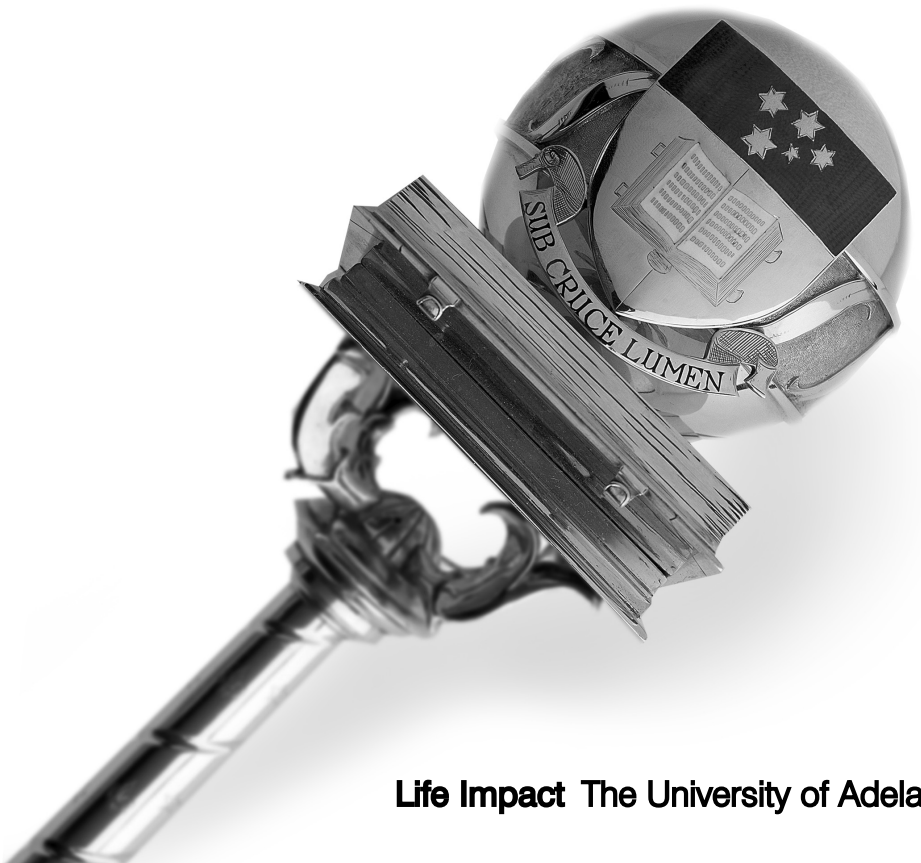




2010

Undergraduate Calendar



Graduate Attributes

The University of Adelaide

The University of Adelaide is a research-intensive university which seeks to develop graduates of international distinction by supporting high quality education.

The University of Adelaide provides an environment where students are encouraged to take responsibility for developing the following attributes:

- Knowledge and understanding of the content and techniques of a chosen discipline at advanced levels that are internationally recognised.
- The ability to locate, analyse, evaluate and synthesise information from a wide variety of sources in a planned and timely manner.
- An ability to apply effective, creative and innovative solutions, both independently and cooperatively, to current and future problems.
- Skills of a high order in interpersonal understanding, teamwork and communication.
- A proficiency in the appropriate use of contemporary technologies.
- A commitment to continuous learning and the capacity to maintain intellectual curiosity throughout life.
- A commitment to the highest standards of professional endeavour and the ability to take a leadership role in the community.
- An awareness of ethical, social and cultural issues and their importance in the exercise of professional skills and responsibilities.

Student Study Commitment

To successfully complete courses, students will need to allocate an appropriate time commitment to their study. In addition to the formal contact - the time required for each course (eg, lectures, tutorials, practicals) - students will need to allocate non-contact time. Non-contact time will be required for a range of activities which may include, but are not limited to, assessment tasks, reading, researching, note-taking, revision, writing, consultation with staff, and informal discussion with other students. While the relative proportion of contact and non-contact time may vary from course to course, as a guide, a full-time student would expect to spend, on average, a total of 48 hours per week on their studies during teaching periods. The workload for undergraduate programs is 24 units per year (full-time).



The Arms of the University

The heraldic description of the Coat of Arms is as follows:

Per pale Or and Argent an Open Book proper edged Gold on a Chief Azure five Mulletts, one of eight, two of seven, one of six and one of five points of the second, representing the Constellation of the Southern Cross; and the Motto associated with the Arms is

Sub Cruce Lumen

'The light (of learning) under the (Southern) Cross'

Contacting the University

The University's postal address is:

The University of Adelaide
South Australia 5005
Australia

For information about Programs and Courses, contact the Student Centre:

Telephone: 61 8 8303 5208
Freecall: 1 800 061 459
Email: student.centre@adelaide.edu.au
Web: www.adelaide.edu.au

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Glossary of Terms

Academic Program The award in which students are enrolled for study e.g. Bachelor of Arts, Bachelor of Finance, Diploma in Wine Marketing.

Assumed Knowledge A course may list a statement of assumed knowledge. For example, SACE Stage 2 Biology may be listed as assumed knowledge. This indicates the academic background which lecturers of that course will assume a student has. The onus is on the student to determine whether or not they have attained the appropriate level of knowledge. For example, in the above situation, the student may not have completed SACE Stage 2 Biology, but may have read widely in the relevant area, and decide that they have an appropriate level of knowledge. **Note:** a course will be taught on the basis of assumed knowledge. Should a student be uncertain about whether they possess an appropriate level of knowledge, they should discuss this with the course coordinator.

Corequisite A course in which a student must enrol concurrently if the student has not previously passed the course specified as a corequisite. For example Mathematics IA is a corequisite for enrolment in Physics IA; to enrol in Physics IA, a student must either have previously passed Mathematics IA or intends to enrol in it concurrently.

Course To complete an academic program, students enrol in and pass courses as required by the Academic Program Rules for that program.

Incompatible A course/courses which has/have substantially similar content to the specified course. Students should not enrol in the specified course if they have previously passed a course listed as incompatible, as they will not be able to present that course towards their award.

Non-award Study University study undertaken for personal interest or professional development, in which the courses completed do not count towards a specific academic program. In the case of non-award study, where courses specify prerequisites, these prerequisites are considered as statements of assumed knowledge. Note that non-award study involves the payment of up-front tuition fees for the course.

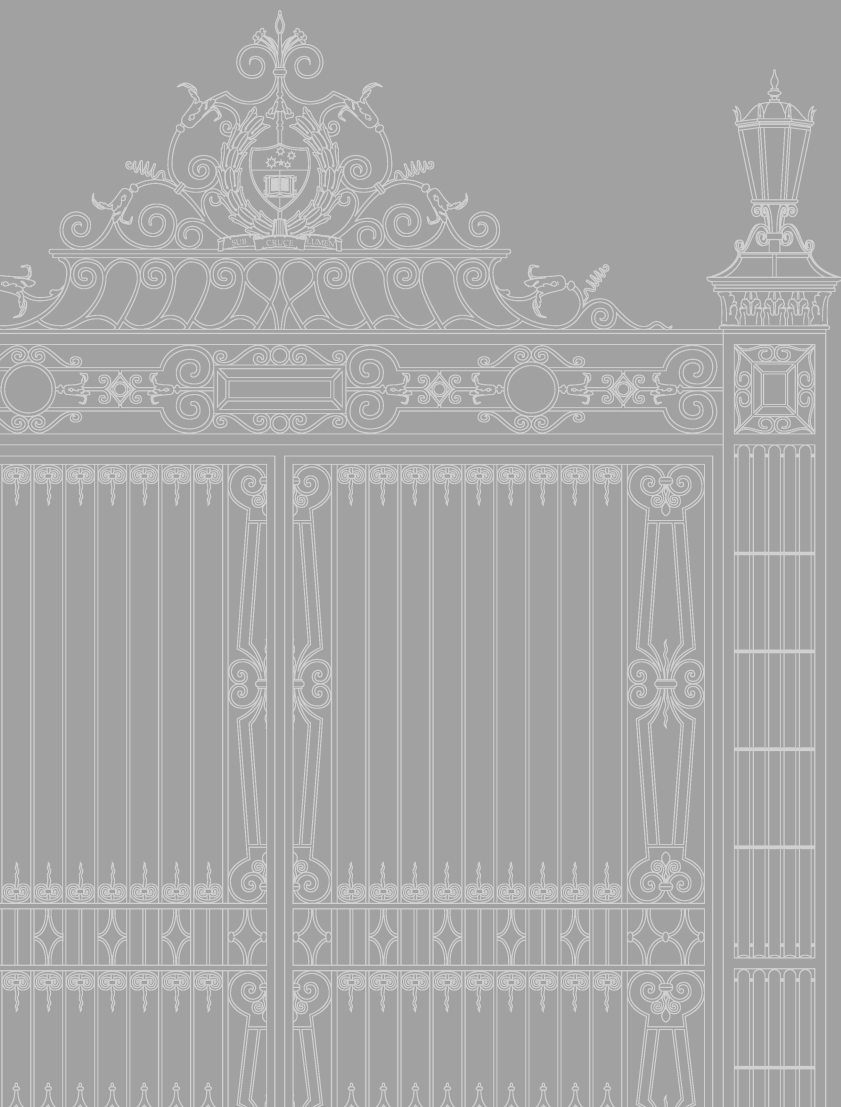
Prerequisite A prescribed requirement that must be fulfilled before a student can enrol in the specified course. For example, SACE Stage 2 Chemistry is a prerequisite for the course Chemistry IA, while Psychology IA and Psychology IB are prerequisites for the course Psychological Research Methodology II. A student may not enrol in a course that specifies prerequisites unless they satisfy the prerequisites. Prerequisites are specified to protect students from enrolling in a course for which they do not have the appropriate background. Often, this relates to the need for students to possess certain skills and/or knowledge developed in the prerequisite course, which are extended in the specified course. For example, Mathematics IA is a prerequisite for a student wishing to enrol in Mathematics IB. Note that where prerequisites specify a University of Adelaide course, a Conceded Pass is not sufficient to satisfy that prerequisite.

Quota Some courses will have a limit on the maximum number of students who may enrol in the specified course.

Restriction Some courses are available only to students in certain academic programs. For example, dentistry courses are only available to students enrolled in the Bachelor of Dentistry or Bachelor of Oral Health. Note that in some cases, the restriction may only appear for a particular semester of a course offering e.g. the course Accounting for Decision Makers I is offered in semester 1 and semester 2, however, only students in the Bachelor of Commerce may enrol in the semester 1 offering of that course.

SACE Stage 2 Subject A full-year or semester-length subject taken within the second year of the South Australian Certificate of Education.

Unit Courses are assigned a numerical unit value, which reflects the total study commitment associated with that course. The study commitment includes both the formal contact time required for the course (e.g. lectures, tutorials, practicals), as well as non-contact time. Non-contact time will be required for a range of activities which may include, but are not limited to, reading, researching, note-taking, revision, writing, consultation with staff, and informal discussions with other students. While the relative proportion of contact and non-contact time may vary from course to course, a full-time student should expect to spend, on average, a total of 48 hours per week on their studies. For a 3-unit course, this would equate, on average, to 12 hours per week.



Academic Program Rules

Centre for Aboriginal Studies in Music

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Undergraduate Awards

- Associate Diploma in Aboriginal Studies in Music

Notes on Delegated Authority

1. Council has delegated the power to approve minor changes to the Academic Program Rules to the Executive Deans of Faculties.
2. Council has delegated the power to specify syllabuses to the Head of each department or centre concerned, such syllabuses to be subject to approval by the Faculty or by the Executive Dean on behalf of the Faculty.



Associate Diploma in Aboriginal Studies in Music

1 General

The Associate Diploma is intended for Aboriginal and Torres Strait Islander people only.

2 Duration of program

The course of study for the Associate Diploma in Aboriginal Studies in Music (New) shall normally extend over two academic years of full-time study or equivalent.

3 Admission

3.1 Admission to this course shall normally be through satisfactory completion of the CASM Foundation Year.

3.2 For those applicants who have not completed the CASM Foundation Year admission will be based upon equivalent studies passed at another tertiary institution, or relevant musical knowledge and experience and assessed ability.

3.3 An applicant will not be permitted to defer an offer of admission to the course.

4 Assessment and examinations

4.1 In determining a candidate's final result the examiners may take into account oral, written, practical and examination work, provided that the candidate has been given adequate notice at the commencement of the teaching of the course of the way in which work will be taken into account and of its relative importance in the final result.

4.2 There will be six classifications of pass in the final assessment of any course offered within the Associate Diploma in Aboriginal Studies in Music (New): Pass with High Distinction, Pass with Distinction, Pass with Credit, Pass, and Non Graded Pass.

A grade of Conceded Pass will not be offered for courses in this program.

4.3 Candidates are required to attend a minimum of 70% of classes for all enrolled CASM courses. Formal approved leave provisions apply for variations to this rule. Students who do not comply with these requirements may be failed in a given course. Full details of attendance regulations and approved leave provisions are available in the CASM Academic Program Handbook and from the CASM Coordinator (Academic Programs) and course lecturers.

4.4 A candidate who fails a course, and who desires to take that course again shall, unless exempted wholly or partially therefrom by the CASM Coordinator (Academic Programs), again complete the required work in that course to the satisfaction of the teaching staff concerned.

4.5 A candidate who has twice failed any course may not enrol for that course again or for any other course which, in the opinion of CASM Coordinator (Academic Programs), contains a substantial amount of the same material, except by special permission of the CASM Coordinator (Academic Programs) and then only under such conditions as the CASM Coordinator (Academic Programs) may prescribe.

5 Qualification requirements

5.1 Academic Program

5.1.1 The courses listed for each level under Program Rule 5.1.5 below need not all be taken in the one and same year. A candidate who has satisfied the prerequisite requirements for enrolment in later level courses may so enrol before completing all the courses of the preceding level.

5.1.2 The requirements for each course must normally be completed in one year of study. The CASM Coordinator (Academic Programs) may permit a candidate to complete the requirements of a course over a period of two years on such conditions as it may determine.

5.1.3 Except where otherwise determined by the CASM Coordinator (Academic Programs), a candidate who is eligible in any year to enrol in MUSIC 1009A/B Practical Music Study I MS (and MUSIC 1002A/B Practical Music Study I CM, MUSIC 2020A/B Practical Music Study II MS or MUSIC 2006A/B Practical Music Study II CM) and fails to do so, and who wishes to enrol in one of these courses in a subsequent year, shall be required to attend an audition and to reach a minimum audition standard for enrolment in the course in question before being authorised to so enrol.

5.1.4 Candidates must obtain the approval of the CASM Coordinator (Academic Programs), or nominee, for the proposed courses of study and are required to take part in the general practical work of the Centre for Aboriginal Studies in Music.

5.1.5 To qualify for the Associate Diploma candidates shall satisfactorily complete the requirements for the courses listed below:

Level I

Either

MUSIC 1009 A/B Practical Music Study I MS Pt 1 & 2.....	4
MUSIC 1010 A/B Theory of Music I MS Pt 1 & 2.....	3
MUSIC 1011 A/B Research Studies (CASM) I MS Pt 1 & 2.....	3
MUSIC 1013 A/B Performance I MS Pt 1 & 2.....	4

MUSIC 1021 A/B Style Studies I MS Pt 1 & 2.....	2
<i>or</i>	
MUSIC 1001 A/B Style Studies I CM Pt 1 & 2.....	2
MUSIC 1002 A/B Practical Music Study I CM Pt 1 & 2.....	4
MUSIC 1014 A/B Performance I CM Pt 1 & 2.....	4
MUSIC 1016 A/B Research Studies (CASM) I CM Pt 1 & 2.....	3
MUSIC 1020 A/B Theory of Music I CM Pt 1 & 2.....	3
<i>and</i>	
MUSIC 1007 A/B Studies in Community & Culture Pt 1 & 2.....	3
MUSIC 1015 A/B General Studies (New) I Pt 1 & 2.....	2
MUSIC 1018 A/B Practical Extension I Pt 1 & 2....	2
MUSIC 1024 A/B Aural Development (New) I Pt 1 & 2.....	1

Level II

Either

MUSIC 2002 A/B Style Studies II MS Pt 1 & 2	2
MUSIC 2003 A/B Theory of Music II MS Pt 1 & 2.....	4
MUSIC 2004 A/B Performance II MS Pt 1 & 2.....	4
MUSIC 2019 A/B Research Studies (CASM) II MS Pt 1 & 2.....	4
MUSIC 2020 A/B Practical Music Study II MS Pt 1 & 2.....	4
<i>or</i>	
MUSIC 2000A Theory of Music II CM Pt 1 & 2.....	4
MUSIC 2001 A/B Style Studies II CM Pt 1 & 2.....	2
MUSIC 2006 A/B Practical Music Study II CM Pt 1 & 2.....	4
MUSIC 2009 A/B Performance II CM Pt 1 & 2	4
MUSIC 2023 A/B Research Studies (CASM) II CM Pt 1 & 2.....	4

and

MUSIC 2005 A/B Practical Extension II Pt 1 & 2....	2
MUSIC 2011 A/B Aural Development (New) II Pt 1 & 2.....	1

and either

MUSIC 2016 A/B Studies in Community & Culture II Pt 1 & 2.....	3
<i>or</i>	
MUSIC 2017 A/B General Studies (New) II Pt 1 & 2.....	3

5.1.6 A candidate who satisfactorily completes all of the requirements of Level 1 of the program, but does not wish to proceed to the Associate Diploma may be awarded, upon application, the Advanced Certificate in Aboriginal Studies in Music (New).

5.1.7 A candidate who holds the Certificate in Aboriginal Studies in Music or the Advanced Certificate in Aboriginal Studies in Music shall surrender the Certificate.

5.2 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

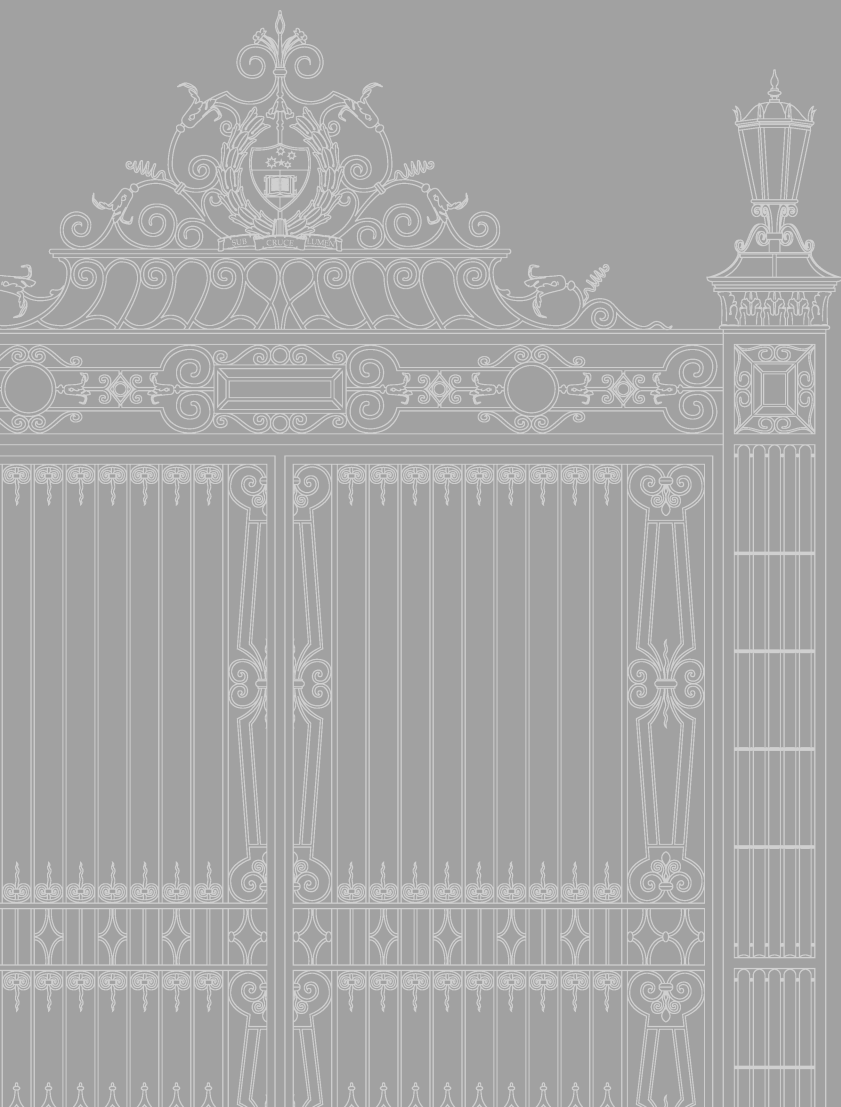
5.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award.

6 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

Note: MS denotes Music Studies Stream
CM denotes Community Musician Stream.



Academic Program Rules

School of Architecture, Landscape Architecture and Urban Design

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Undergraduate Awards

- Degree of Bachelor of Design Studies
- Honours degree of Bachelor of Design Studies

Notes on Delegated Authority

1. Council has delegated the power to approve minor changes to the Academic Program Rules to the Executive Deans of Faculties.
2. Council has delegated the power to specify syllabuses to the Head of each department or centre concerned, such syllabuses to be subject to approval by the Faculty or by the Executive Dean on behalf of the Faculty.

1 General

- 1.1 There shall be a degree and an Honours degree of Bachelor of Design Studies. The Bachelor degree shall be awarded with a major in either Architectural Studies or Landscape Studies or Architectural and Landscape Studies, or without a major.
- 1.2 A graduate of the University or of another educational institution who wishes to proceed to the degree of Bachelor of Design Studies may do so under the requirements of these Academic Program Rules.
- 1.3 A candidate who has completed courses under any repealed regulations for the Bachelor of Architectural Studies shall have status in equivalent courses under the Academic Program Rules.

2 Duration of program

- 2.1 The program of study for the Bachelor degree shall extend over three years of full-time study or the equivalent. Students shall pass courses to the value of at least 24 units at each of the three levels. The unit values of the courses are contained in Academic Program Rule 5.1.
- 2.2 A candidate may interrupt the program for such periods and on such conditions as may in each case be determined by the School.
- 2.3 Students wishing to interrupt their studies in accordance with 2.2 above must apply through the Student Adviser for permission and obtain beforehand the approval of the Head on behalf of the School for leave of absence for a defined period.
- 2.4 A student who leaves the program without approval or who extends a leave of absence beyond the time period approved under 2.2 above shall be deemed to have withdrawn his or her candidature for the degree but may reapply for admission to the program in accordance with the procedures in operation at the time.
- 2.5 Students who have interrupted their studies in the prescribed courses may be required to resume at such a point in the program and/or to undertake such additional or special program of study as the Head of the School deems appropriate.

3 Admission

3.1 Status, exemption and credit transfer

A candidate who has passed undergraduate, or equivalent, level courses in the Faculty or in other faculties of the University or in other educational institutions, may, on written application to the Head of the School of Architecture, Landscape Architecture and Urban Design, be granted such

exemption from these Academic Program Rules as the Faculty may determine, save that a candidate shall always be required to satisfy the examiners in all courses of the final year of the program.

3.2 Articulation with other awards

- 3.2.1 It is possible for students in Design Studies to elect to complete both the Bachelor of Design Studies and Bachelor of Laws academic programs in a total of five years of full-time study*, provided they are accepted into the Bachelor of Laws academic program. Students wishing to pursue this academic plan may apply for admission through the South Australian Tertiary Admissions Centre by September of the year before they commence University study or in a later year of the program.

*Some overload may be required for students taking the B.Des. St. (Landscape Studies major) or B.Des.St. (Architectural and Landscape Studies major).

The following program of study for the B. Law and B.Des.St. (with an Architectural Studies major) is recommended:

Level I

DESST 1027 Human Environments: Design and Representation	6
DESST 1029 Construction and Design: Theories and Practice	6
LAW 1501 Foundations of Law	3
LAW 1502 Law of Torts 1	3
LAW 1504 Principles of Public Law.....	3
LAW 1505 Law of Torts 2	3

Level II

DESST 1028 Natural and Urban Systems	3
DESST 1030 History of Settlements	3
DESST 2503 Landscape Architecture Histories and Theories	3
LAW 1503 Contracts.....	6
LAW 1506 Property Law.....	6
LAW 2501 Australian Constitutional Law.....	3

Level III

DESST 2500 Technology in Design.....	6
DESST 2501 Design Studio.....	6
DESST 2502 Architecture Histories and Theories	3
LAW 2503 Criminal Law and Procedure	6
LAW 2504 Administrative Law	3

Level IV

DESST 3027 Design for Sustainable Community ...	6
DESST 3029 Architecture Design Studio	6
LAW 2502 Equity	3
LAW 2505 Corporate Law	6
Law Elective.....	3

Level V

LAW 3501 Dispute Resolution and Ethics.	6
LAW 3502 Evidence and Proof in Theory and Practice.....	6

Law Electives to the value of 12 units from the LL.B degree

Before enrolment in the Level III courses of the above scheme, students should consult the Law Program Adviser.

Students should seek advice about course choices if they wish to undertake the B.Des.St. (with a Landscape Studies major) or B.Des.St. (with an Architectural and Landscape Studies major) together with the Bachelor of Laws.

See also the Academic Program Rules of the LL.B. degree and in particular, the Introductory Notes to the LL.B. Syllabuses.

- 3.2.2 It is possible for students in Design Studies to elect to complete both the Bachelor of Design Studies and Bachelor of Commerce academic programs in a total of four years of full-time study by taking an overload of 3 units in each semester of the first and second years of the program, provided they are accepted into the Bachelor of Commerce academic program after they have completed at least one equivalent full-time year of the Bachelor of Design Studies. Students wishing to pursue this academic plan may apply for admission to the Bachelor of Commerce through the South Australian Tertiary Admissions Centre by September of their first year in the B.Des.St. program. Students should seek advice regarding course choices in the B.Des.St. and B.Commerce programs.
- 3.2.3 A graduate in another faculty or other educational institution who wishes to qualify for the degree of Bachelor of Design Studies in the Faculty and to count towards that degree courses which have already been presented for another degree may do so providing such a candidate presents a range of courses which fulfils the requirements of Academic Program Rule 5.1 below, including courses to the value of 36 units which must include compulsory and elective Level III courses to the value of at least 24 units which have not been presented for any other degree.

4 Assessment and examinations

- 4.1 There shall be four classifications of pass: Pass with High Distinction, Pass with Distinction, Pass with Credit, Pass. There shall also be a

classification of Conceded Pass. A candidate may present for the degree a limited number of courses for which a Conceded Pass has been awarded, as specified in the relevant Rule under these Academic Program Rules.

- 4.2 A candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
- 4.3 In determining a candidate's final result in a course (or part of a course) the examiners may take into account oral, written, practical and examination work, provided that the candidate has been given adequate notice at the commencement of the teaching of the course of the way in which work will be taken into account and of its relative importance in the final result.
- 4.4 A candidate who fails a course or who obtains Conceded Pass and who desires to take that course again shall, unless exempted wholly or partially therefrom by the Head of School or Head of Department concerned, again complete the required work in that course to the satisfaction of the teaching staff concerned.
- 4.5 Conceded passes cannot be presented for any compulsory Design Studies courses. A candidate may present for the degree Level I, II or III elective courses for which a Conceded Pass grade has been awarded to a maximum aggregate value of 6 units.
- 4.6 A candidate who has twice failed the examination in any elective course for the Bachelor degree may not enrol for that course again or for any other elective course which in the opinion of the School contains a substantial amount of the same material, except by special permission of the School and then only under such conditions as the School may prescribe.
- 4.7 There shall be three classifications of Pass in the final assessment of the course for the Honours degree as follows: First Class, Second Class and Third Class. The Second Class classification shall be divided into two divisions as follows: Division A and Division B.

4.8 Academic progress

The Faculty may prescribe rules for review of academic progress. Any student who meets the requirements for review will be asked to show cause as to why they should be permitted to continue their studies. Students who cannot adequately explain poor academic performance may have their enrolment cancelled or restricted, and/or be precluded from undertaking further studies toward their program

5 Qualification requirements

5.1 Academic Program

5.1.1 The Bachelor degree

5.1.1.1 To qualify for the degree of Bachelor of Design Studies with an Architectural Studies major a candidate shall pass the following courses to the value of at least 72 units:

Level I

DESST 1027 Human Environments: Design and Representation	6
DESST 1028 Natural and Urban Systems	3
DESST 1029 Construction and Design: Theories and Practice	6
DESST 1030 History of Settlements	3
Level I Electives to the value of 6 units	6

Level II

DESST 2500 Technology in Design	6
DESST 2501 Design Studio	6
DESST 2502 Architecture Histories & Theories	3
DESST 2503 Landscape Architecture Histories and Theories	3
Level II Electives to the value of 6 units	6

Level III

DESST 3027 Design for Sustainable Community ...	6
DESST 3029 Architecture Design Studio	6
Level III Electives to the value of 12 units	12

5.1.1.2 To qualify for the degree of Bachelor of Design Studies with a Landscape Studies major a candidate shall pass the following courses to the value of at least 72 units:

Level I

DESST 1027 Human Environments: Design and Representation	6
DESST 1028 Natural and Urban Systems	3
DESST 1029 Construction and Design: Theories and Practice	6
DESST 1030 History of Settlements	3
Level I Electives to the value of 6 units	6

Level II

DESST 2500 Technology in Design	6
DESST 2501 Design Studio	6
DESST 2502 Architecture Histories & Theories	3
DESST 2503 Landscape Architecture Histories and Theories	3
Level II Electives to the value of 6 units	6

Level III

DESST 3027 Design for Sustainable Community ...	6
DESST 3028 Natural and Landscape Systems	6
DESST 3030 Landscape Architecture Design Studio	6

Level III Electives to the value of 6 units

5.1.1.3 To qualify for the degree of Bachelor of Design Studies with an Architectural and Landscape Studies major a candidate shall pass the following courses to the value of at least 72 units

Level I

DESST 1027 Human Environments: Design and Representation	6
DESST 1028 Natural and Urban Systems	3
DESST 1029 Construction and Design: Theories and Practice	6
DESST 1030 History of Settlements	3
Level I Electives to the value of 6 units	6

Level II

DESST 2500 Technology in Design	6
DESST 2501 Design Studio	6
DESST 2502 Architecture Histories & Theories	3
DESST 2503 Landscape Architecture Histories and Theories	3
Level II Electives to the value of 6 units	6

Level III

DESST 3027 Design for Sustainable Community ...	6
DESST 3028 Natural and Landscape Systems	6
DESST 3029 Architecture Design Studio	6
DESST 3030 Landscape Architecture Design Studio	6

5.1.1.4 To qualify for the degree of Bachelor of Design Studies without a major, a candidate shall pass the following courses to the value of at least 72 units:

Level I

DESST 1027 Human Environments: Design and Representation	6
DESST 1028 Natural and Urban Systems	3
DESST 1029 Construction and Design: Theories and Practice	6
DESST 1030 History of Settlements	3
Level I Electives to the value of 6 units	6

Level II

DESST 2500 Technology in Design	6
DESST 2501 Design Studio	6
DESST 2502 Architecture Histories & Theories	3
DESST 2503 Landscape Architecture Histories and Theories	3
Level II Electives to the value of 6 units	6

Level III

DESST 3027 Design for Sustainable Community ...	6
Level III Electives to the value of 18 units*	18

* 6 units of these electives must be taken from the School of Architecture, Landscape Architecture and Urban Design.

5.1.1.5 The following courses have been approved by the School of Architecture, Landscape Architecture

and Urban Design as electives towards the Bachelor degree.

Design Studies courses

Level I, II and III courses listed below (subject to availability each year:

Level I

DESST 1001 Special Topic in Design Studies IB	....3
DESST 1007 Special Topic in Design Studies IA	....3
DESST 1009 Art History and Theories IA	.....3
DESST 1019 Art History and Theories IB	.....3
DESST 1026 Special Topic in Design Studies IC	....3
DESST 1031 Special Topic in Design Studies ID	....3
DESST 1032 Imaging Our World	.....3
DESST 1500 Landscape Narratives	.....3

Level II

DESST 2504 Art History and Theories IIA	..... 3
DESST 2505 Art History and Theories IIB	..... 3
DESST 2506 Digital Media II	..... 6
DESST 2507 Special Topic in Design Studies IIA	...3
DESST 2508 Special Topic in Design Studies IIB	...3
DESST 2509 Special Topic in Design Studies IIC	...3
DESST 2510 Special Topic in Design Studies IID	...3
DESST 2511 Special Topic in Design Studies IIE	...3
DESST 2512 Islamic Architecture & Gardens II	..... 3
DESST 2513 Colonial and Contemporary Issues in South Asian Architecture II	..... 3
DESST 2514 Conservation in the Built Environment II	..... 3
DESST 2515 Special Topic in Design Studies IIF	.... 6

Level III

DESST 3028 Natural and Landscape Systems	....6
DESST 3031 Digital Media Studio	.....6
DESST 3500 Colonial and Contemporary Issues in South Asian Architecture III	.....3
DESST 3501 Conservation in the Built Environment III	.....6
DESST 3502 Islamic Architecture & Gardens III	....3
DESST 3503 Special Topic in Design Studies IIIA	.....3
DESST 3504 Special Topic in Design Studies IIIB	....3
DESST 3505 Special Topic in Design Studies IIIC	....3
DESST 3506 Special Topic in Design Studies IIID	....3
DESST 3507 Special Topic in Design Studies IIIE	....3
DESST 3508 Special Topic in Design Studies IIIF	....3
DESST 3509 Digital Media III	.....6
DESST 3510 Sustainable Residential Building Design	.....3
DESST 3511 Sustainable Commercial Building Design	.....3

Economics courses

Students are permitted to enrol in approved courses listed in the Academic Program Rules of the degree of Bachelor of Economics provided they have the prerequisites.

Engineering courses

C&ENVENG 1008 Engineering Planning and Design IA	.....3
C&ENVENG 1010 Engineering Mechanics - Statics	..... 3
CHEM ENG 1008 Engineering Computing	..... 3
MECH ENG 1006 Design Graphics and Communications	.....3
MECH ENG 1007 Engineering Mechanics - Dynamics	..... 3

Humanities and Social Sciences courses

Level I courses listed in Academic Program Rule 5.12.1, Level II courses listed in Academic Program Rule 5.12.2, and Level III courses listed in Academic Program Rule 5.12.3 of the degree of Bachelor of Arts.

Law courses*

Level I

LAW 1501 Foundations of Law	.....3
LAW 1502 Law of Torts 1	.....3
LAW 1503 Contracts	..... 6
LAW 1504 Principles of Public Law	.....3
LAW 1505 Law of Torts 2	.....3
LAW 1506 Property Law6

Level II

LAW 2501 Australian Constitutional Law 3
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Level III

LAW 2502 Equity3
LAW 2503 Criminal Law and Procedure6
LAW 2504 Administrative Law3
LAW 2505 Corporate Law	.....6

*available only to students who have gained admission to Law studies through SATAC

Mathematical and Computer Sciences courses

Level I courses listed in Academic Program Rule 4.2.1.1, Level II courses listed in Academic Program Rule 4.2.2.1, and Level III courses listed in Academic Program Rule 4.2.3.1 of the degree of Bachelor of Mathematical and Computer Sciences.

Music courses

Level I courses listed in Academic Program Rules of the degree in the Elder Conservatorium of Music and approved by them.

Science courses

Level I courses listed in the Academic Program Rules of the degrees of Bachelor of Agriculture

and Bachelor of Science (Agricultural Science), and Level I, II and III courses listed in Academic Program Rules 5.5.1, 5.5.3 and 5.5.5 of the degree of Bachelor of Science in the Faculty of Sciences.

Courses offered by other faculties but not listed above may be acceptable on application and subject to the recommendation of the Head of the School of Architecture, Landscape Architecture and Urban Design and the department concerned, and the approval of the School.

Courses from other institutions

Such courses provided by other institutions as may be approved from time to time on the recommendation of the Head of School of Architecture, Landscape Architecture and Urban Design.

- 5.1.1.6 No candidate will be permitted to count for an award any course together with any other course which, in the opinion of the School contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards the degree. No candidate may present the same section of a course in more than one course for a degree.
- 5.1.1.7 A candidate who has completed courses under any repealed Academic Program Rules in the Bachelor of Architectural Studies degree prior to semesterisation and amendments of the program in 1989, or in the Bachelor of Architectural Studies program between 1989 to 1996, or in the Bachelor of Design Studies program between 1997 to 2005, shall have status in equivalent courses under these Academic Program Rules.
- 5.1.1.8 When in the opinion of the Faculty special circumstances exist for a candidate affected by Academic Program Rules 1.3 and 5.1, the Council on the recommendation of the Faculty in each case may vary any of the provisions of these Academic Program Rules.
- 5.1.1.9 Candidates applying to undertake part of their studies as Study Abroad may only be approved to do so during the second semester of the second year of their program or during the first semester of the third year of their program.

5.1.2 The Honours degree

- 5.1.2.1 A candidate who wishes to proceed to the Honours degree must obtain the approval of the Head of School, normally by 15 December of the year preceding enrolment.
- 5.1.2.2 A candidate for the Honours degree of Bachelor of Design Studies shall pass examinations in DESST 4001A/B Honours Design Studies which shall consist of either one topic to the value of 24 units or two topics to the value of up to 12 units each of an Honours course*.
- 5.1.2.3 A candidate may, subject to the approval of the Head of School in each case, include in their Honours year a course to the value of 12 units taught in a department/school in another faculty;

such candidates must consult the Head of the Department/Head of School concerned and must apply in writing to the School by 15 December of the year preceding the proposed Honours year, seeking the approval of the Head of the School of Architecture, Landscape Architecture and Urban Design.

- 5.1.2.4 The work of the Honours year may not be commenced before a candidate has qualified for the Bachelor degree, or has qualified for a degree regarded by the School of Architecture, Landscape Architecture and Urban Design as equivalent and has completed such prerequisite courses (if any) as may be prescribed in the syllabuses.
- 5.1.2.5 The work of the Honours year must be completed in one year of full-time study, save that on the recommendation of the Head of School, the School may permit a candidate to spread the work over two years but not more, under such conditions as the School may determine.
- 5.1.2.6 If a candidate is unable to complete the program for the Honours degree within the time allowed, or if the candidate's work is unsatisfactory at any stage of the program, or if the candidate withdraws from the program such fact shall be reported to the School. The Head of School may permit the candidate to re-enrol for an Honours degree under such conditions (if any) as the Head may determine.
- 5.1.2.7 No exemption from any component of the requirements of 5.1.2 is permitted.
- 5.1.2.8 A candidate who satisfies the requirements for Honours shall be awarded the Honours degree, but the Faculty shall decide within which of the following classes and divisions the degree shall be awarded:
 - 1 First Class
 - 2A Second Class div A
 - 2B Second Class div B
 - 3 Third Class
 - NAH Not awarded

5.2 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award.

6 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

*Information on the approved courses from which the prescribed combination may be chosen shall be advised in the preceding year by the School of Architecture, Landscape Architecture and Urban Design.

Note: the courses to be offered in a particular year will depend upon the availability of staff.

**Transition Arrangements from 2009
(not forming part of the Academic Program Rules)**

- A student who has completed only one of the following courses: DESST 1023 Computer-Aided Design I and DESST 1024 Drawing Architecture and Landscape I, will be required to enrol in DESST 1027 Human Environments: Design and Representation and will be granted appropriate exemption from components of the course already completed.
- A student who has completed only one of the following courses: DESST 1008 Composing Architecture and Landscape I and DESST 1014 Construction I, will be required to enrol in DESST 1029 Construction and Design: Theories and Practice and will be granted appropriate exemption from components of the course already completed.
- A student who has completed only one of the following courses: DESST 2005 Technology in the Built Environment II and DESST 2034 Domestic Scale Construction, will be required to enrol in DESST 2500 Technology in Design and will be granted appropriate exemption from components of the course already completed.
- A student who has completed only one of the following courses: DESST 2016 Twentieth Century Architecture and Landscapes II and DESST 2023 Design and Environments II, will be required to enrol in DESST 2501 Design Studio, DESST 2502 Architecture Histories and Theories, and DESST 2503 Landscape Architecture Histories and Theories, and may be granted appropriate exemption from components of the course already completed.
- A student who failed DESST 2036 Technology in Design will be required to take DESST 2500 Technology in Design.
- A student who failed DESST 2037 Cultures, Histories and Designed Environment will be required to take DESST 2501 Design Studio, DESST 2502 Architecture Histories and Theories and DESST 2503 Landscape Architecture Histories and Theories.

Graduate Attributes

Bachelor of Design Studies

Knowledge

- To form and express deep criticism of architectural and landscape design objects from a broad perspective
- To generate and present relevant proposals for intervention in situations in the built environment
- To combine criticism and proposal generation into a working process of design.

Intellectual and social capabilities

Instrumental:

- Finding, ordering, sifting, filtering, organising information
- Intelligent use of library resources and research of library materials
- Information acquisition, collation and management from libraries and other sources.

Visualising, representing & manipulating spatial objects:

- Representing and manipulating spatial objects
- Drawing and model making using hand and computer techniques.

Writing:

- Designing, outlining, and refining thought expressed with the written word, using hand and computer techniques.

Speaking:

- Designing, outlining, organising, and refining thought expressed with the spoken word.

Computing:

- Computational techniques using algorithms and data relationships.

Working in groups:

- Acting as both a leader and a member of a group of individuals.

Attitudes and values

Critical Thinking:

- To present coherent intellectual structures within which observation, analysis, understanding and judgement of situations.

Creative Action:

- To present current knowledge of the act of designing from both theoretical and practical perspectives
- To demonstrate its application to the management of the design process.

Architecture and Landscape Architecture:

- To present accounts of the built and human modified environments, the processes of its production, and the positions, values and preferences that influence its forms and patterns
- To demonstrate the relevance of these accounts
- To demonstrate the understanding of the synergies between architecture and landscape architecture.



Academic Program Rules

Business School

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Undergraduate Awards

- Degree of Bachelor of Business Information Technology*
- Degree of Bachelor of Commerce
- Degree of Bachelor of Commerce (Accounting)
- Degree of Bachelor of Commerce (Corporate Finance)
- Degree of Bachelor of Commerce (International Business)
- Degree of Bachelor of Commerce (Management)
- Degree of Bachelor of Commerce (Marketing)
- Degree of Bachelor of Finance
- Degree of Bachelor of Finance (International)
- Degree of Bachelor of Finance (Quantitative)*
- Honours degree of Bachelor of Commerce

* Please note there will be no further intake into these programs. Rules are listed in the 2008 Undergraduate Calendar.

Notes on Delegated Authority

1. Council has delegated the power to approve minor changes to the Academic Program Rules to the Executive Deans of Faculties.
2. Council has delegated the power to specify syllabuses to the Head of each department or centre concerned, such syllabuses to be subject to approval by the Faculty or by the Executive Dean on behalf of the Faculty.



Bachelor of Commerce

Bachelor of Commerce (Accounting)

Bachelor of Commerce (Corporate Finance)

Bachelor of Commerce (International Business)

Bachelor of Commerce (Management)

Bachelor of Commerce (Marketing)

1 General

- 1.1 There shall be a degree and an Honours degree of Bachelor of Commerce. A candidate may obtain either degree or both.
- 1.2 On satisfying the admission requirements for entry to undergraduate studies in the Business School, students will enrol in a program of study to allow them to qualify for one of the following degrees:
- Degree of Bachelor of Commerce
 - Degree of Bachelor of Commerce (Accounting)
 - Degree of Bachelor of Commerce (Corporate Finance)
 - Degree of Bachelor of Commerce (International Business)
 - Degree of Bachelor of Commerce (Management)
 - Degree of Bachelor of Commerce (Marketing).
- 1.3 A student may not hold two concurrent places in the Bachelor of Commerce degree. After completion of their first Bachelor of Commerce degree in a particular specialisation, a student may apply for a further place in the Bachelor of Commerce degree in a different specialisation. Students entering the Bachelor of Commerce for a second time may be granted status up to a maximum of 48 units
- 1.4 The degree of Bachelor of Commerce was awarded for the first time in May 1993. Candidates graduating later than May 1993, who were originally enrolled for another degree may graduate with one of the above degrees provided that all requirements for that degree are satisfied.

2 Duration of program

The program for the Bachelor degrees shall extend over three years of full-time study or the part-time equivalent.

3 Assessment and examinations

- 3.1 A candidate for the Bachelor degree shall attend lectures and pass examinations in accordance with the Academic Program Rules.
- 3.2 A candidate shall not be eligible to attend for examination unless the prescribed work has been

completed to the satisfaction of the teaching staff concerned. A candidate who is not eligible to attend for examination shall be deemed to have failed the examination.

- 3.3 In determining a candidate's final result in a course (or part of a course) the examiners may take into account oral, written, practical and examination work, provided that the candidate has been given adequate notice at the commencement of the teaching of the course of the way in which work will be taken into account and of its relative importance in the final result.
- 3.4 There shall be five classifications of pass in each course for the Bachelor degree, as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, Pass, Conceded Pass.
- 3.5 A candidate may present, for the Bachelor degree a limited number of courses for which a Conceded Pass has been awarded, as specified in 4.7.2 below.
- 3.6 A candidate who fails a course or who gains a Conceded Pass and who desires to take that course again shall, unless exempted wholly or partially therefrom by the Head of the School concerned, again complete the required work in that course to the satisfaction of the teaching staff concerned.
- 3.7 A candidate who has twice failed the examination in any course for the Bachelor degree may not enrol for that course again or for any other course which in the opinion of the School contains a substantial amount of the same material, except by permission of the School and then only under such conditions as the School may prescribe.

3.8 Academic Progress

The Faculty may prescribe rules for review of academic progress. Any student who meets the requirements for review will be asked to show cause as to why they should be permitted to continue their studies. Students who cannot adequately explain poor academic performance may have their enrolment cancelled or restricted, and/or be precluded from undertaking further studies toward their program.

4 Qualification requirements

4.1 Bachelor of Commerce

To qualify for the degree of Bachelor of Commerce, candidates must pass courses with a combined total of not less than 72 units drawn from 4.8 below including:

- a not more than 30 units at Level I, including ACCTING 1002 Accounting for Decision Makers I, ECON 1000 Principles of Macroeconomics, ECON 1004 Principles of Microeconomics, and ECON 1008 Business and Economic Statistics I or STATS 1000 Statistical Practice I
- b at least 12 units of Level II Commerce courses
- c 12 units of Level III Commerce courses and
- d *either*
 - i a further 6 units of Level III Commerce courses *or*
 - ii a further 12 units of Level III courses in 4.8 below.

4.2 Bachelor of Commerce (Accounting)

4.2.1 To qualify for the degree of Bachelor of Commerce (Accounting), candidates must satisfy all conditions in 4.1 above.

4.2.2 In addition, the courses presented must include:

- i ACCTING 1005 Accounting Method I, COMMLAW 1004 Commercial Law I, ECOMMRCE 1000 Information Systems I, ACCTING 2500 Management Accounting II, ACCTING 2501 Financial Accounting II, COMMLAW 2500 Commercial Law II and CORPFIN 2500 Business Finance II *and*
- ii one of COMMGMT 2500 Organisational Behaviour II, COMMGMT 2501 Management II, CORPFIN 2501 Financial Institutions Management II or MARKETNG 2500 Marketing II *and*
- iii Level III Accounting courses from 4.8.1 below to the value of 12 units.

4.3 Bachelor of Commerce (Corporate Finance)

4.3.1 To qualify for the degree of Bachelor of Commerce (Corporate Finance), candidates must satisfy all conditions in 4.1 above. For the purpose of qualifying for this degree ECON 2508 Financial Economics and ECON 2504 Intermediate Econometrics II are considered Commerce courses.

4.3.2 In addition, the courses presented must include:

ECON 1009 International Financial Institutions & Markets
CORPFIN 2500 Business Finance II
CORPFIN 2501 Financial Institutions Management II
CORPFIN 2502 Business Valuation II
ECON 2504 Intermediate Econometrics II

CORPFIN 3500 Corporate Finance Theory III

CORPFIN 3501 Portfolio Theory and Management III

CORPFIN 3502 Options, Futures & Risk Management III

CORPFIN 3503 Corporate Investment & Strategy III

4.4 Bachelor of Commerce (International Business)

4.4.1 To qualify for the degree of Bachelor of Commerce (International Business), candidates must satisfy all conditions in 4.1 above.

For the purpose of qualifying for this degree ECON 2500 International Trade & Investment Policy II is considered a Commerce course.

4.4.2 In addition, the courses presented must include:

COMMLAW 1004 Commercial Law I

ECON 1009 International Financial Institutions & Markets I

COMMGMT 2501 Management II

ECON 2500 International Trade & Investment Policy II

INTBUS 2500 International Business II

MARKETNG 2500 Marketing II

COMMLAW 3502 Legal Aspects of International Business III

COMMGMT 3500 International Management III

INTBUS 3000 Corporate Responsibility for Global Business III

MARKETNG 3501 International Marketing III

4.4.3 In addition, to qualify for the BCom (Int Bus) one of the following must be included:

either

- i at least 3 units of approved Level Humanities and Social Sciences courses and 12 units of study undertaken at an approved institution abroad *or*
- ii at least 6 units of approved Level Humanities and Social Sciences courses *or*
- iii at least 12 units of foreign language studies *or*
- iv completion of the Diploma of Languages.

4.5 Bachelor of Commerce (Management)

4.5.1 To qualify for the degree of Bachelor of Commerce (Management), candidates must satisfy all conditions in 4.1 above.

4.5.2 In addition, the courses presented must include COMMGMT 2500 Organisational Behaviour II, COMMGMT 2501 Management II, and Level III Management courses from 4.8.1 below to the value of 12 units, or such courses as approved by the Head of the School.

Two courses must also be included from: COMMLAW 1004 Commercial Law I, ENGL 1104 Professional English (ESL) or English for Professional Purposes, PHIL 1101 Argument and Critical Thinking, Culture, Globalisation and Power, ACCTING 2500 Management Accounting II, CORPPIN 2500 Business Finance II, INTBUS 2500 International Business II, MARKETNG 2500 Marketing II, PHIL 2045 Professional Ethics.

4.6 Bachelor of Commerce (Marketing)

4.6.1 To qualify for the degree of Bachelor of Commerce (Marketing), candidates must satisfy all conditions in 4.1 above.

4.6.2 In addition, the courses presented must include MARKETNG 2500 Marketing II, MARKETNG 2501 Consumer Behaviour II, and Level III Marketing courses from 4.8.1 below to the value of 12 units, or such courses as approved by the Head of the Business School.

4.7 All degrees

4.7.1 In determining a candidate's eligibility for the award of the degree, the School may disallow any course passed more than 10 years previously.

4.7.2 A candidate may present for the degree courses for which a Conceded Pass has been awarded to a maximum aggregate value of 6 units, providing that each course does not exceed 3 units. Conceded passes cannot be presented for those courses listed in 4.4.3, 4.8.1 and 4.8.2 below.

4.7.3 Candidates who have completed courses for the degree under previous Academic Program Rule schedules may continue under the schedules then in force, with such modifications (if any) as shall be prescribed by the Head.

4.7.4 A candidate may not count for the degree any course together with any other course which, in the opinion of the School, contains a substantial amount of the same material and no course may be counted twice towards the degree. A table of unacceptable combinations of courses is available from the Business School.

4.7.5 To qualify for an undergraduate degree in the Business School a student who has transferred into Commerce from another degree program or from another university and has been granted status for courses completed prior to transfer must satisfy all conditions in 4.1 above and must pass at least 24 units of Level II or III courses taught at the University of Adelaide. These must include 12 units of Level III Commerce courses. However, this requirement may be waived in special circumstances approved by the Business School.

4.7.6 A candidate for an undergraduate degree in the Business School at the University of Adelaide, who wishes to undertake courses elsewhere towards that degree, must satisfy all conditions in 4.1 above and present courses taught at the

University of Adelaide having a minimum value of 48 units, including at least 12 units of Level II or III Commerce courses, and also arrange for the proposed scheme of study elsewhere to be approved in advance by the School. However, this requirement may be waived in special circumstances approved by the Business School.

- 4.7.7 a Graduates of the University of Adelaide (except those specified in 4.7.7(b) below) or of other institutions, who wish to proceed to an undergraduate degree in the Business School and to count towards that degree courses which they have already presented for another qualification may be permitted to do so subject to the following conditions:
- i they may present for the degree such courses to a maximum aggregate value of 24 units. No such course/s may be presented in lieu of 12 units of Level II Commerce courses and 12 units of Level III Commerce courses
 - ii they shall present at least 18 units of courses at Level III, which have not been presented to any other degree *and*
 - iii they shall present a range of courses which fulfil the requirements for 4.1 above.
- b Graduates of the University of Adelaide who wish to proceed to an undergraduate degree in the Business School and to count towards that degree courses which they have already presented for the Bachelor of Arts, Bachelor of Business Information Technology, Bachelor of Computer Science, Bachelor of Design Studies, Bachelor of Economics, Bachelor of Engineering (Telecommunications), Bachelor of Environmental Studies, Bachelor of Finance, Bachelor of Mathematical and Computer Sciences, Bachelor of Media, Bachelor of International Studies, Bachelor of Social Sciences or Bachelor of Wine Marketing degree, may be permitted to do so subject to the following conditions:
- i they may present for the degree such courses to a maximum aggregate value of 48 units
 - ii they shall present at least 24 units which have not been presented to any other degree, comprising either 18 units of Level III Commerce courses and an additional 6 units of Level II or III courses from 4.8 below, or 12 units of Level III Commerce courses and an additional 12 units of Level III courses from 4.8 below
 - iii they shall present the courses specified in 4.1(a) and 4.1(b) above
 - iv they hold only one of the degrees listed in 4.7.7(b).

4.8 Academic program

The following courses may be presented for an undergraduate degree in the Business School:

4.8.1 Commerce courses

Level I

ACCTING 1002 Accounting for Decision Makers I@	3
ACCTING 1005 Accounting Method I@	3
COMMLAW 1004 Commercial Law I@	3
ECOMMRCE 1000 Information Systems I@	3

Level II

ACCTING 2500 Management Accounting II@	3
ACCTING 2501 Financial Accounting II@	3
COMMGMT 2500 Organisational Behaviour II+	3
COMMGMT 2501 Management II+	3
COMMLAW 2500 Commercial Law II @	3
CORPFIN 2500 Business Finance II@#	3
CORPFIN 2501 Financial Institutions Management II#	3
CORPFIN 2502 Business Valuation II#	3
ECOMMRCE 2500 Internet Commerce II	3
INTBUS 2500 International Business II	3
MARKETNG 2500 Marketing II*	3
MARKETNG 2501 Consumer Behaviour II*	3

Level III

ACCTING 3500 Accounting Theory III@	3
ACCTING 3501 Corporate Accounting III@	3
ACCTING 3502 Auditing III@	3
ACCTING 3503 Advanced Management Accounting III@	3
COMMGMT 3500 International Management III+	3
COMMGMT 3501 Strategic Management III+	3
COMMGMT 3502 Human Resource Management III+	3
COMMGMT 3503 Organisational Dynamics III+	3
COMMLAW 3500 Income Tax Law III@	3
COMMLAW 3501 Business Taxation and GST III@	3
COMMLAW 3502 Legal Aspects of International Business III	3
CORPFIN 3500 Corporate Finance Theory III#	3
CORPFIN 3501 Portfolio Theory and Management III#	3
CORPFIN 3502 Options, Futures & Risk Management III#	3
CORPFIN 3503 Corporate Investment & Strategy III#	3
CORPFIN 3504 Treasury and Financial Risk Management III	3

ECOMMRCE 3500 Electronic Commerce III	3
INTBUS 3501 Corporate Responsibility for Global Business III	3
MARKETNG 3500 Marketing Communications III *	3
MARKETNG 3501 International Marketing III *	3
MARKETNG 3502 Market Research III *	3
MARKETNG 3503 Marketing Strategy and Project III *	3
@ Accounting course	
# Corporate Finance course	
+ Management course	
* Marketing course	

4.8.2 Economics courses

Courses listed in the Academic Program Rules of the degree of Bachelor of Economics. Some Economics courses are compulsory for the undergraduate degrees in the Business School.

4.8.3 Humanities and Social Sciences courses

Courses listed in the Academic Program Rules of the degree of Bachelor of Arts, excluding PURE MTH 1002 Quantitative Methods Using Computers I. Note that the Program Rules include courses in Psychology (listed in the Academic Program Rules of the Degree of Bachelor of Health Sciences).

4.8.4 Law courses

Courses, to a maximum of 24 units, listed in the Academic Program Rules of the degree of Bachelor of Laws (see note 2 of the notes (not forming part of the Academic Program Rules) below).

4.8.5 Finance courses

Courses listed in the Academic Program Rules of the degree of Bachelor of Finance

4.8.6 Wine Marketing courses

Courses listed in the Academic Program Rules of the degree of Bachelor of Wine Marketing, excluding:

AGRIBUS 2016/2500EX Introduction to Business Management II	
WINEMKTG 1013WT Food and Wine Marketing Principles I	
WINEMKTG 2011/2501WT/EX Applied Marketing Research II	
WINEMKTG 2014/2503WT/EX International Marketing of Wine and Agricultural Products II	
WINEMKTG 2033/2502WT/EX Consumer Behaviour Analysis II	
WINEMKTG 2034/2505WT/EX Strategic Marketing Management II	
WINEMKTG 3034/3502WT/EX Advertising & Promotion III	

4.8.7 A candidate may not present both ECON 3034 Economic Theory and ECON 4367 Applied Economics for the degree.

4.8.8 A candidate may not present COMMLAW 1004 Commercial Law I for the degree if passed after LAW 1003 Law of Contract.

4.8.9 A candidate may not present COMMLAW 2500 Commercial Law II for the degree if passed after LAW 2004/2505 Corporate Law.

4.8.10 The Honours degree

4.8.10.1 A candidate for the Honours degree shall attend lectures and pass examinations in accordance with the provisions of these Academic Program Rules.

4.8.10.2 A candidate who satisfies the requirements for Honours shall be awarded the Honours degree, but the Faculty shall decide within which of the following classes and divisions the degree shall be awarded:

- 1 First Class
- 2A Second Class div A
- 2B Second Class div B
- 3 Third Class
- NAH Not awarded.

4.8.10.3 A candidate may, subject to the approval of the Head of the Business School, proceed to the Honours degree in the following course: COMMERCE 4000A/B Honours Commerce or COMMERCE 4002A/B for part-time students.

4.8.10.4 A candidate may, subject to the approval of the Heads of Schools concerned, proceed to the Honours degree taught jointly by the Business School and another department. Candidates must apply in writing for the proposed program of study to be approved in advance by the Business School.

4.8.10.5 a A candidate preparing for the Honours year taught by the Business School must complete the requirements for a Bachelor degree of the Business School (or the equivalent elsewhere) before proceeding with the Honours year, and must obtain a high standard in courses presented for the Bachelor degree.

b A candidate who has satisfied the requirements for admission to Honours as set out in previous schedules is also eligible to apply for admission to the Honours year as above.

4.8.10.6 The work of the Honours year is normally completed in one year of full-time study. The School may permit a candidate to spread the work over two years, but not more, under such conditions as it may determine.

4.8.10.7 A candidate who is unable to complete the program for the Honours degree within the time allowed, or whose work is unsatisfactory at any stage of the program, or who withdraws from the program shall be reported to the School, which may permit re-enrolment for an Honours degree under such conditions (if any) as it may determine.

4.9 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award

of the University shall be admitted to that award.

5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

Notes (not forming part of the Academic Program Rules)

- 1 Students are advised that a knowledge of Mathematics is helpful for Commerce courses and is assumed knowledge for some Corporate Finance courses.
- 2 Studies in Law within the degree of Bachelor of Commerce
 - (1) See the Academic Program Rules of the LL.B. degree and the Introductory Notes to the LL.B. Syllabuses.
 - (2) Candidates who wish to present for the Bachelor of Commerce degree Law courses passed prior to 1999 should apply in writing to have their position determined by the Business School. Such candidates will not be disadvantaged by the transition.
- 3 Students from other Faculties will be considered for eligibility for the Bachelor of Commerce degree in accordance with the Regulations and Academic Program Rules of the Bachelor of Commerce degree which are applicable in the year in which the student first enrolls in a course offered by the Economics or Business Schools.
- 4 Candidates may enrol for the degree of Bachelor of Commerce concurrently with one of the degrees Bachelor of Arts, Bachelor of Business Information Technology, Bachelor of Computer Science, Bachelor of Design Studies, Bachelor of Economics, Bachelor of Engineering (Telecommunications), Bachelor of Environmental Studies, Bachelor of Finance, Bachelor of Mathematical and Computer Sciences, Bachelor of Media, Bachelor of Social Science, Bachelor of International Studies or Bachelor of Wine Marketing. Candidates already enrolled in the degrees of B.A., B.Bus.IT., B.Des.St., B.Ec., B.E (Tele.), B.Env. St., B.Fin., B.Ma & Comp.Sc., B.Media, B Soc Sc., B Int St, or B.Comp.Sc. wishing to proceed to the B.Com. concurrently, may apply for admission to the B.Com. Candidates already enrolled in the B.Com. wishing to proceed to one of these other degrees concurrently, may apply towards the end of their first year for admission to the second degree in the following year.
 - (1) The combined degrees (apart from B.Com/BE(IT&T)) may be completed in a minimum of four years of full time study provided appropriate courses are selected. Candidates should seek program advice regarding course choice.
 - (2) Candidates must complete all of the requirements for the Bachelor of Commerce, together with the following minimum requirements for the other degree:
 - i Candidates must complete the compulsory courses for that degree
 - ii Candidates must complete all of the Level III requirements in accordance with the Academic Program Rules for that degree. Courses presented to complete the Level III requirements for the other degree must include at least 24 units which have not been presented to the Bachelor of Commerce degree.
 - (3) Candidates should note that an enrolment in courses exceeding a total units value of 24 units per year will result in a program overload. Candidates should be aware of the full implications of their choice to take a program overload.

Graduate Attributes

Bachelor of Commerce

Bachelor of Commerce (Accounting)

Bachelor of Commerce (Corporate Finance)

Bachelor of Commerce (International Business)

Bachelor of Commerce (Management)

Bachelor of Commerce (Marketing)

Knowledge

- A thorough knowledge and understanding of the content of their major discipline at levels that are internationally recognised
- Some understanding of other related disciplines.

Intellectual and social capabilities

- Ability to research, analyse and evaluate information in their chosen discipline from a wide variety of sources
- Ability to identify problems and apply critical thinking and problem solving skills both independently and cooperatively
- A high level of literacy and numeracy and the ability to verbally communicate information and ideas
- Ability to work effectively individually and as a team member
- A general understanding of and an ability to use modern information technology
- Ability to keep up-to-date in their chosen discipline
- A commitment to intellectual curiosity and life-long learning
- Ability to adapt to a changing environment
- Confidence in their professional and interpersonal skills
- Ability to take a leadership role in their chosen discipline and in the wider community
- Ability to work to the highest standard in their chosen discipline
- Ability to act in a professional manner.

Attitudes and values

- An awareness of and commitment to the ethical standards expected in their chosen discipline
- Being informed about social, ethical and cultural issues in Australia and the rest of the world
- A commitment to the highest standards of ethical behaviour in the community.



Bachelor of Finance

Bachelor of Finance (International)

1 General

- 1.1 There shall be a degree and an Honours degree of Bachelor of Finance. A candidate may obtain either degree or both.
- 1.2 On satisfying the admission requirements for entry into the Bachelor of Finance degree, students will enrol in a program of study to allow them to qualify for either the degree of Bachelor of Finance or the degree of Bachelor of Finance (International).

2 Duration of program

The program of study for the degree of Bachelor of Finance shall extend over three years of full-time study or its part-time equivalent.

3 Assessment and examinations

- 3.1 A candidate for the Bachelor degree shall attend lectures and pass examinations in accordance with the Academic Program Rules.
- 3.2 A candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned. A candidate who is not eligible to attend for examination shall be deemed to have failed the examination.
- 3.3 In determining a candidate's final result in a course (or part of a course) the examiners may take into account oral, written, practical and examination work, provided that the candidate has been given adequate notice at the commencement of the teaching of the course of the way in which work will be taken into account and of its relative importance in the final result.
- 3.4 There shall be five classifications of pass in each course for the Bachelor degree, as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, Pass, Conceded Pass.
- 3.5 A candidate may present, for the Bachelor degree, a limited number of courses for which a Conceded Pass has been obtained, as specified in 4.4 below.
- 3.6 A candidate who fails a course or who gains a Conceded Pass and who desires to take that course again shall, unless exempted wholly or partially therefrom by the Head of the School concerned, again complete the required work in that course to the satisfaction of the teaching staff concerned.
- 3.7 A candidate who has twice failed the examination in any course for the Bachelor degree may not enrol for that course again or for any other course which in the opinion of the School contains a

substantial amount of the same material, except by permission of the School and then only under such conditions as the School may prescribe.

3.8 Academic Progress

The Faculty may prescribe rules for review of academic progress. Any student who meets the requirement for review will be asked to show cause as to why they should be permitted to continue their studies. Students who cannot adequately explain poor academic performance may have their enrolment cancelled or restricted, and/or be precluded from undertaking further studies toward their program.

4 Qualification requirements

4.1 Bachelor of Finance

To qualify for the degree of Bachelor of Finance, candidates must pass courses with a combined total of not less than 72 units drawn from 4.8 including:

- a not more than 30 units at Level 1, including:
- ACCTING 1002 Accounting for Decision Makers I
 - ECON 1000 Principles of Macroeconomics I
 - ECON 1004 Principles of Microeconomics I
 - ECON 1008 Business and Economic Statistics I
- or*
- STATS 1000 Statistical Practice I
 - ECON 1009 International Financial Institutions and Markets I
 - MATHS 1009 Introduction to Financial Mathematics I
- and*
- MATHS 1010 Applications of Quantitative Methods in Finance I
- or*
- MATHS 1011/1012 Mathematics I A/B
- or*
- MATHS 1011/1013 Mathematics IA/IMA
- b at least 12 units of Level 2 courses, including:
- CORPFIN 2500 Business Finance II
- either:*
- CORPFIN 2501 Financial Institutions Management II
- or*
- ENG 2002 Financial Computing II

- and either*
 ECON 2504 Intermediate Econometrics II
or
 MATHS 2103 Probability and Statistics
 ECON 2508 Financial Economics II
- c 12 units of Level III Finance courses from 4.9.1(a) below including:
 CORPFIN 3501 Portfolio Theory and Management III
and either
 APP MTH 3012 Financial Modelling: Tools and Techniques
or
 CORPFIN 3502 Options, Futures & Risk Management III
- d *and either*
- i a further 6 units of Level III Finance courses from 4.8.1(a) below
or
- ii a further 12 units of Level III courses from 4.8.1 below
- ## 4.2 Bachelor of Finance (International)
- 4.2.1 To qualify for the degree of Bachelor of Finance (International), candidates must satisfy all conditions in 4.1 above.
- 4.2.2 In addition, the courses presented must include:
either
 ECON 2500 International Trade & Investment Policy II
or
 CORPFIN 2501 Financial Institutions Management II
 ECON 2506 Intermediate Microeconomics II
 ECON 2507 Intermediate Macroeconomics II
 CORPFIN 3501 Portfolio Theory and Management
 CORPFIN 3502 Options, Futures & Risk Management III
 ECON 3510 International Finance III
 ECON 3511 Money, Banking & Financial Markets III
- 4.3 In determining a candidate's eligibility for the award of the degree, the Schools of Business, Economics, and Mathematical and Computer Sciences may disallow any course passed more than 10 years previously.
- 4.4 A candidate may present for a Bachelor of Finance degree courses for which a Conceded Pass has been awarded, to a maximum aggregate value of 6 units, providing that each course does not exceed 3 units. Conceded passes cannot be presented for those courses in 4.8.1(a) and 4.8.1(b) below.
- 4.5 To qualify for a Bachelor of Finance degree a student who transferred into the Bachelor of Finance from another university and has been granted status for studies completed prior to transfer must satisfy all conditions in 4.1 or 4.2 above and must pass at least 24 units of Level II or III courses taught at the University of Adelaide. These must include 12 units of Level III Finance courses. However, this requirement may be waived in special circumstances approved by the School.
- 4.6 A candidate for a Bachelor of Finance degree at the University of Adelaide who wishes to undertake courses elsewhere towards their degree, must satisfy all conditions in 4.1, or 4.2 above and present courses taught at the University of Adelaide having a minimum value of 48 units, including at least 12 units of Level III Finance courses, and also arrange for the proposed scheme of study elsewhere to be approved in advance by the School. However, this requirement may be waived in special circumstances approved by the School.
- 4.7 a Graduates of the University of Adelaide (except those specified in 4.7(b)) or of other institutions, who wish to proceed to the degree of Bachelor of Finance and to count towards that degree courses which they have already presented for another qualification may be permitted to do so subject to the following conditions:
- i they may present for the degree such courses to a maximum aggregate value of 24 units. No such course/s may be presented in lieu of 12 units Level II Finance courses and 12 units Level III Finance courses
- ii they shall present at least 18 units for courses at Level III, which have not been presented to any other degree *and*
- iii they shall present a range of courses which fulfil the requirements of 4.1 or 4.2.
- b Graduates of the University of Adelaide who wish to proceed to a Bachelor of Finance degree and to count towards that degree courses which they have already presented for the Bachelor of Commerce, Bachelor of Computer Science, Bachelor of Economics, Bachelor of Engineering (Chemical), Bachelor of Engineering (Civil), Bachelor of Engineering (Civil & Environmental), Bachelor of Engineering (Computer Systems), Bachelor of Engineering (Electrical & Electronic), Bachelor of Engineering (IT&T), Bachelor Engineering (Mechanical) or Bachelor of Mathematical and Computer Sciences, degree may be permitted to do so subject to the following conditions:
- i they may present for the degree such courses to a maximum aggregate value of 48 units
- ii they shall present at least 24 units which have not been presented to any other degree, comprising either 18 units of Level III Finance courses and an additional 6 units

of Level II or III courses from 4.8.1 below, or 12 units of Level III Finance courses and an additional 12 units of Level III courses from 4.8.1 below

- iii they shall present the courses specified in 4.1 or 4.2 above
- iv they hold only one of the degrees listed in 4.7 (b) above.

4.8 Academic program

4.8.1 The following courses may be presented for the Bachelor degree:

A - Finance courses

Level I

ACCTING 1002 Accounting for Decision Makers I	3
ECON 1000 Principles of Macroeconomics	3
ECON 1004 Principles of Microeconomics	3
ECON 1008 Business and Economic Statistics	3
ECON 1009 International Financial Institutions and Markets	3
MATHS 1009 Introduction to Financial Mathematics I	3
MATHS 1010 Applications of Quantitative Methods in Finance I	3
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
MATHS 1013 Mathematics IMA	3
STATS 1000 Statistical Practice I	3

Level II

ENG 2002 Financial Computing II	3
CORPFIN 2500 Business Finance II	3
ECON 2500 International Trade and Investment Policy	3
ECON 2504 Intermediate Econometrics II	3
ECON 2506 Intermediate Microeconomics II	3
ECON 2507 Intermediate Macroeconomics II	3
ECON 2508 Financial Economics II	3
MATHS 2103 Probability and Statistics	3

Level III

APP MTH 3012 Financial Modelling: Tools and Techniques	3
COMMLAW 3501 Business Taxation & GST III	3
CORPFIN 3500 Corporate Finance Theory III	3
CORPFIN 3501 Portfolio Theory and Management III	3
CORPFIN 3502 Options, Futures and Risk Management III	3
CORPFIN 3503 Corporate Investment and Strategy III	3
ECON 3506 International Trade III	3
ECON 3507 Econometric Theory III	3

ECON 3510 International Finance III	3
ECON 3514 Advanced Macroeconomics III	3
ECON 3511 Money, Banking and Financial Markets III	3
STATS 3005 Time Series III	3

B - Other Economics & Commerce courses

All other courses listed in the Academic Program Rules for the degrees of Bachelor of Economics and Bachelor of Commerce.

C - Other Mathematical & Computer Sciences courses

All other courses listed in the Academic Program Rules for the degrees of Bachelor of Mathematical and Computer Sciences and Bachelor of Computer Science.

D - Humanities and Social Sciences courses

Courses listed in the Academic Program Rules of the degree of Bachelor of Arts (which include courses offered by other Faculties).

E - Law courses

For students who have obtained a place in the Bachelor of Laws, courses, to a maximum of 24 units, listed in the Academic Program Rules of the degree of the Bachelor of Laws (see note 2 of the Notes (not forming part of the Academic Program Rules) above).

- 4.8.2 Candidates who have completed courses for a Bachelor of Finance degree under previous schedules may continue under the schedules then in force, with such modifications (if any) as shall be prescribed by the School.
- 4.8.3 A candidate may not count for a Bachelor of Finance degree any course together with any other course which, in the opinion of the School, contains a substantial amount of the same material and no course may be counted twice towards the degree. A table of unacceptable combinations of courses is available from the Schools of Business, Economics, or Mathematical and Computer Sciences.
- 4.8.4 Except with the permission of the School, a candidate may not enrol in non-Finance courses at Level II to the value of more than 12 units unless he or she has already passed or is concurrently enrolled in the compulsory Level II courses CORPFIN 2500 Business Finance II, ECON 2504 Economic and Financial Data Analysis and ECON 2508 Financial Economics (or equivalent). These non-Finance courses to the value of not more than 12 units shall not include courses in which the candidate has previously failed or from which they candidate has withdrawn.

4.8.5 Except with the permission of the School, a candidate may not enrol in non-Finance courses at Level III to the value of more than 9 units unless he or she has already passed or is concurrently enrolled in the compulsory Level II courses CORPFIN 2500 Business Finance II, ECON 2504 Economic and Financial Data Analysis and ECON 2508 Financial Economics (or equivalent), and has already passed or is concurrently enrolled in Level III Finance courses to the value of 12 units. These non-Finance courses to the value of not more than 9 units shall not include courses in which the candidate has previously failed or from which the candidate has withdrawn.

4.9 The Honours degree

4.9.1 A candidate for the Honours degree shall attend lectures and pass examinations in accordance with the provisions of these Academic Program Rules.

4.9.2 A candidate may, subject to the approval of the Heads of the Business School, School of Economics, and Heads of the Departments of Mathematics, Applied Mathematics or Statistics, proceed to the Honours degree in the course COMMERCE 4000A/B Honours Commerce, or COMMERCE 4002A/B for part-time students.

4.9.3 A candidate may, subject to the approval of the Heads of the Schools/Departments concerned, proceed to the Honours degree taught jointly by more than one Department/School. Candidates must apply in writing to the School for the proposed program of study to be approved in advance.

4.9.4 a A candidate preparing for the Honours year must complete the requirements for a Bachelor of Finance degree before proceeding with the Honours year, including ECON 3507 Econometric Theory III (ECON 3507 may be waived by permission of the Head of the School), and must obtain a high standard in courses presented for the Bachelor degree (or their equivalent elsewhere).

b A candidate who has satisfied the requirements for admission to Honours as set out in previous Academic Program Rules is also eligible to apply for admission to the Honours year as above.

4.9.5 The work of the Honours year is normally completed in one year of full-time study. The School may permit a candidate to spread the work over two years, but not more, under such conditions as it may determine.

4.9.6 A candidate who is unable to complete the program for the Honours degree within the time allowed, or whose work is unsatisfactory at any stage of the program, or who withdraws from the program shall be reported to the School, which may permit re-enrolment for an Honours degree under such conditions (if any) as it may determine.

4.9.7 A candidate who satisfies the requirements for Honours shall be awarded the Honours degree, but the Faculty shall decide within which of the following classes and divisions the degree shall be awarded:

- 1 First Class
- 2A Second Class div A
- 2B Second Class div B
- 3 Third Class
- NAH Not awarded.

4.10 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award.

5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

Notes (not forming part of the Academic Program Rules)

- 1 Students are advised that a knowledge of mathematics is helpful for finance, commerce and economics courses and is essential for some courses.
- 2 Studies in Law within a Bachelor of Finance degree
 - (1) It is possible for students in Finance to elect to complete both the Bachelor of Finance and Bachelor of Laws academic program in a total of 5 years of full-time study, provided they are accepted into the Bachelor of Laws academic program. Students wishing to pursue this academic plan may apply for admission through the South Australian Tertiary Admission Centre by September of the year before they commence university study or in a later year of the program.
 - (2) Students will enrol concurrently for the degree of B.Fin. and LL.B and may present for the degree of B.Fin. the Law courses listed in the Academic Program Rules for the degree of Bachelor of Laws. Students must complete all the requirements for the B.Fin. before they can obtain their LL.B degree.
 - (3) See also the Academic Program Rules of the LL.B degree and Introductory Notes to the LL.B Syllabuses.

Graduate Attributes

Bachelor of Finance

Bachelor of Finance (International)

Knowledge

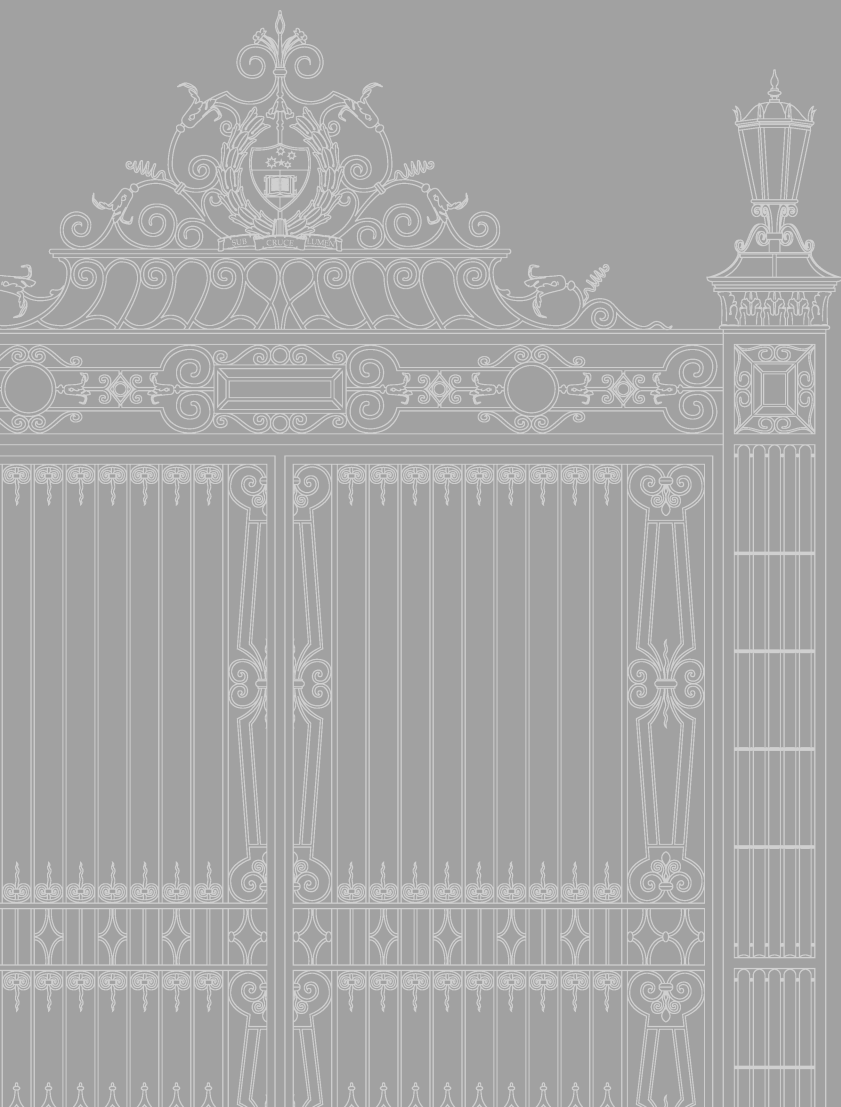
- Knowledge and understanding of economics and finance at levels that are internationally recognised. This includes core analytical knowledge, appropriate quantitative skills, and an understanding of the relevant institutional context.

Intellectual and social capabilities

- Cognitive skills such as the ability to analyse, evaluate and synthesise financial information, both quantitative and qualitative, from a wide variety of sources
- Critical thinking and problem-solving skills, especially as these apply to the analysis of financial problems
- Numeracy skills, especially in statistics and econometrics
- Literacy and verbal communication skills of a high order in the presentation of arguments or evidence of a financial nature
- Skills in interpersonal understanding, with the capacity to communicate effectively and to work both independently and cooperatively with other professional finance specialists
- Capacity for future employment based on a professional education that appropriately balances the reflective, intuitive, and decision-making requirements of work in the finance areas
- To stimulate and maintain intellectual curiosity and a commitment to continuous learning
- The ability to take a leadership role in the finance profession as well as in the wider community, and a commitment to high standards of professional ethics
- Proficiency in the use of computer-based technologies.

Attitudes and values

- A desire to be an informed, responsible and critically discriminating participant in academic, social, cultural and ethical issues, in the community of finance specialists, in the workforce more generally, and both in Australia and abroad
- A commitment to the highest standards of ethical behaviour
- An abiding sense of curiosity and enquiry both within and beyond the discipline.



Academic Program Rules

School of Economics

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Undergraduate Awards

- Degree of Bachelor of Economics
- Honours degree of Bachelor of Economics

Notes on Delegated Authority

1. Council has delegated the power to approve minor changes to the Academic Program Rules to the Executive Deans of Faculties.
2. Council has delegated the power to specify syllabuses to the Head of each department or centre concerned, such syllabuses to be subject to approval by the Faculty or by the Executive Dean on behalf of the Faculty.



Bachelor of Economics

1 General

There shall be a degree and an Honours degree of Bachelor of Economics. A candidate may obtain either degree or both.

2 Duration of program

The program of study for the degree of Bachelor of Economics shall extend over three years of full-time study or its part-time equivalent.

3 Assessment and examinations

3.1 A candidate for the Bachelor degree shall attend lectures and pass examinations in accordance with the provisions of these Academic Program Rules.

3.2 A candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned. A candidate who is not eligible to attend for examination shall be deemed to have failed the examination.

3.3 In determining a candidate's final result in a course (or part of a course) the examiners may take into account oral, written, practical and examination work, provided that the candidate has been given adequate notice at the commencement of the teaching of the course of the way in which work will be taken into account and of its relative importance in the final result.

3.4 There shall be five classifications of pass in the final assessment of any course for the Bachelor degree, as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, Pass and Conceded Pass.

3.5 A candidate may present for the degree a limited number of courses for which a Conceded Pass has been awarded, as specified in 4.3 below.

3.6 A candidate who fails a course or who obtains a Conceded Pass and who desires to take that course again shall, unless exempted wholly or partially therefrom by the Head of the School of Economics, again complete the required work in that course to the satisfaction of the teaching staff concerned.

3.7 A candidate who has twice failed the examination in any course for the Bachelor degree may not enrol for that course again or for any other course which in the opinion of the School contains a substantial amount of the same material, except by permission of the School and then only under such conditions as School may prescribe.

3.8 Academic Progress

The Faculty may prescribe rules for review of academic progress. Any student who meets the requirement for review will be asked to show

cause as to why they should be permitted to continue their studies. Students who cannot adequately explain poor academic performance may have their enrolment cancelled or restricted, and/or be precluded from undertaking further studies toward their program.

4 Qualification requirements

4.1 Academic program

To qualify for the degree of Bachelor of Economics, candidates must pass courses with a combined total of not less than 72 units drawn from 4.7 below including:

- a not more than 24 units from Level I, including:
ECON 1000 Principles of Macroeconomics I
ECON 1004 Principles of Microeconomics I
ECON 1008 Business and Economic Statistics I
or
STATS 1000 Statistical Practice

Note: candidates who have not completed SACE Stage 2 Mathematical Studies or equivalent, must complete ECON 1005 Mathematics for Economists before proceeding to Level II Economics courses.

- b at least 12 units of Economics courses including from those listed in 4.7.1:
ECON 2504 Intermediate Econometrics II
or
ECON 2503 Mathematical Economics II
ECON 2506 Intermediate Microeconomics II
ECON 2507 Intermediate Macroeconomics II
- c at least 12 units of Level III Economics courses from those listed in 4.7.1A *and*
- d *either*
- i a further 6 units of Level III Economics courses from 4.7.1A below and 6 units of Level II or Level III courses
or
- ii a further 12 units of Level III courses from 4.7 below.
- e Included in the 72 units there must be:
- i at least one of the following Economic History courses:
ECON 2505 Australian Economic History II
ECON 3509 International Economic History III
- ii see also note 4.8 below, covering prerequisites for the Bachelor of Economics (Honours) degree.

- 4.2 In determining a candidate's eligibility for the award of the degree, the School may disallow any course passed more than 10 years previously.
- 4.3 A candidate may present for the degree courses for which a Conceded Pass has been awarded to a maximum aggregate value of 6 units, providing that each course does not exceed 3 units. Conceded passes cannot be presented for those courses listed in 4.7.1A, 4.7.1B and 4.7.1E below.
- 4.4 To qualify for the degree of Bachelor of Economics a student who transferred into the Bachelor of Economics from another university and has been granted status for studies completed prior to transfer must satisfy all conditions in 4.1 and must pass at least 24 units of Level 2 or 3 courses taught at the University of Adelaide. These must include 12 units of Level 3 Economics courses. However, this requirement may be waived in special circumstances approved by the School.
- 4.5 A candidate for the degree of Bachelor of Economics at the University of Adelaide, who wishes to undertake courses elsewhere towards their degree, must satisfy all conditions in 4.1 above and present courses taught at the University of Adelaide having a minimum value of 48 units, including at least 12 units of Level 3 Economics courses, and also arrange for the proposed scheme of study elsewhere to be approved in advance by the School. However, this requirement may be waived in special circumstances approved by the School.
- 4.6 a Graduates of the University of Adelaide (except those specified in 4.6 (b) below) or of other institutions who wish to proceed to the degree of Bachelor of Economics and to count towards that degree courses which they have already presented for another qualification may be permitted to do so subject to the following conditions:
- i they may present for the degree such courses to a maximum aggregate value of 24 units
 - ii they shall present at least 18 units for courses at Level 3, which have not been presented to any other degree, including at least 12 units for Economics courses *and*
 - iii they shall present a range of courses which fulfil the requirements of 4.1 above
- b Graduates of the University of Adelaide who wish to proceed to the degree of Bachelor of Economics and to count towards that degree courses which they have already presented for the Bachelor of Arts, Bachelor of Commerce, Bachelor of Computer Science, Bachelor of Engineering (Chemical), Bachelor of Engineering (Civil & Environmental), Bachelor of Engineering (Civil & Structural), Bachelor of Engineering (Computer Systems), Bachelor of Engineering (Electrical & Electronic), Bachelor of Engineering (Mechanical), Bachelor of Engineering (Mechatronic), Bachelor of Engineering (Telecommunications), Bachelor of Finance, Bachelor of Finance (International), Bachelor of International Studies, Bachelor of Mathematical and Computer Sciences, Bachelor of Media and Bachelor of Social Sciences degree may be permitted to do so subject to the following conditions:
- i they may present for the degree such courses to a maximum aggregate value of 48 units
 - ii they shall present at least 24 units which have not been presented for any other degree comprising either at least 18 units of Level 3 Economics courses from those listed in 4.7.1A with the remaining units from courses at Level II or Level III included in 4.7 or 12 units of Level III Economics courses, with at least another 12 units of Level III courses from those listed in 4.7
 - iii they shall present the courses specified in 4.1(a), 4.1(b) and 4.1(d) above *and*
 - iv they hold only one of the degrees listed in 4.6(b).
- 4.7 Academic program**
- 4.7.1 The following courses may be presented for the Bachelor degree:
- A - Economics courses**
- Level I**
- | | |
|---|---|
| ECON 1000 Principles of Macroeconomics I..... | 3 |
| ECON 1002 Australia & the Global Economy I..... | 3 |
| ECON 1004 Principles of Microeconomics I..... | 3 |
| ECON 1005 Mathematics for Economists I..... | 3 |
| ECON 1008 Business and Economic Statistics I... 3 | |
| ECON 1009 International Financial Institutions and Markets I..... | 3 |
| ECON 1010 Introduction to Mathematical Economics I..... | 3 |
- Level II**
- | | |
|--|---|
| ECON 2500 International Trade and Investment Policy II | 3 |
| ECON 2501 Resource and Environmental Economics II | 3 |
| ECON 2502 East Asian Economies II..... | 3 |
| ECON 2503 Mathematical Economics II..... | 3 |
| ECON 2504 Intermediate Econometrics II..... | 3 |
| ECON 2505 Australian Economic History II | 3 |
| ECON 2506 Intermediate Microeconomics II | 3 |
| ECON 2507 Intermediate Macroeconomics II..... | 3 |
| ECON 2508 Financial Economics II..... | 3 |
| ECON 2509 Topics in Microeconomics II | 3 |
| ECON 2510 Business and Economics Statistical Theory II..... | 3 |

Level III

ECON 3016 Industrial Organisations III.....	3
ECON 3500 Resource & Environmental Economics III	3
ECON 3501 Development Economics III	3
ECON 3502 Topics in Applied Econometrics III.....	3
ECON 3503 Strategic Thinking III.....	3
ECON 3504 Labour Economics III.....	3
ECON 3506 International Trade III	3
ECON 3507 Econometric Theory III	3
ECON 3508 Public Economics III	3
ECON 3509 International Economic History III.....	3
ECON 3510 International Finance III	3
ECON 3511 Money, Banking and Financial Markets III.....	3
ECON 3512 Public Finance III.....	3
ECON 3514 Macroeconomics III.....	3
ECON 3515 Time Series Econometrics III	3
ECON 3516 Industrial Organisation III.....	3
ECON 3517 Managerial Economics III	3

B - Commerce courses

Courses listed in the Academic Program Rules of the degree of Bachelor of Commerce.

C - Humanities and Social Sciences courses

Courses listed in the Academic Program Rules of the degree of Bachelor of Arts, (which include courses offered by other Faculties) not listed in A or B above.

D - Law courses

For students who have obtained a place in the Bachelor of Laws, courses to a maximum of 24 units, listed in the Academic Program Rules of the degree of Bachelor of Laws - see note 4 of the Notes (not forming part of the Academic Program Rules).

E - Finance courses

Courses listed in the Academic Program Rules of the degree of Bachelor of Finance.

- 4.7.2 A candidate may not present COMMLAW 1004 Commercial Law I for the degree if passed after 3731 Contract or LAW 1003 Law of Contract.
- 4.7.3 A candidate may not present COMMLAW 2500 Commercial Law II for the degree if passed after LAW 2004 Corporate Law.
- 4.7.4 Candidates who have completed courses for the degree under previous schedules may continue under the schedules then in force, with such modifications (if any) as shall be prescribed by the Head.
- 4.7.5 A candidate may not count for the degree any course together with any other course which, in the opinion of the School, contains a substantial amount of the same material, and no course may

be counted twice towards the degree. A table of unacceptable combinations of courses is available from the Faculty of the Professions office.

- 4.7.6 Except with the permission of the School, a candidate may not enrol in non-Economics courses at Level II to the value of more than 12 units unless he or she has already passed or is concurrently enrolled in the compulsory Level II courses ECON 2504 Intermediate Econometrics II, ECON 2506 Intermediate Microeconomics and ECON 2507 Intermediate Macroeconomics (or equivalents). These non-Economics courses to the value of not more than 12 units shall not include courses in which the candidate has previously failed or from which the candidate has withdrawn.
- 4.7.7 Except with the permission of the School, a candidate may not enrol in non-Economics courses at Level III to the value or more than 9 units unless he or she has already passed or is concurrently enrolled in the compulsory Level II courses ECON 2504 Intermediate Econometrics II, ECON 2506 Intermediate Microeconomics and ECON 2507 Intermediate Macroeconomics (or equivalents) and has already passed or is concurrently enrolled in Level III Economics courses to the value of 12 units. These non-Economics courses to the value of not more than 9 units shall not include courses in which the candidate has previously failed or from which the candidate has withdrawn.

4.8 The Honours degree

- 4.8.1 A candidate for the Honours degree shall attend lectures and pass examinations in accordance with the provisions of these Academic Program Rules.
- 4.8.2 A candidate may, subject to the approval of the Head of the School of Economics, proceed to the Honours degree in the course ECON 4003 A/B Honours Economics.
- 4.8.3 A candidate may, subject to the approval of the Head of the Schools concerned, proceed to the Honours degree taught jointly by the School of Economics and another School. Candidates must apply in writing for the proposed program of study to be approved in advance by the School.
- 4.8.4 a A candidate preparing for the Honours year taught by the School of Economics must complete the requirements for the Bachelor degree of B.Ec. or its equivalent including ECON 2503 Mathematical Economics II, ECON 2504 Intermediate Econometrics II, ECON 2509 Topics in Microeconomics II, ECON 2510 Business and Economic Statistical Theory II, ECON 3507 Econometric Theory III, ECON 3514 Macroeconomics III and at least two other Level III courses in economics, and must obtain at least a high credit standard in all six of these courses, together with a high standard in other courses presented for the Bachelor degree, subject to approval from the School of Economics.

- b A candidate who has satisfied the requirements for admission to Honours as set out in previous schedules is also eligible to apply for admission to the Honours year as above.
- 4.8.5 The work of the Honours year is normally completed in one year of full-time study, after completion of the Bachelor degree or its equivalent. The School may permit a candidate to spread the work over two years, but not more, under such conditions as it may determine.
- 4.8.6 A candidate who is unable to complete the program for the Honours degree within the time allowed, or whose work is unsatisfactory at any stage of the program, or who withdraws from the program shall be reported to the School, which may permit re-enrolment for an Honours degree under such conditions (if any) as it may determine.
- 4.8.7 A candidate who satisfies the requirements for Honours shall be awarded the Honours degree, but the Faculty shall decide within which of the following classes and divisions the degree shall be awarded:
- | | |
|-----|--------------------|
| 1 | First Class |
| 2A | Second Class div A |
| 2B | Second Class div B |
| 3 | Third Class |
| NAH | Not awarded. |
- 4.8.8 A graduate who has obtained the Honours Degree of Bachelor of Arts in Economics may not obtain the Honours degree of Bachelor of Economics.
- 4.9 **Graduation**
- Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award.

5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

Notes (not forming part of the Academic Program Rules)

- Not all Level II and Level III courses will be offered every year. Courses will be offered according to numbers of students enrolled and staff availability. Students can increase their flexibility by taking ECON 2506 Intermediate Microeconomics II in their second semester concurrently with ECON 1000 Principles of Macroeconomics I and ECON 2507 Intermediate Macroeconomics II in their third semester so that some Level III courses will be available in their third semester and almost all by their fourth semester.
- Students are advised that a knowledge of mathematics is helpful for economics courses and is essential for some courses. Students who are particularly interested in Mathematics, and are intending to apply for Honours, are encouraged to take some courses in the School of Mathematical and Computer Sciences.
- Studies in Law within the Degree of Bachelor of Economics.

- It is possible for students in Economics to elect to complete both the Bachelor of Economics and Bachelor of Laws academic program in a total of 5 years of full-time study, provided they are accepted into the Bachelor of Laws academic program. Students wishing to pursue this academic plan may apply for admission through the South Australian Tertiary Admission Centre by September of the year before they commence university study or in a later year of the program.
- Students will enrol concurrently for the degree of B.Ec. and LL.B and may present for the degree of B.Ec. Law courses listed in the Academic Program Rules for the degree of Bachelor of Laws. Students must complete all the requirements for the B.Ec. before they can obtain their LL.B degree.
- See also the Academic Program Rules of the LL.B degree and Introductory Notes to the LL.B Syllabuses.

4

Candidates undertaking study for the degree of Bachelor of Economics and one of the degrees of Bachelor of Commerce, Bachelor of Finance, Bachelor of Mathematical and Computer Sciences or Bachelor of Computer Science concurrently:

Candidates may enrol for the degree of Bachelor of Economics concurrently with one of the degrees of Bachelor of Arts, Bachelor of Commerce, Bachelor of Computer Science, Bachelor of Engineering (Chemical), Bachelor of Engineering (Civil & Environmental), Bachelor of Engineering (Civil & Structural), Bachelor of Engineering (Computer Systems), Bachelor of Engineering (Electrical & Electronic), Bachelor of Engineering (Mechanical), Bachelor of Engineering (Telecommunications), Bachelor of Finance, Bachelor of Finance (International), Bachelor of International Studies, Bachelor of Mathematical and Computer Sciences, Bachelor of Media, or Bachelor of Social Sciences, if they apply for admission and are admitted to both programs. Candidates already enrolled in the Bachelor of Economics wishing to proceed to one of these additional degrees concurrently, may apply towards the end of their first year for admission to the B.A., B.Com., B.E.(Chem.), B.E.(Civil), B.E.(Civil & Env.), B.E.(Comp.Sys.), B.E.(Elect.), B.E.(T & T), B.E.(Mech.), B.E.(Mechatronic), B.Fin., B.Ma. & Comp. Sc. or B.Comp.Sc. in the following year.

- The combined degrees may be completed in a minimum of four years (five years for Engineering combined degrees) of full-time study provided appropriate courses are selected. Candidates should seek program advice regarding course choice.
 - Candidates must complete all of the requirements for the Bachelor of Economics, together with the following minimum requirements for the other degree:
 - they must complete the compulsory courses for that degree
 - they shall present 24 units for courses at Level III which have not been presented to the Bachelor of Economics degree.
 - Candidates should note that an enrolment in courses exceeding a total unit value of 24 units per year will result in a program overload and is subject to approval. Candidates should be aware of the full implications of their choice to take a program overload.
- 5 Students following the Accounting pathway may count ACCTING 3020 Corporate Accounting as a fourth Level 3 Economics course, if the student has three (3) Level 3 Economics courses as part of their program.

Graduate Attributes

Bachelor of Economics

Knowledge

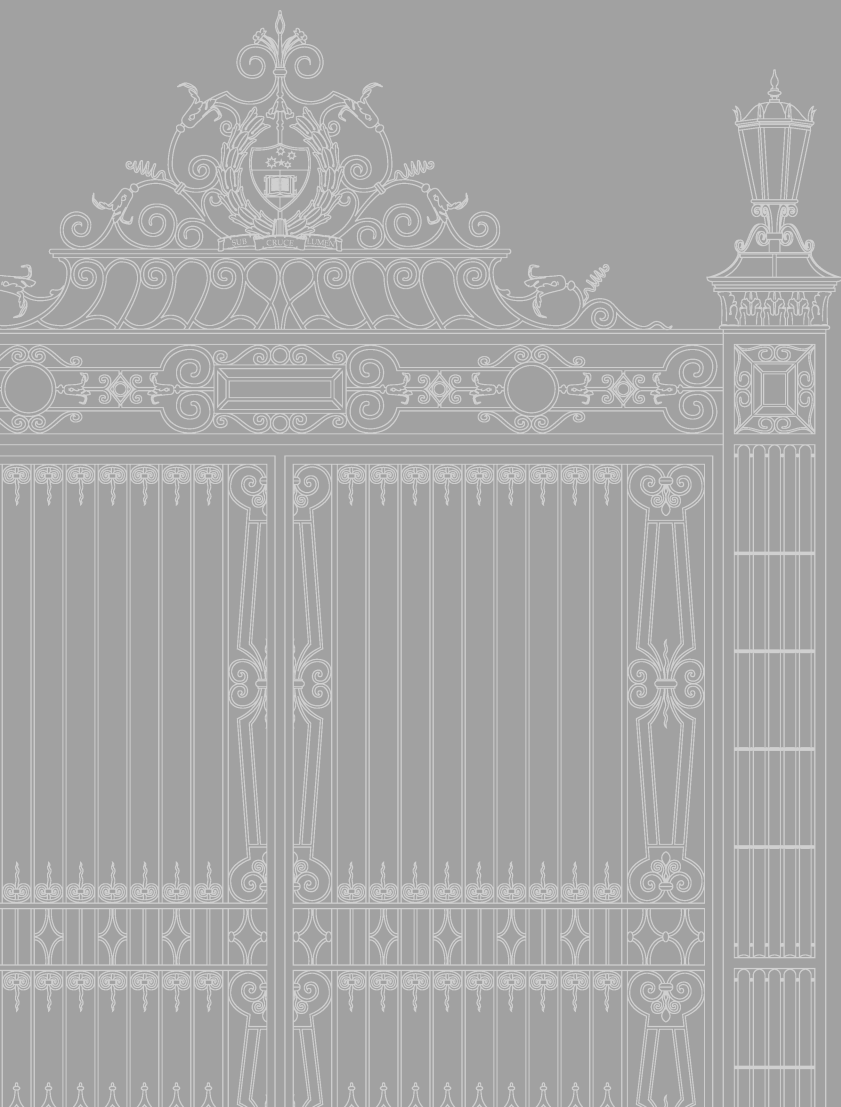
- Knowledge and understanding of the content of economics at levels that are internationally recognised. This includes core analytical knowledge, appropriate quantitative skills and an understanding of the relevant institutional context.

Intellectual and social capabilities

- Cognitive skills such as the ability to analyse, evaluate and synthesise economic information, both quantitative and qualitative, from a wide variety of sources
- Critical thinking and problem-solving skills, especially as these apply to the analysis of economic problems
- Numeracy skills, especially in economic statistics and econometrics
- Literacy and verbal communication skills of a high order in the presentation of arguments or evidence of an economic nature
- Skills in interpersonal understanding, with the capacity to communicate effectively and to work both independently and with other professional economics specialists
- Capacity for future employment based on a professional education that appropriately balances the reflective, intuitive and decision-making requirements of work in the economics areas
- To stimulate and maintain intellectual curiosity and a commitment to continuous learning
- The ability to take a leadership role in the economics profession as well as in the wider community, and a commitment to high standards of professional ethics
- Proficiency in the use of computer-based technologies.

Attitudes and values

- A desire to be an informed, responsible and critically discriminating participant in academic, social, cultural and ethical issues, in the community of economists specialists and in the workforce more generally, in both Australia and abroad
- A commitment to the highest community standards of ethical behaviour
- An abiding sense of curiosity and enquiry both within and beyond the discipline.



Academic Program Rules

School of Education

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Undergraduate Awards

- Degree of Bachelor of Teaching

Notes on Delegated Authority

1. Council has delegated the power to approve minor changes to the Academic Program Rules to the Executive Deans of Faculties.
2. Council has delegated the power to specify syllabuses to the Head of each department or centre concerned, such syllabuses to be subject to approval by the Faculty or by the Executive Dean on behalf of the Faculty.



Bachelor of Teaching

1 Duration of program

To qualify for the Bachelor of Teaching as part of a double degree program, a student shall satisfactorily complete a program of four years of full time study or equivalent part time study in the two degrees concerned.

2 Admissions

An applicant for admission will have been accepted for enrolment in a University of Adelaide Bachelor program that is approved by the Head of the School of Education as one appropriate to be taken concurrently with the Bachelor of Teaching.

2.1 Status, exemption and credit transfer

2.1.1 No student may be granted more than 12 units of status to the required Education courses listed in 4.1 below.

2.1.2 A candidate who has had practical teaching experience may, after enrolment, apply in writing to the School of Education for status in teaching practice.

3 Assessment and examinations

3.1 There shall be one of two systems of classification of pass in individual courses for the Bachelor of Teaching:

either

Non-Graded Pass

or

Pass with High Distinction, Pass with Distinction, Pass with Credit, and Pass. There shall also be a classification of Conceded Pass. Courses for which a Conceded Pass has been awarded may not be presented towards the degree nor to satisfy prerequisite requirements within any education course.

3.2 Academic Progress

3.2.1 A student who fails a course and desires to take the course again shall again attend lectures and satisfactorily do such written and practical work as the teaching staff concerned may prescribe.

3.2.2 A student who has twice failed a course may not enrol for that course again except by special permission to be obtained in writing from the School and then only under such conditions as may be prescribed.

3.2.3 For the purposes of this clause a student who is refused permission to sit for an examination, or who does not, with a reason accepted by the Head of the School of Education as adequate, attend all or part of a final examination (or supplementary examination if granted) after having

enrolled for at least two thirds of the normal period during which the course is taught, shall be deemed to have failed the examination.

4 Qualification requirements

Academic program

A Bachelor of Teaching is a double degree qualification requiring completion of courses to the value of not less than 96 units. To qualify for the Bachelor of Teaching a candidate must successfully complete courses as described in 4.1 below, and one of 4.2, 4.3, 4.4 or 4.5 below.

4.1 Education

4.1.1 Level I

EDUC 1001 Schools and Policies.....3

EDUC 1002 Primary School Interaction3

4.1.2 Level II

EDUC 2001 Issues in Contemporary Education ...3

EDUC 2002 Professional Practice and Research..3

4.1.3 Level III

EDUC 3002 Secondary School Interaction.....3

4.1.4 Level IV

Students must successfully complete courses to the value of 24 units comprising 6 units of Teaching Practice courses, 12 units of Education Studies courses and 6 units of Curriculum and Methodology courses, as follows:

Teaching Practice

EDUC 4205 Teaching Practice Part I (UG)3

EDUC 4206 Teaching Practice Part II (UG)3

Education Studies

EDUC 4201 Education Culture & Indigenous Perspectives (UG)3

EDUC 4202 Student Learning and Interactions I (UG).....3

EDUC 4203 Curriculum and Assessment of Learning.....3

EDUC 4204 Families, Schools & Special Needs (UG)3

Curriculum and Methodology

Courses to a value of 6 units from:

Humanities

EDUC 4320 A/B Geography Curriculum & Methodology (UG)2

EDUC 4322 A/B History Curriculum & Methodology (UG).....2

EDUC 4334 A/B Studies of Society and Environment (UG)2

Business

EDUC 4308 A/B Accounting Curriculum & Methodology (UG)	2
EDUC 4311 A/B Business Studies Curriculum & Methodology (UG)	2
EDUC 4315 A/B Economics Curriculum & Methodology (UG)	2

English

EDUC 4319 A/B General English Curriculum & Methodology (UG)	2
EDUC 4332 A/B Senior English Curriculum & Methodology (UG)	2

Languages other than English

EDUC 4313 A/B Chinese Curriculum & Methodology (UG)	2
EDUC 4316 A/B English as a Second Language (UG)	2
EDUC 4318 A/B French Curriculum & Methodology (UG)	2
EDUC 4321 A/B German Curriculum & Methodology (UG)	2
EDUC 4332 A/B Indonesian Curriculum & Methodology (UG)	2
EDUC 4326 A/B Italian Curriculum & Methodology (UG)	2
EDUC 4327 A/B Japanese Curriculum & Methodology (UG)	2
EDUC 4330 A/B Language Methodology (UG)	2
EDUC 4335 A/B Spanish Curriculum & Methodology (UG)	2
EDUC 4336 A/B Other Languages Curriculum & Methodology (UG)	2
EDUC 4337 A/B Vietnamese Curriculum & Methodology (UG)	2
EDUC 4338 A/B Modern Greek Curriculum & Methodology (UG)	2
EDUC 4339 A/B Languages Education for TESOL (UG)	2

Mathematics

EDUC 4324 A/B Information Technology Curriculum & Methodology (UG)	2
EDUC 4328 A/B Junior Mathematics Curriculum & Methodology (UG)	2
EDUC 4333 A/B Senior Mathematics Curriculum & Methodology (UG)	2

Music

EDUC 4314 A/B Classroom Music Curriculum & Methodology (UG)	3
EDUC 4325 A/B Instrumental Music Curriculum & Methodology (UG)	3

Science

EDUC 4310 A/B Biology Curriculum & Methodology (UG)	2
EDUC 4312 A/B Chemistry Curriculum & Methodology (UG)	2
EDUC 4329 A/B Junior Science Curriculum & Methodology (UG)	2
EDUC 4331 A/B Physics Curriculum and Methodology (UG)	2
EDUC 4340 A/B Psychology Curriculum & Methodology	2

General

EDUC 4309 A/B Adult Learner Curriculum & Methodology (UG)	2
EDUC 4317 A/B Extended Specialist Curriculum (UG)	2

4.2 Bachelor of Teaching/Bachelor of Economics

In addition to the courses listed in 4.1 above a candidate must complete courses towards the Bachelor of Economics degree as listed below:

4.2.1 Level I

18 units of Level 1 courses, including:

ECON 1000 Principles of Macroeconomics I	3
ECON 1004 Principles of Microeconomics I	3
ECON 1008 Business & Economics Statistics I ...	3

or

STATS 1000 Statistical Practice	3
---------------------------------------	---

Note: candidates who have not completed SACE Stage 2 Mathematical Studies or equivalent, must complete ECON 1005 Mathematics for Economists before proceeding to Level II.

4.2.2 Level II

18 units of Level 2 courses, including at least 12 units Economics courses which must include:

ECON 2506 Intermediate Microeconomics II	3
ECON 2507 Intermediate Macroeconomics II	3
ECON 2504 Intermediate Econometrics II	3

or

ECON 2503 Mathematical Economics II	3
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4.2.3 Level III

18 units of Level III courses including at least 12 units of Level III Economics courses from those listed in the program rules for the Bachelor of Economics degree.

A further 3 units of Level III Economics courses chosen from those listed in the program rules for the Bachelor of Economics degree *or*

EDUC 3001 Reflective Practice	3
-------------------------------------	---

- 4.2.4 Included in the Economics courses there must be at least one of the following Economic History courses:
 ECON 2505 Australian Economic History II3
 ECON 3509 International Economic History III3

4.3 Bachelor of Teaching/Bachelor of Arts

In addition to the courses listed in 4.1 above a candidate must complete courses towards the Bachelor of Arts degree as listed below:

4.3.1 Level I

18 units of Level I courses, including at least 12 units of Level I courses chosen from those listed in the rules for the Bachelor of Arts degree.

4.3.2 Advanced Level/ Level II & III

36 units of Advanced Level or Level II and Level III courses chosen from those listed in the rules for the Bachelor of Arts degree.

A further 3 units of Advanced Level courses chosen from those listed in the rules for the Bachelor of Arts degree *or*

EDUC 3001 Reflective Practice3

- 4.3.3 The courses completed must include at least one major and one minor sequence of study as defined in the program rules for the Bachelor of Arts degree.

4.4 Bachelor of Teaching/Bachelor of Mathematical & Computer Sciences

In addition to the courses listed in 4.1 above a candidate must complete courses towards the Bachelor of Mathematical and Computer Sciences degree as listed below.

The courses completed must include at least 36 units of courses in Mathematical and Computer Sciences disciplines.

4.4.1 Level I

18 units of Level 1 courses, including:

either

MATHS 1011 Mathematics IA *and*

MATHS 1012 Mathematics IB

or

MATHS 1013 Mathematics IMA *and*

MATHS 1011 Mathematics IA *and*

MATHS 1012 Mathematics IB

obtaining a Pass standard or higher for each course presented.

The remaining courses must be chosen from the Level I requirements as specified in the program rules for the Bachelor of Mathematical and Computer Sciences.

4.4.2 Level II

18 units of Level II courses chosen from the Level II requirements as specified in the program rules for the Bachelor of Mathematical and Computer Sciences.

4.4.3 Level III

21 units of Level III courses which must include at least 12 units of Level III Mathematical and Computer Sciences courses *and*

MATHS 3015 Communication Skills III3

Courses must be chosen from the Level III requirements as specified in the program rules for the Bachelor of Mathematical and Computer Sciences.

Note: Students may substitute one Level 2 course with a Level III course chosen from those specified in the Program Rules for the Bachelor of Mathematical and Computer Sciences. Specific course requirements for majors in Applied Mathematics, Computer Science, Mathematical Sciences, Pure Maths and Statistics are specified in the Academic Program Rules for the Bachelor of Mathematical and Computer Sciences.

4.5 Bachelor of Teaching/Bachelor of Science

In addition to the courses listed in 5.1 above a candidate must complete courses towards the Bachelor of Science degree as listed below:

4.5.1 Level I

18 units of Level I courses, as listed in Rule 5.5.1 and 5.5.2 for the Bachelor of Science.

4.5.2 Level II

18 units of Level II courses as listed in Rule 5.5.3 and 5.5.4 for the Bachelor of Science.

4.5.3 Level III

21 units of Level III courses including a major in a science discipline, as set out in the program rules for the Bachelor of Science

- 4.6 No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

4.7 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award.

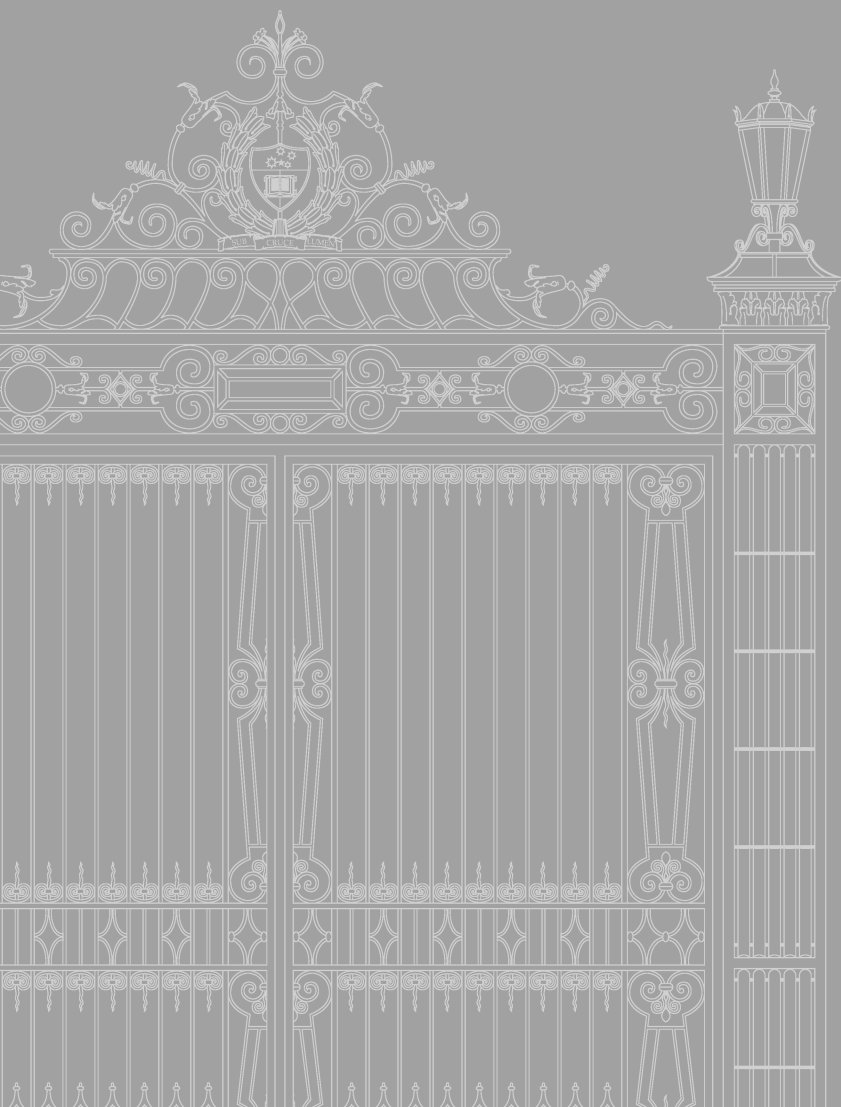
5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

Graduate Attributes

Bachelor of Teaching

- Knowledge and understanding of the student's chosen discipline areas and policies relating to schools and teaching
- Skills in analysing, evaluating and synthesising information
- The capacity for critical thinking, analysis and problem solving and the ability to undertake research and apply it to practice
- Interpersonal and communication skills of a high order
- The ability to fulfil leadership roles within the teaching profession and community at large
- Proficiency in the appropriate and responsible use of modern technologies
- An awareness of the need to commit to responsible participation within their discipline and their profession, as well as their local communities and the wider world
- An understanding of social justice including aspects related to moral standards and cultural diversity
- The capacity for reflecting on one's teaching and professional practice.



Academic Program Rules

Faculty of Engineering, Computer and Mathematical Sciences

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Undergraduate Awards

- Degree of Bachelor of Computer Graphics
- Degree of Bachelor of Computer Science
- Degree of Bachelor of Engineering in Aerospace Engineering
- Degree of Bachelor of Engineering in Architectural Engineering
- Degree of Bachelor of Engineering in Avionics and Electronic Systems Engineering
- Degree of Bachelor of Engineering in Chemical Engineering
- Degree of Bachelor of Engineering in Chemical Engineering (Minerals Processing)
- Degree of Bachelor of Engineering in Civil and Environmental Engineering
- Degree of Bachelor of Engineering in Civil and Structural Engineering
- Degree of Bachelor of Engineering in Computational Engineering
- Degree of Bachelor of Engineering in Computer Systems Engineering
- Degree of Bachelor of Engineering in Electrical and Electronic Engineering
- Degree of Bachelor of Engineering in Electrical and Electronic Engineering and Bachelor of Science (Physics)
- Degree of Bachelor of Engineering in Mechanical Engineering
- Degree of Bachelor of Engineering in Mechanical and Automotive Engineering
- Degree of Bachelor of Engineering in Mechatronic Engineering
- Degree of Bachelor of Engineering in Mining Engineering
- Degree of Bachelor of Engineering in Petroleum Engineering
- Degree of Bachelor of Engineering in Petroleum Engineering and

Bachelor of Engineering in Chemical Engineering

- Degree of Bachelor of Engineering in Petroleum Engineering and Bachelor of Engineering in Civil and Environmental Engineering
- Degree of Bachelor of Engineering in Petroleum Engineering and Bachelor of Engineering in Civil and Structural Engineering
- Degree of Bachelor of Engineering in Petroleum Engineering and Bachelor of Engineering in Mechanical Engineering
- Degree of Bachelor of Engineering in Petroleum Engineering and Bachelor of Science (Geology and Geophysics)
- Degree of Bachelor of Engineering in Pharmaceutical Engineering
- Degree of Bachelor of Engineering in Software Engineering
- Degree of Bachelor of Engineering in Sports Engineering
- Degree of Bachelor of Engineering in Sustainable Energy Engineering
- Degree of Bachelor of Engineering in Telecommunications Engineering
- Degree of Bachelor of Engineering and Bachelor of Arts*
- Degree of Bachelor of Mathematical Sciences
- Degree of Bachelor of Mathematical and Computer Sciences
- Honours degree of Bachelor of Computer Science
- Honours degree of Bachelor of Mathematical Sciences
- Honours degree of Bachelor of Mathematical and Computer Sciences

* Available in disciplines of Chemical, Civil, Computer Systems, Electrical & Electronic, Environmental, Mechanical, Mechatronic and Telecommunications Engineering

Notes on Delegated Authority

1. Council has delegated the power to approve minor changes to the Academic Program Rules to the Executive Deans of Faculties.
2. Council has delegated the power to specify syllabuses to the Head of each department or centre concerned, such syllabuses to be subject to approval by the Faculty or by the Executive Dean on behalf of the Faculty.



Bachelor of Computer Graphics

1 Duration of program

The program of study for the Bachelor degree shall extend over three years of full-time study or the equivalent part-time study.

2 Assessment and examinations

- 2.1 A candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
- 2.2 In determining a candidate's final result in a course (or part of a course) the examiners may take into account oral, written, practical and other work, provided that the candidate has been given adequate notice at the commencement of the teaching of the course of the way in which such work will be taken into account and of its relative importance in the final result.
- 2.3 There shall be four classifications of pass in the final assessment of any course for the Bachelor degree, as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, Pass.
There shall also be a classification of Conceded Pass. A candidate may present for the Bachelor degree only a limited number of courses for which a Conceded Pass has been obtained, as specified in the relevant Rule made under these Academic Program Rules.
- 2.4 A candidate who fails a course for the Bachelor degree or obtains a Conceded Pass result and who desires to take that course again shall, unless exempted wholly or partially therefrom by the Faculty concerned, again complete the required work in that course to the satisfaction of the teaching staff concerned.
- 2.5 A candidate who has twice failed any course for the Bachelor degree may not enrol for that course again or for any other course which in the opinion of the Faculty contains a substantial amount of the same material, except by permission of the Faculty and then only under such conditions as the Faculty may prescribe.

3 Qualification requirements

3.1 General: Bachelor of Computer Graphics

- 3.1.1 The program of study for the degree of Bachelor of Computer Graphics shall extend over three years of full time study or equivalent.
- 3.1.2 To qualify for the Bachelor degree a candidate shall, subject to 3.1.4 below, present passes in courses from 3.2 to the value of at least 72 units including:

- a at least 24 units for Level I courses
- b at least 18 units for Level II courses
- c at least 24 units for Level III courses
- d at least 45 units for Level II and Level III courses.

3.1.3 The courses presented must include:

- a MATHS 3015 Communication Skills III3
- b At least one of the following at the level of Pass or higher:
MATHS 1008 Mathematics for Information Technology I.....3
MATHS 1012 Mathematics IB.....3
- c The following Design Studies courses:
DESST 1032 Imaging Our World.....3
DESST 2506 Digital Media II6
DESST 3031 Digital Media Studio.....6
- d At least 9 units of Level I Computer Science courses with at least 6 units at the level of Pass or higher
- e At least 12 units of Level II Computer Science courses with at least 9 units at the level of Pass or higher
- f At least 18 units of Level III Computer Science courses with at least 12 units at the level of Pass or higher.
- g The Computer Science courses at the level of Pass or higher must include:
COMP SCI 1008 Computer Science IA.....3
COMP SCI 1009 Computer Science IB.....3
COMP SCI 2000 Computer Systems3
COMP SCI 2004 Data Structures & Algorithms3
COMP SCI 3006 Software Engineering & Project.....3
COMP SCI 3014 Computer Graphics.....3
- h The Computer Science courses must include:
COMP SCI 2005 Systems Programming in C and C++3
COMP SCI 2006 Introduction to Software Engineering.....3
COMP SCI 3007 Artificial Intelligence.....3
COMP SCI 3013 Event Driven Computing.....3

Note (not forming part of the Academic Program Rules)

A graduate who qualifies for the Bachelor of Computer Graphics will be considered to have qualified for a major in Computer Science.

- 3.1.4 A candidate may present for the degree courses passed at the Conceded Pass level within the following limits: courses with an aggregate units value of not more than 6 provided that no course thus presented has a units value of more than 3.
- 3.1.5 A graduate who wishes to qualify for the degree of Bachelor of Computer Graphics and to count towards that degree courses which have already been presented for another award may do so providing such a candidate
either
- presents a range of courses which fulfils the requirements of 3.1.2 and 3.1.3 above. The courses presented must include Level II and Level III courses from 3.2 below to the value of at least 24 units, which have not been presented for any other degree. At least 18 units of the new courses must be at Level III
or
 - presents a range of courses as determined by the Faculty in accordance with any formal articulation programs approved by the Faculty
 - Subject to any formal articulation programs approved by Faculty, a candidate qualifying for the degree under this clause may not present more than 3 units of courses at the Conceded Pass level.
- 3.1.6 No candidate will be permitted to count for the degree any course together with any other course which, in the opinion of the Faculty, contains a substantial amount of the same material; and no course may be counted twice towards the same degree. No candidate may present the same section of a course in more than one course for the degree.
- 3.1.7 Students who have completed at another institution part of the equivalent of the requirements for the Adelaide degree of Bachelor of Computer Graphics will be required as a minimum to complete Level III courses from 3.2 with an aggregate unit value of 24 satisfying the requirements of 3.1.3.
- 3.1.8 With special permission of the Faculty, a student who has completed most of the courses for the degree of Bachelor of Computer Graphics at the University of Adelaide including Level III Computer Science courses with an aggregate unit value of 12 may be permitted to complete the requirements for the degree at another institution. All applications must be made in writing to the Faculty.
- 3.2 Program of study for the degree of Bachelor of Computer Graphics**

Note: Students are advised that some courses are either unrepresentable or cannot be counted with other courses towards the degree of Bachelor of Computer Graphics. Students are advised to check their chosen electives with the Faculty Program Adviser.

Notwithstanding the Academic Program Rules and syllabuses published in this volume, a number of the courses listed in the program leading to the degree of Bachelor of Computer Graphics may not be offered. The availability of all courses is conditional upon the availability of staff and facilities.

3.2.1 Level I

Courses offered at Level I towards a degree program at the University of Adelaide and approved by the Faculty Program Adviser.

3.2.2 Level II

Courses offered at Level II towards a degree program at the University of Adelaide and approved by the Faculty Program Adviser.

3.2.3 Level III

Courses offered at Level III towards a degree program at the University of Adelaide and approved by the Faculty Program Adviser.

3.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award.

4 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

Graduate Attributes

Bachelor of Computer Graphics

The following Graduate Attributes have been designed for the Bachelor of Computer Graphics:

- An ability to apply knowledge of computer science fundamentals, including programming, computer systems, data structures and computer graphics techniques
- An ability to design complex systems involving hardware, software and networks, using software engineering techniques
- An appreciation of current technologies
- An ability to communicate effectively, not only with other computer scientists, but with the community at large on information and technology issues
- Demonstrate effective contribution as members of multi-disciplinary and multi-cultural teams, with the capacity to be leaders or managers as well as effective team members
- An ability, by self directed study, to remain up-to-date with developments in their careers/ professions
- Are innovative and creative, adaptable and able to guide developments in their careers/ professions.
- Demonstrate an appreciation of professional conduct and ethical issues pertinent to the information technology industry
- Possess the skills in computer graphics required to operate as an effective part of a team working in one of the application areas of computer graphics.

1 General

There shall be a degree and an Honours degree of Bachelor of Computer Science. A candidate may obtain either degree or both.

2 Duration of program

The program of study for the Bachelor degree shall extend over three years of full-time study or the equivalent part-time study.

3 Assessment and examinations

- 3.1 A candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
- 3.2 In determining a candidate's final result in a course (or part of a course) the examiners may take into account oral, written, practical and other work, provided that the candidate has been given adequate notice at the commencement of the teaching of the course of the way in which such work will be taken into account and of its relative importance in the final result.
- 3.3 There shall be four classifications of pass in the final assessment of any course for the Bachelor degree, as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, Pass. There shall also be a classification of Conceded Pass. A candidate may present for the Bachelor degree only a limited number of courses for which a Conceded Pass has been obtained, as specified in the relevant Rule made under these Academic Program Rules.
- 3.4 A candidate who fails a course for the Bachelor degree or obtains a Conceded Pass result and who desires to take that course again shall, unless exempted wholly or partially therefrom by the Head of the School concerned, again complete the required work in that course to the satisfaction of the teaching staff concerned.
- 3.5 A candidate who has twice failed any course for the Bachelor degree may not enrol for that course again or for any other course which in the opinion of the Faculty contains a substantial amount of the same material, except by permission of the Faculty and then only under such conditions as the Faculty may prescribe.

4 Qualification requirements

4.1 General: Bachelor of Computer Science

- 4.1.1 To qualify for the Bachelor degree a candidate

shall, subject to 4.1.3 below, present passes in courses from 4.2 to the value of at least 72 units including:

- a at least 24 units for Level I courses
- b at least 18 units for Level II courses
- c at least 24 units for Level III courses
- d at least 45 units for Level II & Level III courses.

4.1.2 The courses presented must include:

- a At least 9 units of Level I Computer Science courses which must include at the level of Pass or higher:
COMP SCI 1008 Computer Science IA *and*
COMP SCI 1009 Computer Science IB
- b At least one of the following at a Level of Pass or higher:
MATHS 1008 Mathematics for Information Technology I
MATHS 1012 Mathematics IB
- c At least 12 units of Level II Computer Science courses with at least 9 units at the level of Pass or higher. The courses at Pass or higher must include:
COMP SCI 2000 Computer Systems *and*
COMP SCI 2004 Data Structures & Algorithms
- d MATHS 3015 Communication Skills III
- e At least 18 units of Level III Computer Science courses with at least 12 units at the level of Pass or higher. The course at Pass or higher must include:
COMP SCI 3006 Software Engineering
& Project.....3

Note (not forming part of the Academic Program Rules)

A graduate who qualifies for the Bachelor of Computer Science or Bachelor of Computer Science (Software Engineering) will be considered to have qualified for a major in Computer Science.

- 4.1.3 A candidate may present for the degree courses passed at the Conceded Pass level within the following limits: courses with an aggregate units value of not more than 6 provided that no course thus presented has a units value of more than 3.
- 4.1.4 Subject to 4.1.3, students enrolled in an Engineering program offered by the Faculty may qualify for the B.Comp.Sc. by fulfilling the requirements of 4.1.6(a) of these Academic Program Rules.

Note (not forming part of the Academic Program Rules)

This clause enables Engineering students to complete the requirements of the B.Comp.Sc. degree before completing the requirements of the Bachelor of Engineering degree. Students wishing to qualify for the B.Comp.Sc. in this way must apply for admission to the B.Comp.Sc. program.

- 4.1.5 Except with the permission of the Faculty, a candidate may not enrol in courses to the value of more than 18 units taught by disciplines other than Applied Mathematics, Pure Mathematics, Statistics and Computer Science before obtaining at least a pass in:
- COMP SCI 1009 Computer Science IB
and either
MATHS 1008 Mathematics for Information Technology I
or
MATHS 1011 Mathematics IA *with*
MATHS 1013 Mathematics IMA
or
MATHS 1012 Mathematics IB *with*
MATHS 1011 Mathematics IA
- The courses to the value of not more than 18 units shall not include courses in which a candidate has failed or courses from which a candidate has withdrawn.
- 4.1.6 A graduate who wishes to qualify for the degree of Bachelor of Computer Science and to count towards that degree courses that have already been presented for another award may do so providing such a candidate:
- a presents a range of courses that fulfil the requirements of 4.1.1 and 4.1.2 above, except that only 6 units of Level I Computer Science are required. The courses presented must include Level II and Level III courses from 4.2 below to the value of at least 24 units, which have not been presented for any other degree. At least 18 units of the new courses must be at Level III
- or*
- b presents a range of courses as determined by the Faculty in accordance with any formal articulation programs approved by the Faculty
- c subject to any formal articulation programs approved by Faculty, a candidate qualifying for the degree under this clause may not present more than 3 units of courses at a Conceded Pass level.
- 4.1.7 No candidate will be permitted to count for the degree any course together with any other course which, in the opinion of the Faculty, contains a substantial amount of the same material; and no course may be counted twice towards the same degree. No candidate may present the same section of a course in more than one course for the degree.

4.1.8 Students who have completed at another institution part of the equivalent of the requirements for the Adelaide degree of Bachelor of Computer Science will be required as a minimum to complete Level III courses from 4.2 with an aggregate units value of 24 satisfying the requirements of 4.1.2(d) and 4.1.2 (e).

4.1.9 With special permission of the Faculty, a student who has completed most of the courses for the degree of Bachelor of Computer Science at the University of Adelaide including Level III Computer Science courses with an aggregate units value of 12 may be permitted to complete the requirements for the degree at another institution. All applications must be made in writing to the Faculty.

4.2 Program of study for the degree of Bachelor of Computer Science

Note: Students are advised that some courses are either unrepresentable or cannot be counted with other courses towards the degree of Bachelor of Computer Science. Students are advised to check their chosen electives with the Faculty Program Adviser.

Notwithstanding the Academic Program Rules and syllabuses published in this volume, a number of the courses listed in the program leading to the degree of B.Comp.Sc. may not be offered in every calendar year. The availability of all courses is conditional upon the availability of staff and facilities.

4.2.1 Level I

Courses offered at Level I towards a degree program at the University of Adelaide and approved by the Faculty Program Adviser.

4.2.2 Level II

Courses offered at Level II towards a degree program at the University of Adelaide and approved by the Faculty Program Adviser.

4.2.3 Level III

Courses offered at Level III towards a degree program at the University of Adelaide and approved by the Faculty Program Adviser.

4.3 Honours programs

To be eligible to be admitted to an Honours degree program, a candidate shall complete the requirements for a Bachelor degree or equivalent to a standard that is acceptable to the Faculty for the purpose of admission to the Honours degree.

A candidate who satisfies the requirements for Honours shall be awarded the Honours degree, but the Faculty shall decide within which of the following classes and divisions the degree shall be awarded:

- 1 First Class
- 2A Second Class div A
- 2B Second Class div B
- 3 Third Class
- NAH Not awarded.

4.3.1 The Honours degree of

Bachelor of Computer Science

- 4.3.1.1 A candidate may, subject to the approval of the Faculty, proceed to the Honours degree in one of the following courses, each with the value of 24 units:
- APP MTH 4011 A/B Honours Applied Mathematics and Computer Science
 - COMP SCI 4999 A/B Honours Computer Science
 - PURE MTH 4004 A/B Honours Computer Science and Pure Mathematics
 - STATS 4003A/B Honours Statistics and Computer Science
- 4.3.1.2 The work of the Honours Program must be completed in one year of full-time study, save that the Faculty may permit a candidate to spread the work over two years, but no more, under such conditions as it may determine.
- 4.3.1.3 A candidate may not enrol a second time for the Honours program in Computer Science if he/she:
- a has already qualified for Honours in that program
 - or*
 - b has presented himself/herself for examination in the Honours program in that course but has failed to obtain Honours
 - or*
 - c has withdrawn from the program unless the Faculty under 4.3.1.4 permits re-enrolment.
- 4.3.1.4 If a candidate is unable to complete the program for the Honours degree within the time allowed, or if a candidate's work is unsatisfactory at any stage of the program, or if a candidate withdraws from the program, such fact shall be reported to Faculty. The Faculty may permit the candidate to re-enrol for an Honours degree under such conditions (if any) as it may determine.

4.4 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award.

5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

Graduate Attributes

Bachelor of Computer Science

The objectives of the undergraduate programs in Computer Science are to support the mission of the University of Adelaide (to advance knowledge, understanding and culture through scholarship, research, teaching and community service of international distinction and integrity), to provide an inclusive curriculum that allows all students to learn and progress unhindered through the program, and to produce graduates who:

- Have the basic skills and knowledge (Computer Science/Information Technology, problem solving skills, analytical skills, communication skills and flexibility) necessary for a successful career in Computer Science/Information Technology
- Are able to apply knowledge of Computer Science fundamentals, including programming, computer systems, data structures and computer networks
- Are able to design complex systems involving both hardware, software and networks, using software engineering techniques
- Have an appreciation of current technologies
- Are able to communicate effectively, not only with other computer scientists, but with the community at large on information technology issues
- Can contribute effectively as members of multi-disciplinary and multi-cultural teams, with the capacity to be leaders or managers as well as effective team members
- Are able, by self directed study, to remain up to date with developments in their careers/ professions
- Are innovative and creative, adaptable and able to guide developments in their careers/professions.
- Are educated in a broad sense, are well informed and can take their place as leaders in the community
- Have an appreciation of professional conduct and ethical issues pertinent to the information technology industry.

1 General

The degree of Bachelor of Engineering may be awarded in the Pass or Honours grade. The award of the Honours grade shall be made for meritorious performance in the program with greatest weight given to performance in the later years.

The Honours grade may be awarded in one of the following classifications: First Class, Second Class Division A, Second Class Division B.

2 Duration of program

The program shall extend over four years of full-time study. Details of these programs are set out in 6.5.1- 6.5.19 below.

3 Admission

3.1 Transfers between programs

The Faculty of Engineering, Computer and Mathematical Sciences may permit a student to transfer with credit from one Engineering program to another. A student may also be permitted to transfer from other programs (offered by the University or another institution) to an Engineering program. Prospective transfer students should first consult the Faculty.

The Faculty has developed a transfer credit scheme between certain Technical and Further Education (TAFE) programs and the Bachelor of Engineering program. Applications for credit transfer from TAFE programs can be made to the Faculty upon admission.

4 Enrolment

4.1 Approval of program of study

During the enrolment period before the beginning of each academic year, students who are so directed must obtain the approval of the Dean or nominee of the Faculty of Engineering, Computer and Mathematical Sciences to enrol for the courses they wish to study. The Dean or nominee, in exceptional circumstances, may approve minor variations to the course completion requirements of individual students.

4.2 Unless exempted, all international students are required to undertake a specialist course ENG 3003 Engineering Communication EAL. The course provides language development in English as a second language for the purposes of oral and written communication in the context of the study of Engineering. Students normally undertake this course in their first semester of study. This course is substituted in lieu of another course in the program and students must seek advice from the Faculty on this substitution.

4.3 Except with the permission of the Faculty, students who have either completed or partially completed a Bachelor of Engineering from the University—or from another institution that is accepted by the Faculty as equivalent—will be required to complete courses from section 6 of these Academic Program Rules with a minimum aggregate units value of 36, including Level III courses with an aggregate units value of at least 6, and Level IV courses with an aggregate units value of at least 18.

5 Assessment and examinations

- i A student shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned. A student who is not eligible to attend for examination shall be deemed to have failed the examination.
- ii In determining a student's final result in a course (or part of a course) the examiners may take into account oral, written, practical and examination work, provided that the student has been given adequate notice of the way in which work will be taken into account and of its relative importance in the final result.
- iii There shall be four classifications of pass at an annual examination in any course for the degree, as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, Pass.

There shall also be a classification of Conceded Pass. A student may present for the degree courses for which a Conceded Pass grade has been awarded within the following limits:

- a no course may be presented at the Conceded Pass level with a unit value greater than 3 units
- b for any single Bachelor of Engineering program no more than 10% of the courses presented may be at the Conceded Pass level with a limit of 9 units in total
- c for all double/combined programs no more than 10% of the courses presented may be at the Conceded Pass level with a limit of 12 units in total. All rules pertaining to the presentation of Conceded Passes within the individual programs comprising the double/combined program must also be complied with
- d articulating students and students with transfer credit may present 10% of their units undertaken at the University at the Conceded Pass level and this number will be rounded up to a multiple of 3 and will not exceed 9 units in total

- iv A student who fails to pass in any course shall again complete the required work in that course to the satisfaction of the teaching staff concerned, unless exempted by the Faculty.
- v A student who has twice failed to pass the examination in any course or division of a course may not present again for instruction or examination therein unless the student's plan of study is approved by the Dean or nominee. For the purpose of this Rule a student who is refused permission to sit for examination in any course or division of a course shall be deemed to have failed to pass the examination.

6 Qualification requirements

6.1 General

- i A student shall regularly attend lectures and do written, laboratory, and other practical work (where such is required), and pass examinations in the courses prescribed for one of the following Engineering programs:
 - a Aerospace Engineering
 - b Architectural Engineering
 - c Avionics & Electronic Systems Engineering
 - d Chemical Engineering - with the option of specialising in Minerals Processing
 - e Civil & Environmental Engineering
 - f Civil & Structural Engineering
 - g Computational Engineering
 - h Computer Systems Engineering
 - i Electrical & Electronic Engineering
 - j Mechanical Engineering
 - k Mechanical & Automotive Engineering
 - l Mechatronic Engineering
 - m Mining Engineering
 - n Petroleum Engineering
 - o Pharmaceutical Engineering
 - p Software Engineering
 - q Sports Engineering
 - r Sustainable Energy Engineering - with a plan available in:
 - Chemical
 - Electrical *or*
 - Mechanical
 - s Telecommunications Engineering
- ii Before being admitted to the degree a student shall also submit satisfactory evidence of completion of a period of practical experience in work approved by the Faculty as appropriate to the program that the student has followed.

6.2 Level I Mathematics requirements

Students who have undertaken SACE Stage 2 Specialist Mathematics (or equivalent) will be

required to enrol in Mathematics IA followed by Mathematics IB. Students who have not undertaken SACE Stage 2 Specialist Mathematics will be required to enrol in Mathematics IMA, followed by Mathematics IA with Mathematics IB taken in Summer Semester to complete the Mathematics requirements at Level I. The satisfactory completion of Mathematics IMA is in addition to the normal requirements of the Bachelor of Engineering.

6.3 Practical experience

i General

For all engineering programs, a total of twelve weeks' practical experience (of which a minimum 6 weeks should be under the supervision of a professional engineer) is required and this should be undertaken during the University vacations and normally completed before beginning the work of Level IV of the program.

The Faculty may grant either partial or total exemption from these requirements to a student who produces satisfactory evidence of practical experience obtained before their first enrolment in the Faculty; and in special cases, the Faculty may grant dispensation from the requirements.

Credit will not normally be given for periods of less than three consecutive weeks.

A student should seek a variety of practical experience appropriate to the student's academic level.

Before beginning a period of practical experience, a student may ensure that it will be satisfactory to the Faculty by consulting the Head of the School or nominee, concerned.

Upon completion of each period of practical experience, a student is required to submit a prescribed practical experience form to the Faculty for approval. This submission must include a statement of practical experience gained and must be certified by the employer.

ii Chemical Engineering

It is desirable that at least half of the total number of weeks specified in clause (i) be spent in an approved chemical factory or research establishment on plant operation or industrial research or development.

iii Aerospace, Mechanical, Mechanical and Automotive, Mechatronic, Sports Engineering

Students must complete Workshop Practice, which will normally occupy a one-week period during a semester break. On satisfactory completion of this component of Mechatronics IM or Sports Engineering I, students will be automatically credited with one-week engineering experience towards the 12-week work experience requirement.

6.4 Combined programs and double degree programs

Students may enhance their engineering qualification by combining studies in Engineering with studies in other Schools or Faculties. The current options are:

6.4.1 Bachelor of Engineering and Bachelor of Laws - B.E./LL.B

Students in Computer Systems, Electrical & Electronic, Mechanical, and Telecommunications Engineering programs may elect to complete both the Bachelor of Engineering and Bachelor of Laws degrees, provided they are accepted into the LL.B program. Students wishing to pursue this program of study may apply for admission through the South Australian Tertiary Admissions Centre.

For further details, see the relevant Law studies within the B.E. program under Sections 6.5 of these Academic Program Rules.

6.4.2 Bachelor of Engineering and Bachelor of Science - B.E./B.Sc.

6.4.2.1 Direct Entry

i Students may enrol directly in a program of study leading, after five years of full-time study (or six years in the case of BE(Aerospace)/BSc) (or the part time equivalent thereof), to the award of both the degree of Bachelor of Engineering and the degree of Bachelor of Science in the Faculty of Sciences. The following options are available:

B.E. (Aerospace)/B.Sc.

B.E. (Chemical)/B.Sc.

B.E. (Civil & Environmental)/B.Sc.

B.E. (Civil & Structural)/B.Sc.

B.E. (Mechanical)/B.Sc.

B.E. (Mining)/B.Sc.

ii Students enrolled in one of these programs are required to complete satisfactorily the Engineering and Science components described within the relevant sections of these Rules.

6.4.2.2 Direct Entry B.E.(Elec.)/B.Sc.(Physics)

Students may enrol directly in a program of study leading, after five years of full-time study (or the part-time equivalent) to the combined award of Bachelor of Engineering (Electrical and Electronic) and Bachelor of Science.

To qualify for the combined award, students are required to complete satisfactorily the Engineering and Science components described within the relevant section of these Rules.

6.4.2.3 Direct Entry B.E.(Chem)/B.Sc.(Biotech)

Students may enrol directly in a program of study leading, after five years of full-time study (or the part-time equivalent) to the award of both the

degrees of Bachelor of Engineering (Chemical) and Bachelor of Science (Biotechnology).

To qualify for the double awards, students are required to complete satisfactorily the Engineering and Science components described within the relevant section of these Rules.

6.4.2.4 Direct Entry B.E.(Petroleum)/B.Sc (Geology and Geophysics)

Students may enrol directly in a program of study leading, after five years of full-time study (or the part-time equivalent) to the combined award of Bachelor of Engineering (Petroleum) and Bachelor of Science.

To qualify for the combined award, students are required to complete satisfactorily the Engineering and Science components described within the relevant section of these Rules.

6.4.3 Bachelor of Engineering and Bachelor of Mathematical and Computer Sciences - B.E./B.Ma.& Comp.Sc.

6.4.3.1 Students may enrol directly in a program of study leading, after five years of full-time study (or the part time equivalent thereof), to the award of both the degree of Bachelor of Engineering and the degree of Bachelor of Mathematical and Computer Sciences. The following options are available:

B.E.(Aerospace)/B.Ma. & Comp.Sc.

B.E.(Chemical)/B.Ma. & Comp.Sc.

B.E.(Civil & Environmental)/B.Ma. & Comp.Sc.

B.E.(Civil & Structural)/B.Ma. & Comp.Sc.

B.E.(Computer Systems)/B.Ma. & Comp.Sc.

B.E.(Electrical & Electronic)/B.Ma. & Comp.Sc.

B.E.(Mechanical)/B.Ma. & Comp.Sc.

B.E.(Mechanical & Automotive)/B.Ma. & Comp.Sc.

B.E.(Mechatronic)/B.Ma. & Comp.Sc.

B.E.(Mining)/B.Ma. & Comp.Sc.

B.E.(Telecomm.)/B.Ma. & Comp.Sc.

To qualify for these awards, students are required to complete satisfactorily the Engineering, and Mathematical and Computer Sciences components described within the relevant section of these Rules.

Students who commence this program, but who subsequently decide that they do not wish to proceed in both areas of study, may transfer their enrolment to the single B.E. or B.Ma. & Comp. Sc. program with appropriate credit for courses completed.

6.4.3.2 Later Year Entry

Engineering students may intermit their Engineering studies for a year to undertake additional studies in Mathematical and Computer Sciences in order to qualify for the degree of B.Ma.&Comp.Sc.

6.4.4 Bachelor of Engineering and Bachelor of Arts - B.E./B.A.

i The combined award is available in Chemical, Civil and Environmental, Civil and

Structural, Computer Systems, Electrical and Electronic, Mechanical, Mechatronic and Telecommunications Engineering. Students may qualify for the combined award after five years of full-time study in which the requirements of the degrees of B.E. and B.A. have been merged. In some cases, students may need to take an overload to complete the program in five years.

- ii Students who commence this program but who subsequently decide that they do not wish to proceed in both areas of study may transfer their enrolment to the single B.E. or the B.A. program, with appropriate credit for courses completed.
- iii Students may transfer into the combined program after partially completing the requirements of either the B.E. or the B.A. program. This may, however, affect the total time taken to complete the combined program. Students should consult the Faculty to discuss their proposed program of studies.

iv Status

On application to the Faculty, students may be granted transfer credit for studies completed at the University or another approved institution. In the case of studies completed at another approved institution, credit transfer in Humanities and Social Sciences courses will normally only be granted in respect of studies valued at a maximum of 6 units, and normally not including studies towards the major.

v Program of Studies

The details of a student's program will depend upon the Engineering specialisation and the Humanities and Social Sciences courses chosen. The order in which courses are taken will need to take into consideration any prerequisite requirements and students will need to discuss their program of studies with the relevant Faculty.

To qualify for the combined award, students are required to complete satisfactorily the Engineering and Arts components described within the relevant section of these Rules

vi Honours

In the Engineering component, Honours are awarded for meritorious performance in the program (taken over the Engineering courses only). In the Arts component, the award of Honours requires one further year of study devoted exclusively to the Honours program.

6.4.5 Bachelor of Engineering and Bachelor of Economics - B.E./B.Ec.

- i Students may enrol directly in a program of study leading, after five years of full-time study (or the part-time equivalent), to the award of both the degree of Bachelor of Engineering

and the degree of Bachelor of Economics. The following options are available:

- B.E.(Chemical)/B.Ec.
- B.E.(Civil & Environmental)/B.Ec.
- B.E.(Civil & Structural)/B.Ec.
- B.E.(Computer Systems)/B.Ec.
- B.E.(Electrical & Electronic)/B.Ec.
- B.E.(Mechanical)/B.Ec.
- B.E.(Telecomm.)/B.Ec.

- ii To qualify for the double award, students are required to complete satisfactorily the Engineering and Economics components described within the relevant section of these Rules.

6.4.6 Bachelor of Engineering and Bachelor of Finance - B.E./B.Fin.

- i Students may enrol directly in a program of study leading, after five years of full-time study (or the part-time equivalent), to the award of both the degree of Bachelor of Engineering and the degree of Bachelor of Finance. The following options are available:

- B.E.(Chemical)/B.Fin.
- B.E.(Civil & Environmental)/B.Fin.
- B.E.(Civil & Structural)/B.Ec.
- B.E.(Computer Systems)/B.Fin.
- B.E.(Electrical & Electronic)/B.Fin.
- B.E.(Mechanical)/B.Fin.
- B.E.(Telecomm.)/B.Fin.

- ii To qualify for the double awards, students are required to complete satisfactorily the Engineering and Finance components described within the relevant section of these Rules.

6.4.7. Combined Engineering Degrees

The following options are available:

- B.E.(Civil & Structural)/B.E.(Civil & Environmental)
- B.E.(Petroleum)/B.E.(Chemical)
- B.E.(Petroleum)/B.E.(Civil & Environmental)
- B.E.(Petroleum)/B.E.(Civil & Structural)
- B.E.(Petroleum)/B.E.(Mechanical)

Students may enrol directly in a program of study leading, after five years of full-time study (or the part-time equivalent) to the combined award of the degrees. To qualify for the combined award, students are required to complete satisfactorily the Engineering components described within the relevant section of these Rules.

6.5 Academic programs

6.5.1 Aerospace Engineering

6.5.1.1 B.E.(Aerospace)

Students are required to complete satisfactorily courses to the value of 24 units at each of Levels I, II, III and IV:

Level I

C&ENVENG 1010 Engineering Mechanics - Statics	3
CHEM ENG 1009 Materials I	3
ELEC ENG 1009 Electrical & Electronic Engineering IA	3
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
MECH ENG 1006 Design Graphics and Communication M	3
MECH ENG 1007 Engineering Mechanics - Dynamics	3
MECH ENG 1102 Introduction to Aerospace Engineering	3

Level II

MATHS 2201 Engineering Mathematics I	3
MATHS 2202 Engineering Mathematics II	3
MECH ENG 2002 Stress Analysis and Design	3
MECH ENG 2019 Dynamics and Control I	3
MECH ENG 2020 Materials and Manufacturing ...	3
MECH ENG 2021 Thermo-Fluids I	3
MECH ENG 2100 Design Practice	3
MECH ENG 2101 Mechatronics IM ⁺	3

+ includes Workshop Practical

Level III

MECH ENG 3026 Aerospace Materials and Structures	3
MECH ENG 3027 Engineering Systems Design and Communication	3
MECH ENG 3028 Dynamics and Control II	3
MECH ENG 3100 Aeronautical Engineering I	3
MECH ENG 3101 Applied Aerodynamics	3
MECH ENG 3102 Heat Transfer and Thermodynamics	3
MECH ENG 3104 Space Vehicle Design	3
MECH ENG 3105 Sustainability and the Environment	3

Level IV

MECH ENG 4100 Advanced Topics in Aerospace Engineering	3
MECH ENG 4106 Aerospace Propulsion	3
MECH ENG 4108 Aircraft Design	3
MECH ENG 4111 CFD for Engineering Applications	3

or

MECH ENG 4118 Finite Element Analysis of Structures	3
MECH ENG 4116 Engineering Management and Professional Practice	3
MECH ENG 4128A/B Aerospace Design Project Level IV Part 1 & 2 ⁺	6

or

MECH ENG 4129A/B Aerospace Honours Project Level IV Part 1 & 2 ⁺	6
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One elective to be chosen from the following:

MECH ENG 4104 Advanced Topics in Fluid Mechanics	3
MECH ENG 4107 Airconditioning	3
MECH ENG 4114 Corrosion: Principles and Prevention	3
MECH ENG 4120 Fracture Mechanics	3
MECH ENG 4121 Materials Selection and Failure Analysis	3

⁺Students accepted into the Honours stream will take Aerospace Honours Project Level IV and other students will take Aerospace Design Project Level IV.

6.5.1.2 B.E.(Aerospace)/B.Ma.&Comp.Sc. (Computer Science focus)

To qualify for both the award of the degree of B.E.(Aerospace) and the degree of B.Ma.&Comp.Sc. with a Computer Science focus, students are required to complete satisfactorily:

Level I

C&ENVENG 1010 Engineering Mechanics - Statics	3
CHEM ENG 1102 Introduction to Aerospace Engineering	3
COMP SCI 1008 Computer Science IA	3
COMP SCI 1009 Computer Science IB	3
MATHS 1011 Mathematics IA*	3
MATHS 1012 Mathematics IB	3
MATHS 1013 Mathematics IMA*	3
MECH ENG 1006 Design Graphics and Communication	3
MECH ENG 1007 Engineering Mechanics - Dynamics	3

* See Clause 6.2 regarding Level I Mathematics requirements.

Level II

CHEM ENG 1009 Materials I	3
ELEC ENG 1009 Electrical and Electronic Engineering IA	3
MATHS 2201 Engineering Mathematics I	3
MATHS 2202 Engineering Mathematics II	3
MECH ENG 2002 Stress Analysis and Design	3
MECH ENG 2019 Dynamics and Control I	3
MECH ENG 2021 Thermo-Fluids I	3

MECH ENG 2100 Design Practice..... 3

Level III

COMP SCI 2000 Computer Systems 3

COMP SCI 2004 Data Structures & Algorithms 3

MECH ENG 3100 Aeronautical Engineering 3

MECH ENG 3026 Aerospace Materials and Structures 3

MECH ENG 3027 Engineering Systems Design and Communication 3

MECH ENG 2101 Mechatronics IM⁺ 3

MECH ENG 3104 Space Vehicle Design..... 3

MECH ENG 3028 Dynamics and Control II 3

⁺ includes Workshop Practical

Level IV

Level III Computer Science Courses 18

MECH ENG 3101 Applied Aerodynamics 3

MECH ENG 3102 Heat Transfer and Thermodynamics 3

Level V

MECH ENG 3105 Sustainability and the Environment..... 3

MECH ENG 4100 Advanced Topics in Aerospace Engineering..... 3

MECH ENG 4106 Aerospace Propulsion 3

MECH ENG 4108 Aircraft Design..... 3

MECH ENG 4116 Engineering Management and Professional Practice 3

MECH ENG 4128A/B Aerospace Design Project Part A & B[#] 6

or

MECH ENG 4129A/B Aerospace Honours Project Part A & B[#] 6

Elective 3

[#] Students accepted into the Honours stream will take MECH ENG 4129A/B Aerospace Honours Project and other students will take MECH ENG 4128A/B Aerospace Design Project.

One elective to be chosen from the following:

MECH ENG 4104 Advanced Topics in Fluid Mechanics..... 3

MECH ENG 4107 Airconditioning 3

MECH ENG 4114 Corrosion: Principles and Prevention 3

MECH ENG 4120 Fracture Mechanics 3

MECH ENG 4121 Materials Selection and Failure Analysis 3

6.5.1.3 B.E.(Aerospace)/ B.Ma.Comp.Sc. (Mathematics focus)

To qualify for both the award of the degree of B.E.(Aerospace) and the degree of B.Ma.Comp.Sc. with a Mathematics focus, students are required to complete satisfactorily:

Level I

C&ENVENG 1010 Engineering Mechanics - Statics 3

CHEM ENG 1009 Materials I 3

ELEC ENG 1009 Electrical & Electronic Engineering IA 3

MATHS 1011 Mathematics IA 3

MATHS 1012 Mathematics IB 3

MATHS 1013 Mathematics IMA* 3

MECH ENG 1006 Design Graphics and Communication M..... 3

MECH ENG 1007 Engineering Mechanics - Dynamics 3

MECH ENG 1102 Introduction to Aerospace Engineering..... 3

* See Clause 6.2 regarding Level I Mathematics requirements.

Level II

MATHS 2202 Engineering Mathematics II 3

MECH ENG 2002 Stress Analysis and Design..... 3

MECH ENG 2019 Dynamics and Control I..... 3

MECH ENG 2020 Materials and Manufacturing ... 3

MECH ENG 2021 Thermo-Fluids I..... 3

MECH ENG 2100 Design Practice..... 3

MECH ENG 2101 Mechatronics IM⁺ 3

MECH ENG 2201 Engineering Mathematics I 3

⁺ includes Workshop Practical

Level III

MECH ENG 3026 Aerospace Materials and Structures 3

MECH ENG 3027 Engineering Systems Design and Communication 3

MECH ENG 3028 Dynamics and Control II 3

MECH ENG 3100 Aeronautical Engineering 3

MECH ENG 3101 Applied Aerodynamics 3

MECH ENG 3102 Heat Transfer and Thermodynamics 3

MECH ENG 3104 Space Vehicle Design 3

MECH ENG 3105 Sustainability and the Environment 3

Level IV

Mathematics Courses 24

24 units of additional Mathematics courses of which 18 units must be at Level III

Level V

MECH ENG 4100 Advanced Topics in Aerospace Engineering..... 3

MECH ENG 4106 Aerospace Propulsion 3

MECH ENG 4108 Aircraft Design..... 3

MECH ENG 4111 CFD for Engineering Applications 3

or

MECH ENG 4118 Finite Element Analysis of Structures	3
MECH ENG 4116 Engineering Management and Professional Practice	3
MECH ENG 4128A/B Aerospace Design Project Part A & B#	6

or

MECH ENG 4129A/B Aerospace Honours Project Part A & B#	6
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One elective to be chosen from the following:

MECH ENG 4104 Advanced Topics in Fluid Mechanics	3
MECH ENG 4107 Airconditioning	3
MECH ENG 4114 Corrosion: Principles and Prevention	3
MECH ENG 4120 Fracture Mechanics	3
MECH ENG 4121 Materials Selection and Failure Analysis	3

Students accepted into the Honours stream will take 4129A/B Aerospace Honours Project and other students will take 4128A/B Aerospace Design Project.

6.5.1.4 B.E (Aerospace)/B.Sc.

To qualify for a Bachelor of Science award, students must complete a major pursuant to Bachelor of Science Program Rules.

To qualify for both the award of the degree of B.E.(Aerospace) and the degree of B.Sc, students are required to complete satisfactorily:

Level I

C&ENVENG 1010 Engineering Mechanics - Statics	3
CHEM ENG 1009 Materials I	3
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
MATHS 1013 Mathematics IMA*	3
MECH ENG 1006 Design Graphics & Communication	3
MECH ENG 1007 Engineering Mechanics Dynamics	3
MECH ENG 1102 Introduction to Aerospace Engineering	3
Level I Science Course	3

*See Clause 6.2 regarding Level I Mathematics requirements.

Level II

MATHS 2201 Engineering Mathematics I	3
MATHS 2202 Engineering Mathematics II	3
MECH ENG 2002 Stress Analysis & Design	3
MECH ENG 2020 Materials & Manufacturing	3
MECH ENG 2021 Thermo-Fluids I	3
MECH ENG 2100 Design Practice	3
MECH ENG 2101 Mechatronics IM ⁺	3

Level I Science Course	3
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+includes Workshop Practical

Level III

APP MTH 2104 Numerical Methods (replaces APP MTH 3017 Waves III)	3
MECH ENG 2019 Dynamics and Control I	3
MECH ENG 3026 Aerospace Materials and Structures	3
MECH ENG 3027 Engineering Systems Design and Communication	3
MECH ENG 3100 Aeronautical Engineering	3
MECH ENG 3102 Heat Transfer and Thermodynamics	3
MECH ENG 3104 Space Vehicle Design	3
MECH ENG 3105 Sustainability and the Environment	3

Level IV

MECH ENG 3028 Dynamics and Control II	3
MECH ENG 3101 Applied Aerodynamics	3
MECH ENG 4106 Aerospace Propulsion	3
MECH ENG 4108 Aircraft Design	3
Level II Science Courses*	12

* Check with the Faculty of Science on requirements for majors.

Level V

Level III Science Courses	24
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Level VI

MECH ENG 4100 Advanced Topics in Aerospace Engineering	3
MECH ENG 4111 CFD for Engineering Applications	3
MECH ENG 4116 Engineering Management and Professional Practice	3
MECH ENG 4118 Finite Element Analysis of Structures	3
MECH ENG 4128A/B Aerospace Design Project Part A & B#	6

or

MECH ENG 4029A/B Aerospace Honours Project Part A & B#	6
Elective from list below	6

Students accepted into the Honours stream will take MECH ENG 4029A/B Aerospace Honours Project Parts A & B and other students will take MECH ENG 4128A/B Aerospace Design Project Parts A & B.

Electives from the following if available:

MECH ENG 4102 Advanced PID Control	3
MECH ENG 4107 Airconditioning	3
MECH ENG 4115 Engineering Acoustics	3
MECH ENG 4120 Fracture Mechanics	3
MECH ENG 4104 Advanced Topics in Fluid Mechanics	3

MECH ENG 4105 Advanced Vibrations.....	3
MECH ENG 4114 Corrosion: Principles & Prevention	3
MECH ENG 4121 Materials Selection & Failure Analysis.....	3
MECH ENG 4126 Topics in Welded Structures	3

6.5.2 Architectural Engineering

6.5.2.1 B.E.(Architectural)

Students are required to complete satisfactorily courses to the value of 24 units at each of Levels I, II, III and IV:

Level I

C&ENVENG 1010 Engineering Mechanics - Statics	3
C&ENVENG 1012 Engineering Modelling and Analysis IA	3
DESST 1027 Human Environments.....	6
DESST 1029 Constructions and Design: Theories and Practice	6
MATHS 1011 Mathematics IA.....	3
MATHS 1012 Mathematics IB.....	3
MATHS 1013 Mathematics IMA*	3

* See Clause 6.2 regarding Level I Mathematics requirements.

Level II

C&ENVENG 2025 Strength of Materials IIA	3
C&ENVENG 2069 Geotechnical Engineering IIA ...	3
C&ENVENG 2070 Engineering Modelling and Analysis IIA	3
C&ENVENG 2072 Structural Engineering Design IIA	3
DESST 1030 History of Settlements 1	3
DESST 2502 Architecture Histories & Theories	3
MATHS 2201 Engineering Mathematics I.....	3
MECH ENG 2021 Thermo-Fluids 1.....	3

Level III

C&ENVENG 3001 Structural Mechanics IIIA	3
C&ENVENG 3005 Structural Design III (Concrete)..	3
C&ENVENG 3007 Structural Design III (Steel).....	3
C&ENVENG 3012 Geotechnical Engineering Design III	3
C&ENVENG 3078 Engineering Management and Planning IIIA.....	3
MECH ENG 3102 Heat Transfer and Thermodynamics.....	3
DEST 3510 Sustainable Residential Building Design.....	3
DEST 3511 Sustainable Commercial Building Design.....	3

Level IV

Note: Level IV is indicative only

C&ENVENG 4003A/B Civil and Structural Research Project Part 1 & 2	6
C&ENVENG 4034 Engineering Management IV....	3
Building Services	3

Mechanical Engineering course:

Heating, Ventilation and Air-conditioning.....	3
Specialisation courses to the value of 9 units	9

^ Students who are not selected for Honours will be required to complete two additional final year specialisation courses instead of the Architectural Engineering Research Project.

Specialisations

Students may take up to 3 units of Level II or III courses offered by the School of Mathematical Sciences.

Students may also, with the approval of the Head of School, replace one or more specialisation courses with appropriate courses offered by other schools in the University.

The specialisation courses offered by the School in any one year will depend on staff availability, and will be chosen from the following:

Group I: Structural Engineering

C&ENVENG 4068 Computer Methods of Structural Analysis and Design	3
C&ENVENG 4069 Advanced Reinforced Concrete	3
C&ENVENG 4099 Structural Response to Blast Loading.....	3

Group II: Geotechnical/Mining Engineering

C&ENVENG 4079 Deep Foundation Engineering and Design.....	3
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Group III: Water Engineering

C&ENVENG 4098 Water Resources Sustainability and Design.....	3
C&ENVENG 4073 Water Distribution Systems and Design.....	3
C&ENVENG 4075 Water Resources Optimisation and Modelling.....	3

Group IV: Management Engineering

C&ENVENG 4085 Traffic Engineering and Design..	3
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Group V: Environmental Engineering

C&ENVENG 4092 Wastewater Engineering and Design.....	3
C&ENVENG 4091 Waste Management Analysis and Design.....	3

Alternatively, students may substitute up to 3 units of Level II or III courses offered by the School of Mathematics.

6.5.3 Avionics and Electronic Systems Engineering

6.5.3.1 B.E.(Avionics and Electronic Systems)

Students are required to complete satisfactorily courses to the value of 24 units at each of Levels I, II, III and IV:

Level I

COMP SCI 1008 Computer Science IA.....	3
COMP SCI 1009 Computer Science IB.....	3
ELEC ENG 1009 Electrical and Electronic Engineering IA.....	3
ELEC ENG 1010 Electrical and Electronic Engineering IB.....	3
MATHS 1011 Mathematics IA.....	3
MATHS 1012 Mathematics IB.....	3
MATHS 1013 Mathematics IMA *.....	3
MECH ENG 1007 Engineering Mechanics - Dynamics.....	3
PHYSICS 1100 Physics IA.....	3

* See Clause 6.2 regarding Level I Mathematics requirements.

Level II

COMP SCI 2000 Computer Systems.....	3
COMP SCI 2004 Data Structures & Algorithms....	3
ELEC ENG 2007 Signals and Systems.....	3
ELEC ENG 2008 Electronics II.....	3
ELEC ENG 2009 Engineering Electromagnetics....	3
ELEC ENG 2011 Circuit Analysis.....	3
MATHS 2201 Engineering Mathematics I.....	3
MATHS 2202 Engineering Mathematics II.....	3

Level III

COMP SCI 3006 Software Engineering and Project.....	3
ELEC ENG 3018 RF Engineering III.....	3
ELEC ENG 3027 Control III.....	3
ELEC ENG 3024 Project Mangement for Engineers.....	3
ELEC ENG 3026 Engineering Systems: Avionics....	3
ELEC ENG 3028 Digital Systems.....	3
ELEC ENG 3033 Signal Processing III.....	3
MECH ENG 3100 Aeronautical Engineering.....	3

Level IV

Note: Level IV is indicative only

Electrical & Electronic Engineering courses:

Avionic Sensors and Systems.....	3
STATS 4001 Reliability and Quality Control.....	3
Management and Professional Practice for Engineers.....	3
Systems Engineering.....	3
Electives.....	6
ELEC ENG 4036B Design Project Part 2 [#]	6
or	
ELEC ENG 4039B Honours Project Part 2 [#]	6

[#] Students accepted into the Honours stream will take Honours Project Part 1 & 2 and other students will take Design Project Part 1 & 2.

6.5.4 Chemical Engineering

6.5.4.1 B.E.(Chemical)

Students are required to complete satisfactorily courses to the value of 24 units at each of Levels I, II, III and IV.

Level I

CHEM ENG 1007 Process Engineering I.....	3
CHEM ENG 1008 Engineering Computing.....	3
CHEM ENG 1010 Professional Practice I.....	3
CHEM 1100 Chemistry IA ⁺	3

and

CHEM 1200 Chemistry IB ⁺	3
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or

CHEM 1101 Foundations of Chemistry IA ⁺	3
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and

CHEM 1201 Foundations of Chemistry IB ⁺	3
MATHS 1011 Mathematics IA.....	3
MATHS 1012 Mathematics IB.....	3
ENV BIOL 1002 Ecological Issues I.....	3

⁺ Students with a Subject Achievement score of at least 13 in SACE Stage 2 Chemistry or equivalent must enrol in CHEM 1100/1200. All other students must enrol in CHEM 1101/1201.

Level II

CHEM 2530 Environmental and Analytical Chemistry II.....	3
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or

CHEM 2510 Chemistry IIA ⁺⁺	3
CHEM ENG 2010 Introduction to Process Simulation.....	3

CHEM ENG 2011 Chemical Engineering Thermodynamics.....	3
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CHEM ENG 2013 Process Modelling and Computations.....	3
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CHEM ENG 2014 Process Engineering IIA.....	3
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CHEM ENG 2016 Professional Practice II.....	3
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CHEM ENG 2018 Process Engineering IIB.....	3
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MATHS 2201 Engineering Mathematics I.....	3
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⁺⁺ CHEM 2510 Chemistry IIA requires either passes in both CHEM 1100 & CHEM 1200 or credits in both CHEM 1101 & CHEM 1201 as prerequisites.

Level III

CHEM ENG 3023 Chemical Engineering Unit Operations Lab.....	3
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CHEM ENG 3024 Professional Practice III.....	3
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CHEM ENG 3029 Materials III.....	3
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CHEM ENG 3030 Simulation and Concept Design.....	3
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CHEM ENG 3031 Process Control and Utilities....	3
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CHEM ENG 3033 Chemical Engineering	
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C&ENVEG 3013 Water Engineering & Design IIIA	3
C&ENVEG 3014 Water Engineering & Design IIIB	3
<i>Chemical Engineering course:</i>	
Bio-Fuels	3
Frontier Technologies	3
CHEM ENG 4002A/B Chemical Engineering Research Elective II	3
CHEM ENG 4021 Combustion Processes	3
CHEM ENG 4024 Environmental Engineering	3
CHEM ENG 4043 Special Studies in Chemical Engineering	3
CHEM ENG 4044 Minerals Processing	3

6.5.4.3 B.E.(Chemical)/B.A.

To satisfy the BE (Chemical) component of this program students are required to satisfactorily complete the courses listed below:

Level I

CHEM 1100 Chemistry IA ⁺	3
<i>and</i>	
CHEM 1200 Chemistry IB ⁺	3
<i>or</i>	
CHEM 1101 Foundations of Chemistry IA ⁺	3
<i>and</i>	
CHEM 1201 Foundations of Chemistry IB ⁺	3
CHEM ENG 1007 Process Engineering I.....	3
CHEM ENG 1008 Engineering Computing.....	3
CHEM ENG 1010 Professional Practice I.....	3
ENV BIOL 1002 Ecological Issues.....	3
MATHS 1011 Mathematics IA*	3
MATHS 1012 Mathematics IB*	3
MATHS 1013 Mathematics IMA*	3

⁺ Students with a Subject Achievement score of at least 13 in SACE Stage 2 Chemistry or equivalent must enrol in CHEM 1100 /1200. All other students must enrol in CHEM 1101/1201.

* See Clause 6.2 regarding Level I Mathematics requirements.

Level II

CHEM ENG 2010 Introduction to Process Simulation	3
CHEM ENG 2011 Chemical Engineering Thermodynamics	3
CHEM ENG 2013 Process Modelling and Computations	3
CHEM ENG 2014 Process Engineering IIA	3
CHEM ENG 2018 Process Engineering IIB	3
MATHS 2201 Engineering Mathematics I.....	3
Arts Course	3
CHEM ENG 2016 Professional Practice II	3

Level III

CHEM ENG 3023 Chemical Engineering Unit Operations Lab	3
CHEM ENG 3024 Professional Practice III	3
CHEM ENG 3029 Materials III	3
CHEM ENG 3030 Simulation and Concept Design.....	3
CHEM ENG 3031 Process Control and Utilities.....	3
CHEM ENG 3033 Chemical Engineering Applications C.....	3
CHEM ENG 3034 Chemical Engineering Applications B.....	3
CHEM ENG 3035 Chemical Engineering Applications A.....	3

Level IV

CHEM ENG 4014 Plant Design Project	6
CHEM ENG 4034 Professional Practice IV	3
CHEM ENG 4041 Chemical Engineering Projects IV	3
CHEM ENG 4042 Chemical Engineering Research Project (N) <i>or</i> #	3
CHEM ENG 4047 Chemical Engineering Research Project (H)#	3
CHEM ENG 4050 Chemical Engineering Applications D	3
Arts course	3
Elective course	3

Students accepted into the Honours Stream will take Chemical Engineering Research Project H and other students will take Chemical Engineering Research Project N.

Level V

Arts Courses	24
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6.5.4.4 B.E.(Chemical)/B.Ec.

To qualify for both the award of the degree of B.E.(Chem.) and the degree of B.Ec., students are required to complete satisfactorily courses as indicated below:

Level I

CHEM 1100 Chemistry IA ⁺	3
<i>and</i>	
CHEM 1200 Chemistry IB ⁺	3
<i>or</i>	
CHEM 1101 Foundations of Chemistry IA ⁺	3
<i>and</i>	
CHEM 1201 Foundations of Chemistry IB ⁺	3
CHEM ENG 1007 Process Engineering I.....	3
CHEM ENG 1008 Engineering Computing.....	3
CHEM ENG 1010 Professional Practice I.....	3
ECON 1004 Principles of Microeconomics.....	3
MATHS 1011 Mathematics IA *	3
MATHS 1012 Mathematics IB*	3
MATHS 1013 Mathematics IMA*	3

+ Students with a Subject Achievement score of at least 13 in SACE Stage 2 Chemistry or equivalent must enrol in CHEM 1100 /1200. All other students must enrol in CHEM 1101/1201.

* See Clause 6.2 regarding Level I Mathematics requirements

Level II

CHEM ENG 2010 Introduction to Process Simulation	3
CHEM ENG 2011 Chemical Engineering Thermodynamics	3
CHEM ENG 2014 Process Engineering IIA	3
CHEM ENG 2016 Professional Practice II	3
CHEM ENG 2018 Process Engineering IIB	3
ECON 1000 Principles of Macroeconomics I.....	3
ECON 2507 Intermediate Macroeconomics II.....	3
MATHS 2201 Engineering Mathematics I.....	3

Level III

CHEM ENG 3023 Chemical Engineering Unit Operations Lab	3
CHEM ENG 3024 Professional Practice III	3
CHEM ENG 3029 Materials III.....	3
CHEM ENG 3030 Simulation and Concept Design.....	3
CHEM ENG 3031 Process Control and Utilities.....	3
CHEM ENG 3033 Chemical Engineering Applications C.....	3
CHEM ENG 3034 Chemical Engineering Applications B.....	3
CHEM ENG 3035 Chemical Engineering Applications A.....	3

Level IV

COMMGMT 2500 Organisational Behaviour II	3
ECON 2504 Intermediate Econometrics II <i>or</i>	
ECON 2503 Mathematical Economics II.....	3
ECON 2506 Intermediate Microeconomics II	3
CHEM ENG 4034 Professional Practice IV.....	3
CHEM ENG 4041 Chemical Engineering Projects IV.....	3
CHEM ENG 4042 Chemical Engineering Research Project (N) <i>or</i> #	
CHEM ENG 4047 Chemical Engineering Research Project (H)#	3
CHEM ENG 4050 Chemical Engineering Applications D	3
Elective	3

#Students accepted into the Honours Stream will take Chemical Engineering Research Project H and other students will take Chemical Engineering Research Project N.

Level V

CHEM ENG 4014 Plant Design Project	6
Level III Economics Courses	18

Chemical Engineering Electives

CHEM ENG 4032 Composite and Multiphase Polymers	3
CHEM ENG 4039 Environmental Engineering	3
CHEM ENG 4040 Chemical Engineering Research Elective	3
CHEM ENG 4043 Special Studies in Chemical Engineering.....	3
CHEM ENG 4044 Minerals Processing	3
CHEM ENG 4045 Introduction to Nanotechnology.....	3
CHEM ENG 4046 Combustion Processes	3
CHEM ENG 4048 Bio-Fuels, Biomass and Wastes.....	3
CHEM ENG 4049 Biomolecular Engineering	3

6.5.4.5 B.E.(Chemical)/B.Fin.

To qualify for both the award of the degree of B.E.(Chem) and the degree of B.Fin., students are required to complete satisfactorily courses as indicated below:

Level I

CHEM 1100 Chemistry IA+	3
<i>and</i>	
CHEM 1200 Chemistry IB+	3
<i>or</i>	
CHEM 1101 Foundations of Chemistry IA+	3
<i>and</i>	
CHEM 1201 Foundations of Chemistry IB+	3
CHEM ENG 1007 Process Engineering I.....	3
CHEM ENG 1008 Engineering Computing.....	3
CHEM ENG 1010 Professional Practice I.....	3
ACCTING 1002 Accounting for Decision Makers...	3
MATHS 1011 Mathematics IA*	3
MATHS 1012 Mathematics IB*	3
MATHS 1013 Mathematics IMA*	3

+ Students with a Subject Achievement score of at least 13 in SACE Stage 2 Chemistry or equivalent must enrol in CHEM 1100 /1200. All other students must enrol in CHEM 1101/1201.

* See Clause 6.2 regarding Level I Mathematics requirements.

Level II

CHEM ENG 2010 Introduction to Process Simulation	3
CHEM ENG 2011 Chemical Engineering Thermodynamics	3
CHEM ENG 2014 Process Engineering IIA	3
CHEM ENG 2016 Professional Practice II	3
CHEM ENG 2018 Process Engineering IIB	3
ECON 1000 Principles of Macroeconomics I.....	3
ECON 1004 Principles of Microeconomics I.....	3
MATHS 2201 Engineering Mathematics I.....	3

Level III

ECON 1009 International Financial Institutions and	
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Markets I.....	3
CHEM ENG 3023 Chemical Engineering Unit Operations Lab	3
CHEM ENG 3024 Professional Practice III	3
CHEM ENG 3030 Simulation and Concept Design.....	3
CHEM ENG 3031 Process Control and Utilities.....	3
CHEM ENG 3033 Chemical Engineering Applications C.....	3
CHEM ENG 3034 Chemical Engineering Applications B.....	3
CHEM ENG 3035 Chemical Engineering Applications A.....	3
Level IV	
CORPFIN 2500 Business Finance II	3
CORPFIN 2501 Financial Institutions Management II.....	3
ECON 2504 Intermediate Econometrics II	3
ECON 2508 Financial Economics II.....	3
CHEM ENG 4034 Professional Practice IV.....	3
CHEM ENG 4041 Chemical Engineering Projects IV.....	3
CHEM ENG 4042 Chemical Engineering Research Project (N) <i>or</i> #	
CHEM ENG 4047 Chemical Engineering Research Project (H)#.....	3
CHEM ENG 4050 Chemical Engineering Applications D	3
#Students accepted into the Honours Stream will take Chemical Engineering Research Project H and other students will take Chemical Engineering Research Project N.	
Level V	
CHEM ENG 3029 Materials III	3
CHEM ENG 4014 Plant Design Project.....	6
CORPFIN 3501 Portfolio Theory and Management III	3
<i>and either</i>	
APP MTH 3012 Financial Modelling: Tools and Techniques.....	3
<i>or</i>	
CORPFIN 3502 Options, Futures and Risk Management III	3
Level III Finance Course.....	6
Elective course	3
<i>Electives</i>	
CHEM ENG 4032 Composite and Multiphase Polymers	3
CHEM ENG 4039 Environmental Engineering	3
CHEM ENG 4040 Chemical Engineering Research Elective	3
CHEM ENG 4043 Special Studies in Chemical Engineering.....	3

CHEM ENG 4044 Minerals Processing.....	3
CHEM ENG 4045 Introduction to Nanotechnology.....	3
CHEM ENG 4046 Combustion Processes	3
CHEM ENG 4048 Bio-Fuels, Biomass and Wastes	3
CHEM ENG 4049 Bio-molecular Engineering	3

6.5.4.6 B.E.(Chemical)/B.Ma.&Comp.Sc. (Computer Science focus)

To qualify for both the award of the degree of B.E.(Chem.) and the degree of B.Ma.Comp.Sc. with a Computer Science Major, students are required to complete satisfactorily:

Level I

CHEM 1100 Chemistry IA ⁺	3
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and

CHEM 1200 Chemistry IB ⁺	3
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or

CHEM 1101 Foundations of Chemistry IA ⁺	3
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and

CHEM 1201 Foundations of Chemistry IB ⁺	3
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CHEM ENG 1007 Process Engineering I.....	3
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CHEM ENG 1010 Professional Practice I.....	3
--	---

COMP SCI 1008 Computer Science IA.....	3
--	---

COMP SCI 1009 Computer Science IB.....	3
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MATHS 1011 Mathematics IA*	
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MATHS 1012 Mathematics IB*	3
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MATHS 1013 Mathematics IMA*.....	3
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+ Students with a Subject Achievement score of at least 13 in SACE Stage 2 Chemistry or equivalent must enrol in CHEM 1100 /1200. All other students must enrol in CHEM 1101/1201.

* See Clause 6.2 regarding Level I Mathematics requirements.

Level II

CHEM ENG 2010 Introduction to Process Simulation	3
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CHEM ENG 2011 Chemical Engineering Thermodynamics	3
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CHEM ENG 2014 Process Engineering IIA	3
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CHEM ENG 2016 Professional Practice II	3
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CHEM ENG 2018 Process Engineering IIB	3
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COMP SCI 2000 Computer Systems	3
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COMP SCI 2004 Data Structures & Algorithms	3
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MATHS 2201 Engineering Mathematics I.....	3
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Level III

CHEM ENG 2013 Process Modelling and Computations	3
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CHEM 2530 Environmental and Analytical Chemistry II.....	3
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or

CHEM 2510 Chemistry IIA ⁺⁺	3
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CHEM ENG 3023 Chemical Engineering Unit Operations Lab	3
CHEM ENG 3024 Professional Practice III	3
CHEM ENG 3030 Simulation and Concept Design.....	3
CHEM ENG 3031 Process Control and Utilities....	3
CHEM ENG 3034 Chemical Engineering Applications B.....	3
CHEM ENG 3035 Chemical Engineering Applications A.....	3
++CHEM 2510 Chemistry IIA requires either passes in both CHEM 1100 and CHEM 1200 or credits in both CHEM 1101 and CHEM 1201 as prerequisites.	

Level IV

Level III Computer Science Courses	18
CHEM ENG 3029 Materials III	3
CHEM ENG 3033 Chemical Engineering Applications C.....	3

Level V

CHEM ENG 4014 Plant Design Project	6
CHEM ENG 4034 Professional Practice IV.....	3
CHEM ENG 4041 Chemical Engineering IV	3
CHEM ENG 4042 Chemical Engineering Research Project (N)# or	
CHEM ENG 4047 Chemical Engineering Research Project (H)#	3
CHEM ENG 4050 Chemical Engineering Applications D	3
Electives.....	6

#Students accepted into the Honours Stream will take Chemical Engineering Research Project H and other students will take Chemical Engineering Research Project N.

CHEM ENG 4043 Special Studies in Chemical Engineering.....	3
CHEM ENG 4002A/B Chemical Engineering Research Elective II	3
CHEM ENG 4044 Minerals Processing	3
CHEM ENG 4021 Combustion Processes	3
CHEM ENG 4032 Composite and Multiphase Polymers	3
CHEM ENG 4039 Environmental Engineering	3
CHEM ENG 4045 Introduction to Nanotechnology.....	3
CHEM ENG 4048 Bio-Fuels, Biomass and Wastes.....	3
CHEM ENG 4049 Biomolecular Engineering	3

6.5.4.7 B.E (Chemical)/ B.Ma.Comp.Sc. (Mathematics focus)

To qualify for both the award of the degree of B.E.(Chem.) and the degree of B.Ma.Comp.Sc. with a Mathematics focus, students are required to complete satisfactorily:

Level I

CHEM 1100 Chemistry IA+.....	3
<i>and</i>	
CHEM 1200 Chemistry IB+.....	3
<i>or</i>	
CHEM 1101 Foundations of Chemistry IA+	3
<i>and</i>	
CHEM 1201 Foundations of Chemistry IB+	3
CHEM ENG 1007 Process Engineering I.....	3
CHEM ENG 1008 Engineering Computing.....	3
CHEM ENG 1010 Professional Practice I.....	3
ENV BIOL 1002 Ecological Issues.....	3
MATHS 1011 Mathematics IA*	3
MATHS 1012 Mathematics IB*	3
MATHS 1013 Mathematics IMA*.....	3

+ Students with a Subject Achievement score of at least 13 in SACE Stage 2 Chemistry or equivalent must enrol in CHEM 1100 /1200. All other students must enrol in CHEM 1101/1201.

* See Clause 6.2 regarding Level I Mathematics requirements.

Level II

CHEM ENG 2010 Introduction to Process Simulation	3
CHEM ENG 2011 Chemical Engineering Thermodynamics	3
CHEM ENG 2014 Process Engineering IIA	3
CHEM ENG 2016 Professional Practice II	3
CHEM ENG 2018 Process Engineering IIB	3
CHEM 2510 Chemistry IIA++	3
<i>or</i>	
CHEM ENG 2530 Environmental & Analytical Chemistry II.....	3
MATHS 2201 Engineering Mathematics I.....	3
MATHS 2202 Engineering Mathematics II.....	3

++ CHEM 2100 Chemistry IIA requires either passes in both CHEM 1100 & CHEM 1200 or credits in both CHEM 1101 & CHEM 1201 as prerequisites

Level III

CHEM ENG 3023 Chemical Engineering Unit Operations Lab	3
CHEM ENG 3024 Professional Practice III	3
CHEM ENG 3029 Materials III	3
CHEM ENG 3030 Simulation and Concept Design3	
CHEM ENG 3031 Process Control and Utilities....	3
CHEM ENG 3033 Chemical Engineering Applications C.....	3
CHEM ENG 3034 Chemical Engineering Applications B.....	3
CHEM ENG 3035 Chemical Engineering Applications A.....	3

Level IV	
Mathematics courses*	24
*24 units of additional Mathematics courses of which 18 units must be at Level III	

Level V	
CHEM ENG 4014 Plant Design Project	6
CHEM ENG 4034 Professional Practice IV	3
CHEM ENG 4041 Chemical Engineering IV	3
CHEM ENG 4042 Chemical Engineering Research Project (N) <i>or</i> #	3
CHEM ENG 4047 Chemical Engineering Research Project (H)#	3
CHEM ENG 4050 Chemical Engineering Applications D	3
Electives	6

#Students accepted into the Honours Stream will take Chemical Engineering Research Project H and other students will take Chemical Engineering Research Project N.

Chemical Engineering Electives

CHEM ENG 4043 Special Studies in Chemical Engineering	3
CHEM ENG 4002A/B Chemical Engineering Research Elective II	3
CHEM ENG 4044 Minerals Processing	3
CHEM ENG 4021 Combustion Processes	3
CHEM ENG 4032 Composite and Multiphase Polymers	3
CHEM ENG 4039 Environmental Engineering	3
CHEM ENG 4045 Introduction to Nanotechnology	3
CHEM ENG 4048 Bio-Fuels, Biomass and Wastes	3
CHEM ENG 4049 Biomolecular Engineering	3

6.5.4.8 B.E.(Chemical)/B.Sc.

To qualify for a Bachelor of Science award, students must complete a major pursuant to Bachelor of Science Program Rules 5.4.

To qualify for both the award of the degree of B.E.(Chem.) and the award of the degree of B.Sc., students are required to complete satisfactorily the courses listed below:

Level I	
CHEM 1100 Chemistry 1A	3
CHEM 1200 Chemistry 1B ⁺	3
CHEM ENG 1007 Process Engineering I	3
CHEM ENG 1008 Engineering Computing	3
CHEM ENG 1010 Professional Practice I	3
CHEM ENG 2016 Professional Practice II	3
MATHS 1011 Mathematics IA*	3
MATHS 1012 Mathematics IB*	3

MATHS 1013 Mathematics IMA*	3
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⁺If students wish to undertake another Level I Science course option (timetabling permitting) they should discuss this with School Course Advisers

* See Clause 6.2 regarding Level I Mathematics requirements.

Level II	
CHEM ENG 2010 Introduction to Process Simulation	3
CHEM ENG 2011 Chemical Engineering Thermodynamics	3
CHEM ENG 2014 Process Engineering IIA	3
CHEM ENG 2018 Process Engineering IIB	3
MATHS 2201 Engineering Mathematics I	3
Level II Science Courses	9

Level III	
CHEM ENG 3023 Chemical Engineering Unit Operations Lab	3
CHEM ENG 3024 Professional Practice III	3
CHEM ENG 3029 Materials III	3
CHEM ENG 3030 Simulation and Concept Design	3
CHEM ENG 3031 Process Control and Utilities	3
CHEM ENG 3033 Chemical Engineering Applications C	3
CHEM ENG 3034 Chemical Engineering Applications B	3
CHEM ENG 3035 Chemical Engineering Applications A	3

Level IV	
Level III Science Courses	24

Level V	
CHEM ENG 4014 Plant Design Project	6
CHEM ENG 4034 Professional Practice IV	3
CHEM ENG 4042 Chemical Engineering Research Project (N) <i>or</i> #	3
CHEM ENG 4047 Chemical Engineering Research Project (H)#	3
CHEM ENG 4041 Chemical Engineering Projects IV	3
CHEM ENG 4050 Chemical Engineering Applications D	3
Electives	6

Students accepted into the Honours Stream will take Chemical Engineering Research Project H and other students will take Chemical Engineering Research Project N.

Chemical Engineering Electives

CHEM ENG 4039 Environmental Engineering	3
CHEM ENG 4040 Chemical Engineering Research Elective	3
CHEM ENG 4043 Special Studies in Chemical Engineering	3

CHEM ENG 4044 Minerals Processing	3	CHEM ENG 3023 Chemical Engineering Unit Operations Lab	3
CHEM ENG 4045 Introduction to Nanotechnology.....	3	CHEM ENG 3024 Professional Practice III	3
CHEM ENG 4046 Combustion Processes	3	CHEM ENG 3030 Simulation and Concept Design.....	3
CHEM ENG 4048 Bio-Fuels, Biomass and Wastes.....	3	CHEM ENG 3031 Process Control and Utilities....	3
CHEM ENG 4049 Bio-Molecular Engineering.....	3	CHEM ENG 3034 Chemical Engineering Applications B.....	3
6.5.4.9 B.E.(Chemical)/B.Sc.(Biotech.)		CHEM ENG 3035 Chemical Engineering Applications A.....	3
To qualify for a Bachelor of Science award, students must complete a major pursuant to Bachelor of Science Program Rules.		Level IV	
To qualify for both the award of the degree of B.E.(Chem.) and the degree of B.Sc.(Biotech.),		BIOCHEM 3000 Molecular & Structural Biology III	6
Level I		BIOCHEM 3001 Cell & Development Biology III ...	6
BIOLOGY 1101 Biology I: Molecules, Genes & Cells.....	3	<i>or</i>	
BIOLOGY 1201 Biology I: Human Perspectives....	3	PHARM 3011 Pharmacology B III.....	6
BIOTECH 1000 Introduction to Biotechnology	3	BIOTECH 3000 Biotechnology Practice III.....	6
CHEM 1100 Chemistry IA ⁺	3	PHARM 3010 Pharmacology A III.....	6
<i>and</i>		Level V	
CHEM 1200 Chemistry IB ⁺	3	CHEM ENG 3033 Chemical Engineering Applications C.....	3
<i>or</i>		CHEM ENG 3029 Materials III.....	3
CHEM 1101 Foundations of Chemistry IA ⁺	3	CHEM ENG 4014 Plant Design Project.....	6
<i>and</i>		CHEM ENG 4034 Professional Practice IV.....	3
CHEM 1201 Foundations of Chemistry IB ⁺	3	CHEM ENG 4041 Chemical Engineering Projects IV.....	3
CHEM ENG 1007 Process Engineering I.....	3	CHEM ENG 4042 Chemical Engineering Research Project (N) <i>or</i> #	
MATHS 1011 Mathematics IA*	3	CHEM ENG 4047 Chemical Engineering Research Project (H)#	3
MATHS 1012 Mathematics IB*	3	CHEM ENG 4050 Chemical Engineering Applications D	3
MATHS 1013 Mathematics IMA*	3	#Students accepted into the Honours Stream will take Chemical Engineering Research Project H and other students will take Chemical Engineering Research Project N.	
⁺ Students with a Subject Achievement score of at least 13 in SACE Stage 2 Chemistry or equivalent must enrol in CHEM 1100/1200. All other students must enrol in CHEM 1101/1201.		6.5.5 Civil and Environmental Engineering	
* See Clause 6.2 regarding Level I Mathematics requirements.		6.5.5.1 B.E.(Civil & Environmental)	
Level II		Students are required to complete satisfactorily courses to the value of 24 units at each of Levels I, II, III and IV.	
BIOCHEM 2502 Biochemistry II (Biotech) Molecular & Cell Biology.....	3	Level I	
CHEM ENG 2010 Introduction to Process Simulation	3	C&ENVENG 1008 Engineering Planning and Design IA	3
CHEM ENG 2011 Chemical Engineering Thermodynamics	3	C&ENVENG 1009 Civil & Environmental Engineering IA	3
CHEM ENG 2014 Process Engineering IIA	3	C&ENVENG 1010 Engineering Mechanics - Statics	3
CHEM ENG 2015 Principles of Biotechnology II....	3	C&ENVENG 1012 Engineering Modelling and Analysis IA	3
CHEM ENG 2016 Professional Practice II	3	ENV BIOL 1002 Ecological Issues.....	3
CHEM ENG 2018 Process Engineering IIB	3	GEOLOGY 1104 Geology for Engineers.....	3
MATHS 2201 Engineering Mathematics I.....	3	MATHS 1011 Mathematics IA.....	3
Level III			
BIOCHEM 2503 Biochemistry II (Biotechnology): Metabolism.....	3		
MICRO 2504 Microbiology II (Biotechnology)	3		

MATHS 1012 Mathematics IB	3
Level II	
CHEM ENG 2017 Transport Processes in the Environment.....	3
C&ENVENG 2067 Construction Management and Surveying	3
C&ENVENG 2068 Environmental Engineering and Sustainability II.....	3
C&ENVENG 2069 Geotechnical Engineering IIA ...	3
C&ENVENG 2070 Engineering Modelling and Analysis IIA	3
C&ENVENG 2071 Water Engineering IIA.....	3
ENV BIOL 2005 Ecology for Engineers II.....	3
MATHS 2201 Engineering Mathematics I.....	3
Level III	
ENV BIOL 3012WT Integrated Catchment Management III <i>or</i>	
C&ENVENG 3012 Geotechnical Engineering Design III.....	3
CHEM ENG Water and Wastewater Treatment ...	3
ECON 3018 Environmental Economics III.....	3
C&ENVENG 3077 Engineering Hydrology	3
C&ENVENG 3078 Engineering Management and Planning IIIA.....	3
C&ENVENG 3079 Water Engineering and Design III (S2)	3
C&ENVENG 4037 Introduction to Environmental Law	3
C&ENVENG 4087 Environmental Modelling and Management	3
Level IV	
C&ENVENG 4005A/B Civil & Environmental Research Project Part 1 & 2 ^	6
C&ENVENG 4034 Engineering Management IV.....	3
C&ENVENG 4037 Introduction to Environmental Law.....	3
Specialisations	12
^ Students who are not selected for Honours will be required to complete 2 additional final year specialisation courses instead of the Civil & Environmental Research Project.	
Specialisations	
Students may take up to 3 units of Level II or III courses offered by the School of Mathematical Sciences. Students may also, with the approval of the Head of School, replace one or more specialisation courses with appropriate courses offered by other schools in the University.	
Students should undertake at least two specialisations from the Environmental Engineering group, and may only undertake one 'Mining' specialisation in any one year.	
The specialisation courses offered by the School in any one year will depend on staff availability, and	

will be chosen from the following:

<i>Group II: Geotechnical/Mining Engineering</i>	
C&ENVENG 4106 Introduction to Geostatistics....	3
C&ENVENG 4109 Mining in a Global Environment.....	3
C&ENVENG 4081 Engineering Problematic Soils ..	3
<i>Group III: Water Engineering</i>	
C&ENVENG 4073 Water Distribution Systems and Design.....	3
C&ENVENG 4077 Coastal Engineering and Design.....	3
<i>Group IV: Management Engineering</i>	
C&ENVENG 4085 Traffic Engineering and Design	3
MINING 4110 Mine Asset Management and Services	3
<i>Group V: Environmental Engineering</i>	
SOIL&WAT 3007WT GIS for Environmental Management	3
ENV BIOL 3012WT Integrated Catchment Management	3
C&ENVENG 4087 Environmental Modelling and Management	3
C&ENVENG 4091 Waste Management Analysis and Design.....	3
C&ENVENG 4092 Wastewater Engineering and Design.....	3
MINING 4104 Socio-Environmental Aspects of Mining.....	3

6.5.5.2 B.E.(Civil & Environmental)/B.A.

To satisfy the Arts component of this program, students commencing in 2010 must undertake 30 units of Arts courses, which includes an approved major sequence (24 units). The remaining 6 units can be undertaken at any level. Students should consult the Bachelor of Arts academic program rules for the list of approved major sequences and the specific requirements of each.

To satisfy the BE (Civil & Environmental) component of this program students are required to satisfactorily complete the courses listed below:

Level I

C&ENVENG 1008 Engineering Planning & Design IA	3
C&ENVENG 1009 Civil & Environmental Engineering IA	3
C&ENVENG 1010 Engineering Mechanics - Statics	3
C&ENVENG 1012 Engineering Modelling & Analysis IA	3
ENV BIOL 1002 Ecological Issues I.....	3
MATHS 1011 Mathematics IA*	
MATHS 1012 Mathematics IB *	3

MATHS 1013 Mathematics IMA*	3
Arts Course	3

* See Clause 6.2 regarding Level I Mathematics requirements.

Level II

C&ENVENG 2067 Construction Management & Surveying	3
C&ENVENG 2068 Environmental Engineering & Sustainability II	3
C&ENVENG 2069 Geotechnical Engineering IIA ...	3
C&ENVENG 2070 Engineering Modelling & Analysis IIA	3
C&ENVENG 2071 Water Engineering IIA	3
CHEM ENG 2017 Transport Processes in the Environment	3
MATHS 2201 Engineering Mathematics I	3
Arts Course	3

Level III

ENV BIOL 3012WT Integrated Catchment Management III <i>or</i>	
C&ENVENG 3012 Geotechnical Engineering Design III	3
CHEM ENG Water and Wastewater Treatment	3
ECON 3018 Environmental Economics III	3
C&ENVENG 3077 Engineering Hydrology	3
C&ENVENG 3078 Engineering Management and Planning IIIA	3
C&ENVENG 3079 Water Engineering and Design III (S2)	3
C&ENVENG 4037 Introduction to Environmental Law	3
C&ENVENG 4087 Environmental Modelling and Management	3

Level IV

C&ENVENG 4005A/B Civil & Environmental Research Project Part 1 & 2 ^	6
C&ENVENG 4034 Engineering Management IV	3
C&ENVENG 4037 Introduction to Environmental Law	3
Specialisations	12

^ Students who are not selected for Honours will be required to complete two additional final year specialisation courses instead of the Civil & Environmental Research Project

Specialisations

Students may take up to 3 units of Level II or III courses offered by the School of Mathematical Sciences.

Students may also, with the approval of the Head of School, replace one or more specialisation courses with appropriate courses offered by other schools in the University.

Students should undertake at least two specialisations from the Environmental

Engineering group, and may only undertake one 'Mining' specialisation in any one year.

The specialisation courses offered by the School in any one year will depend on staff availability, and will be chosen from the following:

Group II: Geotechnical/Mining Engineering

C&ENVENG 4106 Introduction to Geostatistics	3
C&ENVENG 4109 Mining in a Global Environment	3
C&ENVENG 4081 Engineering Problematic Soils ...	3

Group III: Water Engineering

C&ENVENG 4073 Water Distribution Systems and Design	3
C&ENVENG 4077 Coastal Engineering and Design	3

Group IV: Management Engineering

C&ENVENG 4085 Traffic Engineering and Design	3
MINING 4110 Mine Asset Management and Services	3

Group V: Environmental Engineering

SOIL&WAT 3007WT GIS for Environmental Management	3
ENV BIOL 3012WT Integrated Catchment Management	3
C&ENVENG 4087 Environmental Modelling and Management	3
C&ENVENG 4091 Waste Management Analysis and Design	3
C&ENVENG 4092 Wastewater Engineering and Design	3
MINING 4104 Socio-Environmental Aspects of Mining	3

Level V

Arts Courses	24
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6.5.5.3 B.E.(Civil & Environmental)/B.Ec.

To qualify for both the award of the degree of B.E.(Civil & Environmental) and the degree of B.Ec, students are required to complete satisfactorily courses listed below:

Level I

C&ENVENG 1008 Engineering Planning & Design IA	3
C&ENVENG 1009 Civil & Environmental Engineering I	3
C&ENVENG 1010 Engineering Mechanics - Statics	3
C&ENVENG 1012 Engineering Modelling & Analysis IA	3
ECON 1004 Principles of Microeconomics I	3
ENV BIOL 1002 Ecological Issues	3
MATHS 1011 Mathematics IA*	
MATHS 1012 Mathematics IB *	3

MATHS 1013 Mathematics IMA*3

* See Clause 6.2 regarding Level I Mathematics requirements

Level II

C&ENVENG 2067 Construction Management and Surveying3

C&ENVENG 2068 Environmental Engineering & Sustainability II.....3

C&ENVENG 2069 Geotechnical Engineering IIA...3

C&ENVENG 2070 Engineering Modelling & Analysis IIA3

C&ENVENG 2071 Water Engineering IIA.....3

CHEM ENG 2017 Transport Processes in the Environment.....3

ECON 1000 Principles of Macroeconomics I.....3

MATHS 2201 Engineering Mathematics I.....3

Level III

ENV BIOL 2005 Ecology for Engineers II.....3

ECON 2506 Intermediate Microeconomics II3

ECON 2507 Intermediate Macroeconomics II3

CHEM ENG Water and Wastewater Treatment ...3

C&ENVENG 3077 Engineering Hydrology3

C&ENVENG 3078 Engineering Management and Planning IIIA.....3

C&ENVENG 3079 Water Engineering and Design III (S2)3

C&ENVENG 4087 Environmental Modelling and Management3

Level IV

ECON 2504 Intermediate Econometrics *or*

ECON 2503 Mathematical Economics II.....3

COMMGMT 2500 Organisational Behaviour II3

Level III Economics Courses* 18

*Level III Economics courses chosen from those listed in the specific Academic Program Rules for the Bachelor of Economics.

Level V

C&ENVENG 4005A/B Civil & Environmental Research Project Part 1 & 2^6

C&ENVENG 4034 Engineering Management IV....3

C&ENVENG 4037 Introduction to Environmental Law3

Specialisations 12

^ Students who are not selected for Honours will be required to complete two additional final year specialisation courses instead of the Civil & Environmental Research Project

Specialisations

Students may take up to 3 units of Level II or III courses offered by the School of Mathematical Sciences. Students may also, with the approval of the Head of School, replace one or more specialisation courses with appropriate courses

offered by other schools in the University.

Students should undertake at least two specialisations from the Environmental Engineering group, and may only undertake one 'Mining' specialisation in any one year.

The specialisation courses offered by the School in any one year will depend on staff availability, and will be chosen from the following:

Group II: Geotechnical/Mining Engineering

C&ENVENG 4106 Introduction to Geostatistics....3

C&ENVENG 4109 Mining in a Global Environment.....3

C&ENVENG 4081 Engineering Problematic Soils ...3

Group III: Water Engineering

C&ENVENG 4073 Water Distribution Systems and Design.....3

C&ENVENG 4077 Coastal Engineering and Design.....3

Group IV: Management Engineering

C&ENVENG 4085 Traffic Engineering and Design3

MINING 4110 Mine Asset Management and Services3

Group V: Environmental Engineering

SOIL&WAT 3007WT GIS for Environmental Management3

ENV BIOL 3012WT Integrated Catchment Management3

C&ENVENG 4087 Environmental Modelling & Management3

C&ENVENG 4091 Waste Management Analysis and Design.....3

C&ENVENG 4092 Wastewater Engineering and Design.....3

MINING 4104 Socio-Environmental Aspects of Mining.....3

6.5.5.4 B.E.(Civil & Environmental)/B.Fin.

To qualify for both the award of the degree of B.E.(Civil & Environmental) and the degree of B.Fin, students are required to complete satisfactorily courses listed below:

Level I

C&ENVENG 1008 Engineering Planning & Design IA3

C&ENVENG 1009 Civil & Environmental Engineering I.....3

C&ENVENG 1010 Engineering Mechanics - Statics3

C&ENVENG 1012 Engineering Modelling Analysis IA3

ECON 1004 Principles of Microeconomics I.....3

ENV BIOL 1002 Ecological Issues.....3

MATHS 1011 Mathematics IA*3

MATHS 1012 Mathematics IB*	3
MATHS 1013 Mathematics IMA*	3
*See Clause 6.2 regarding Level I Mathematics requirements.	
Level II	
ACCTING 1002 Accounting for Decision Makers I	3
C&ENVENG 2068 Environmental Engineering & Sustainability II	3
C&ENVENG 2069 Geotechnical Engineering IIA ...	3
C&ENVENG 2070 Engineering Modelling & Analysis IIA	3
C&ENVENG 2071 Water Engineering IIA	3
ECON 1000 Principles of Macroeconomics I	3
ECON 1009 International Finance Institutions & Markets I	3
MATHS 2201 Engineering Mathematics I	3
Level III	
CORPFIN 2500 Business Finance II	3
ECON 2504 Intermediate Econometrics II	3
ECON 2508 Financial Economics II	3
C&ENVENG 2067 Construction Management and Surveying	3
C&ENVENG 3077 Engineering Hydrology	3
C&ENVENG 3079 Water Engineering and Design III (S2)	3
C&ENVENG 4037 Introduction to Environmental Law	3
C&ENVENG 4087 Environmental Modelling and Management	3
Level IV	
CORPFIN 2501 Financial Institutions Management II	3
CHEM ENG Water and Wastewater Treatment ...	3
C&ENVENG 3078 Engineering Management and Planning IIIA	3
ENV BIOL 3012WT Integrated Catchment Management III <i>or</i>	
C&ENVENG 3012 Geotechnical Engineering Design III	3
CORPFIN 3501 Portfolio Theory and Management III	3
<i>and either</i>	
APP MTH 3012 Financial Modelling: Tools and Techniques	3
<i>or</i>	
CORPFIN 3502 Options, Futures and Risk Management III	3
Level III Finance Course	6
Level V	
C&ENVENG 4005A/B Civil & Environmental	

Research Project Part 1 & 2 ^	6
C&ENVENG 4034 Engineering Management IV	3
C&ENVENG 4037 Introduction to Environmental Law	3
Specialisations	12

^ Students who are not selected for Honours will be required to complete 2 additional final year specialisation courses instead of the Civil & Environmental Research Project.

Specialisations

Students may take up to 3 units of Level II or III courses offered by the School of Mathematical Sciences. Students may also, with the approval of the Head of School, replace one or more specialisation courses with appropriate courses offered by other schools in the University.

Students should undertake at least two specialisations from the Environmental Engineering group, and may only undertake one 'Mining' specialisation in any one year.

The specialisation courses offered by the School in any one year will depend on staff availability, and will be chosen from the following:

Group II: Geotechnical/Mining Engineering

C&ENVENG 4106 Introduction to Geostatistics	3
C&ENVENG 4109 Mining in a Global Environment	3
C&ENVENG 4081 Engineering Problematic Soils ...	3

Group III: Water Engineering

C&ENVENG 4073 Water Distribution Systems and Design	3
C&ENVENG 4077 Coastal Engineering and Design	3

Group IV: Management Engineering

C&ENVENG 4085 Traffic Engineering and Design	3
MINING 4110 Mine Asset Management and Services	3

Group V: Environmental Engineering

SOIL&WAT 3007WT GIS for Environmental Management	3
ENV BIOL 3012WT Integrated Catchment Management	3
C&ENVENG 4087 Environmental Modelling and Management	3
C&ENVENG 4091 Waste Management Analysis and Design	3
C&ENVENG 4092 Wastewater Engineering and Design	3
MINING 4104 Socio-Environmental Aspects of Mining	3

6.5.5.5 B.E.(Civil & Environmental)/B.Ma.& Comp.Sc.

To qualify for both the award of the degree of B.E.(Civil & Environmental) and the degree of B.Ma.Comp.Sc. with a Computer Science Major,

students are required to complete satisfactorily:

Level I

C&ENVENG 1008 Engineering Planning & Design IA 3
 C&ENVENG 1009 Civil & Environmental Engineering IA 3
 C&ENVENG 1010 Engineering Mechanics - Statics 3
 COMP SCI 1008 Computer Science IA 3
 COMP SCI 1009 Computer Science IB 3
 ENV BIOL 1002 Ecological Issues 3
 MATHS 1011 Mathematics IA* 3
 MATHS 1012 Mathematics IB* 3
 MATHS 1013 Mathematics IMA* 3

* See Clause 6.2 regarding Level I Mathematics requirements

Level II

C&ENVENG 2067 Construction Management & Surveying 3
 C&ENVENG 2068 Environmental Engineering & Sustainability II 3
 C&ENVENG 2069 Geotechnical Engineering IIA ... 3
 C&ENVENG 2071 Water Engineering IIA 3
 CHEM ENG 2017 Transport Process in the Environment 3
 ENV BIOL 2005 Ecology for Engineers II 3
 MATHS 2201 Engineering Mathematics 1 3
 MATHS 2202 Engineering Mathematics 2 3

Level III

CHEM ENG Water and Wastewater Treatment 3
 ECON 3018 Environmental Economics III 3
 C&ENVENG 3077 Engineering Hydrology 3
 C&ENVENG 3078 Engineering Management and Planning IIIA 3
 C&ENVENG 3079 Water Engineering and Design III (S2) 3
 C&ENVENG 4037 Introduction to Environmental Law 3
 C&ENVENG 4087 Environmental Modelling and Management 3
 Level II Computer Science Course 3

Level IV

Computer Science Courses at Level II/III* 21
 ENV BIOL 3012WT Integrated Catchment Management *or*
 C&ENVENG 3012 Geotechnical Engineering Design III 3

Level V

C&ENVENG 4005A/B Civil & Environmental Research Project ^ 6
 C&ENVENG 4034 Engineering Management IV 3

C&ENVENG 4037 Introduction to Environmental Law 3
 Specialisations 12

^ Students who are not selected for Honours will be required to complete two additional final year specialisation courses instead of the Civil & Environmental Research Project.

Specialisations

Students may take up to 3 units of Level II or III courses offered by the School of Mathematical Sciences.

Students may also, with the approval of the Head of School, replace one or more specialisation courses with appropriate courses offered by other schools in the University.

Students should undertake at least two specialisations from the Environmental Engineering group, and may only undertake one 'Mining' specialisation in any one year.

The specialisation courses offered by the School in any one year will depend on staff availability, and will be chosen from the following:

Group II: Geotechnical/Mining Engineering

C&ENVENG 4106 Introduction to Geostatistics 3
 C&ENVENG 4109 Mining in a Global Environment 3
 C&ENVENG 4081 Engineering Problematic Soils ... 3

Group III: Water Engineering

C&ENVENG 4073 Water Distribution Systems and Design 3
 C&ENVENG 4077 Coastal Engineering and Design 3

Group IV: Management Engineering

C&ENVENG 4085 Traffic Engineering and Design 3
 MINING 4110 Mine Asset Management and Services 3

Group V: Environmental Engineering

SOIL&WAT 3007WT GIS for Environmental Management 3
 ENV BIOL 3012WT Integrated Catchment Management 3
 C&ENVENG 4087 Environmental Modelling & Management 3
 C&ENVENG 4091 Waste Management Analysis and Design 3
 C&ENVENG 4092 Wastewater Engineering and Design 3
 MINING 4104 Socio-Environmental Aspects of Mining 3

6.5.5.6 B.E (Civil & Environmental)/ B.Ma.&Comp.Sc. (Mathematics focus)

To qualify for both the award of the degree of B.E.(Civil & Environmental) and the degree

of B.Ma.Comp.Sc. with a Mathematics Major, students are required to complete satisfactorily:

Level I

C&ENVENG 1008 Engineering Planning and Design IA	3
C&ENVENG 1009 Civil and Environmental Engineering I.....	3

C&ENVENG 1010 Engineering Mechanics - Statics	3
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C&ENVENG 1012 Engineering Modelling & Analysis IA	3
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ENV BIOL 1002 Ecological Issues.....	3
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GEOLOGY 1104 Geology for Engineers.....	3
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MATHS 1011 Mathematics IA	3
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MATHS 1012 Mathematics IB	3
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MATHS 1013 Mathematics IMA*.....	3
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*See Clause 6.2 regarding Level I Mathematics requirements

Level II

C&ENVENG 2067 Construction Management & Surveying	3
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C&ENVENG 2068 Environmental Engineering and Sustainability II.....	3
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C&ENVENG 2069 Geotechnical Engineering IIA...3	
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C&ENVENG 2070 Engineering Modelling and Analysis IIA	3
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C&ENVENG 2071 Water Engineering IIA.....	3
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CHEM ENG 2017 Transport Processes in the Environment.....	3
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ENV BIOL 2005 Ecology for Engineers II	3
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MATHS 2201 Engineering Mathematics I.....	3
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Level III

ENV BIOL 3012WT Integrated Catchment Management III <i>or</i>	
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C&ENVENG 3012 Geotechnical Engineering Design III	3
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CHEM ENG Water and Wastewater Treatment3	
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ECON 3018 Environmental Economics III.....	3
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C&ENVENG 3077 Engineering Hydrology	3
---	---

C&ENVENG 3078 Engineering Management and Planning IIIA.....	3
---	---

C&ENVENG 3079 Water Engineering and Design III (S2)	3
---	---

C&ENVENG 4037 Introduction to Environmental Law	3
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C&ENVENG 4087 Environmental Modelling and Management	3
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Level IV

Mathematics courses*	24
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*24 units of additional Mathematics courses of which 18 units must be at Level III

Level V

C&ENVENG 4005A/B Civil & Environmental Research Project ^	6
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C&ENVENG 4034 Engineering Management IV....3	
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C&ENVENG 4037 Introduction to Environmental Law	3
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Mathematics Course+	3
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Specialisations	9
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^ Students who are not selected for Honours will be required to complete two additional final year specialisation courses instead of the Civil & Environmental Research Project.

+ An additional Level II or Level III Mathematics course is required to fulfil the requirement of 36 units of Mathematics over the entire double program

Specialisations

Students may take up to 3 units of Level II or III courses offered by the School of Mathematical Sciences. Students may also, with the approval of the Head of School, replace one or more specialisation courses with appropriate courses offered by other schools in the University.

Students should undertake at least two specialisations from the Environmental Engineering group, and may only undertake one 'Mining' specialisation in any one year.

The specialisation courses offered by the School in any one year will depend on staff availability, and will be chosen from the following:

Group II: Geotechnical/Mining Engineering

C&ENVENG 4106 Introduction to Geostatistics3	
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C&ENVENG 4109 Mining in a Global Environment.....	3
---	---

C&ENVENG 4081 Engineering Problematic Soils...3	
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Group III: Water Engineering

C&ENVENG 4073 Water Distribution Systems and Design.....	3
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C&ENVENG 4077 Coastal Engineering and Design.....	3
---	---

Group IV: Management Engineering

C&ENVENG 4085 Traffic Engineering and Design	3
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MINING 4110 Mine Asset Management and Services	3
--	---

Group V: Environmental Engineering

SOIL&WAT 3007WT GIS for Environmental Management	3
--	---

ENV BIOL 3012WT Integrated Catchment Management	3
---	---

C&ENVENG 4087 Environmental Modelling and Management	3
--	---

C&ENVENG 4091 Waste Management Analysis and Design.....	3
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C&ENVENG 4092 Wastewater Engineering	
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and Design.....	3
MINING 4104 Socio-environmental Aspects of Mining	3

6.5.5.7 B.E.(Civil & Environmental)/B.Sc.

To qualify for a Bachelor of Science award, students must complete a major pursuant to Bachelor of Science Program Rules.

To qualify for the award of the degree of B.E.(Civil & Environmental) and the degree of B.Sc., students are required to complete satisfactorily:

Level I

C&ENVENG 1008 Engineering Planning and Design IA	3
C&ENVENG 1010 Engineering Mechanics - Statics	3
C&ENVENG 1009 Civil & Environmental Engineering I.....	3
C&ENVENG 1012 Engineering Modelling & Analysis IA	3
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
MATHS 1013 Mathematics IMA*	
Level I Science Courses	6

* See Clause 6.2 regarding Level I Mathematics requirements.

Level II

MATHS 2201 Engineering Mathematics I.....	3
C&ENVENG 2068 Environmental Engineering and Sustainability II.....	3
C&ENVENG 2069 Geotechnical Engineering IIA ...	3
C&ENVENG 2067 Construction Management and Surveying	3
C&ENVENG 2070 Engineering Modelling and Analysis IIA	3
C&ENVENG 2071 Water Engineering IIA.....	3
MATHS 2202 Engineering Mathematics II or Level II Science course.....	3
Level II Science course.....	3

Level III

ECON 3018 Environmental Economics III.....	3
CHEM ENG Water and Wastewater Treatment ...	3
C&ENVENG 3077 Engineering Hydrology	3
C&ENVENG 3078 Engineering Management and Planning IIIA.....	3
C&ENVENG 3079 Water Engineering and Design III S2	3
C&ENVENG 4087 Environmental Modelling and Management	3
Level II Science courses.....	6

Level IV

Level III Science Courses	24
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Level V

C&ENVENG 4005A/B Civil & Environmental Research Project ^	6
C&ENVENG 4034 Engineering Management IV ...	3
C&ENVENG 4037 Introduction to Environmental Law	3
Specialisations.....	12

^ Students who are not selected for Honours will be required to complete 2 additional final year specialisation courses instead of the Civil & Environmental Research Project.

Specialisations

Students may take up to 3 units of Level II or III courses offered by the School of Mathematical Sciences.

Students may also, with the approval of the Head of School, replace one or more specialisation courses with appropriate courses offered by other schools in the University.

Students should undertake at least two specialisations from the Environmental Engineering group, and may only undertake one 'Mining' specialisation in any one year.

The specialisation courses offered by the School in any one year will depend on staff availability, and will be chosen from the following:

Group II: Geotechnical Engineering

C&ENVENG 4106 Introduction to Geostatistics....	3
C&ENVENG 4109 Mining in a Global Environment.....	3
C&ENVENG 4081 Engineering Problematic Soils ...	3

Group III: Water Engineering

C&ENVENG 4073 Water Distribution Systems and Design.....	3
C&ENVENG 4077 Coastal Engineering and Design.....	3

Group IV: Management Engineering

C&ENVENG 4085 Traffic Engineering and Design	3
MINING 4110 Mine Asset Management and Services	3

Group V: Environmental Engineering

SOIL&WAT 3007WT GIS for Environmental Management	3
ENV BIOL 3012WT Integrated Catchment Management	3
C&ENVENG 4087 Environmental Modelling and Management	3
C&ENVENG 4091 Waste Management Analysis and Design.....	3
C&ENVENG 4092 Wastewater Engineering and Design.....	3
MINING 4104 Socio-Environmental Aspects of Mining	3

6.5.6 Civil & Structural Engineering

6.5.6.1 B.E.(Civil & Structural)

Students are required to complete satisfactorily courses to the value of 24 units at each of Levels I, II, III and IV:

Level I

C&ENVENG 1008 Engineering Planning & Design IA 3
 C&ENVENG 1009 Civil & Environmental Engineering IA 3
 C&ENVENG 1010 Engineering Mechanics - Statics 3
 C&ENVENG 1012 Engineering Modelling & Analysis IA 3
 GEOLOGY 1104 Geology for Engineers..... 3
 MATHS 1011 Mathematics IA 3
 MATHS 1012 Mathematics IB 3
 MECH ENG 1007 Engineering Mechanics - Dynamics 3

Level II

C&ENVENG 2025 Strength of Materials IIA 3
 C&ENVENG 2067 Construction Management & Surveying 3
 C&ENVENG 2068 Environmental Engineering & Sustainability II..... 3
 C&ENVENG 2069 Geotechnical Engineering IIA... 3
 C&ENVENG 2070 Engineering Modelling & Analysis IIA 3
 C&ENVENG 2071 Water Engineering IIA..... 3
 C&ENVENG 2072 Structural Engineering Design.. 3
 MATHS 2201 Engineering Mathematics I..... 3

Level III

C&ENVENG 3001 Structural Mechanics IIIA 3
 C&ENVENG 3005 Structural Design III (Concrete) 3
 C&ENVENG 3007 Structural Design III (Steel)..... 3
 C&ENVENG 3012 Geotechnical Engineering Design III 3
 C&ENVENG 3077 Engineering Hydrology 3
 C&ENVENG 3078 Engineering Management and Planning IIIA 3
 C&ENVENG 3079 Water Engineering and Design II (S2) 3
 Water and Wastewater Treatment *or*
 C&ENVENG 4087 Environmental Modelling and Management 3

Level IV

C&ENVENG 4003A/B Civil & Structural Engineering Research Project ^ 6
 C&ENVENG 4034 Engineering Management IV.... 3
 C&ENVENG 4068 Computer Methods of Structural Analysis and Design 3
 Specialisation courses to the value of at least 12 units 12

^ Students who are not selected for Honours will be required to complete 2 additional final year specialisation courses instead of the Civil & Structural Research Project.

Specialisations

Students should take at least two courses from the one group. The remaining may be chosen from any group. Alternatively, students may take up to 3 units of Level II or III courses offered by the School of Mathematical Sciences.

In special circumstances other combinations of specialisation courses may be acceptable but must be approved by the Head of School.

Students may also, with the approval of the Head of School, replace one or more specialisation courses with appropriate courses offered by other schools in the University.

Students should undertake at least two specialisations from the Structural Engineering group, and may only undertake one 'Mining' specialisation in any one year.

The specialisation courses offered by the School in any one year will depend on staff availability, and will be chosen from the following:

Group I: Structural Engineering

C&ENVENG 4069 Advanced Reinforced Concrete 3
 C&ENVENG 4070 Seismic Design of Masonry Buildings 3
 C&ENVENG 4096 FRP Retrofitting of Concrete Structures 3
 C&ENVENG 4099 Structural Response to Blast Loading..... 3

Group II: Geotechnical/Mining Engineering

MINING 3070 Rock Breakage 3
 MINING 3072 Mining Geomechanics 3
 C&ENVENG 4081 Engineering Problematic Soils... 3
 MINING 4102 Mine Geotechnical Engineering..... 3
 C&ENVENG 4106 Introduction to Geostatistics.... 3

Group III: Water Engineering

C&ENVENG 4073 Water Distribution Systems and Design..... 3
 C&ENVENG 4077 Coastal Engineering and Design..... 3

Group IV: Management Engineering

C&ENVENG 4085 Traffic Engineering and Design..... 3
 MINING 4110 Mine Asset Management and Services 3

6.5.6.2 B.E.(Civil & Structural)/B.A.

To satisfy the Arts component of this program, students commencing in 2010 must undertake 30 units of Arts courses, which includes an approved major sequence (24 units). The remaining 6 units can be undertaken at any level. Students should consult the Bachelor of Arts academic program

rules for the list of approved major sequences and the specific requirements of each.

To satisfy the BE (Civil & Structural) component of this program students are required to satisfactorily complete the courses listed below:

Level I

C&ENVENG 1008 Engineering Planning and Design IA	3
C&ENVENG 1009 Civil and Environmental Engineering I	3
C&ENVENG 1010 Engineering Mechanics - Statics	3
C&ENVENG 1012 Engineering Modelling and Analysis IA	3
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
MATHS 1013 Mathematics IMA*	3
Arts course	3
MECH ENG 1007 Engineering Mechanics - Dynamics	3

* See Clause 6.2 regarding Level I Mathematics requirements.

Level II

C&ENVENG 2025 Strength of Materials IIA	3
C&ENVENG 2067 Construction Management and Surveying	3
C&ENVENG 2068 Environmental Engineering and Sustainability II	3
C&ENVENG 2069 Geotechnical Engineering IIA ...	3
C&ENVENG 2070 Engineering Modelling and Analysis IIA	3
C&ENVENG 2071 Water Engineering IIA	3
C&ENVENG 2072 Structural Engineering Design..	3
MATHS 2201 Engineering Mathematics I	3

Level III

Arts Course	3
C&ENVENG 3001 Structural Mechanics IIIA	3
C&ENVENG 3005 Structural Design III (Concrete)	3
C&ENVENG 3007 Structural Design III (Steel)	3
C&ENVENG 3012 Geotechnical Engineering Design III	3
C&ENVENG 3077 Engineering Hydrology	3
C&ENVENG 3078 Engineering Management and Planning IIIA	3
C&ENVENG 3079 Water Engineering and Design III (S2)	3

Level IV

C&ENVENG 4003A/B Civil & Structural Engineering Research Project ^	6
C&ENVENG 4034 Engineering Management IV	3
C&ENVENG 4068 Computer Methods of Structural Analysis and Design	3

Specialisations	12
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^ Students who are not selected for Honours will be required to complete two additional final year specialisation courses instead of the Civil & Structural Research Project.

Level V

Arts Courses	24
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Specialisations

Students should take at least two courses from the one group. The remaining may be chosen from any group. Alternatively, students may take up to 3 units of Level II or III courses offered by the School of Mathematical Sciences. In special circumstances other combinations of specialisation courses may be acceptable but must be approved by the Head of School.

Students may also, with approval of Head of School, replace one or more specialisation courses with appropriate courses offered by other schools in the University.

Students should undertake at least two specialisations from the Structural Engineering group, and may only undertake one 'Mining' specialisation in any one year.

The specialisation courses offered by the School in any one year will depend on staff availability, and will be chosen from the following:

Group I: Structural Engineering

C&ENVENG 4069 Advanced Reinforced Concrete	3
C&ENVENG 4070 Seismic Design of Masonry Buildings	3
C&ENVENG 4099 Structural Response to Blast Loading	3
C&ENVENG 4096 FRP Retrofitting of Concrete Structures	3

Group II: Geotechnical/Mining Engineering

MINING 3070 Rock Breakage	3
MINING 3072 Mining Geomechanics	3
C&ENVENG 4081 Engineering Problematic Soils ...	3
MINING 4102 Mine Geotechnical Engineering	3
C&ENVENG 4106 Introduction to Geostatistics	3

Group III: Water Engineering

C&ENVENG 4073 Water Distribution Systems and Design	3
C&ENVENG 4077 Coastal Engineering and Design	3

Group IV: Management Engineering

C&ENVENG 4085 Traffic Engineering and Design	3
MINING 4110 Mine Asset Management and Services	3

6.5.6.3 B.E.(Civil & Structural)/B.Ec.

To qualify for both the award of the degree of

B.E.(Civil & Structural) and the degree of B.Ec., students are required to complete satisfactorily courses listed below:

Level I

C&ENVENG 1008 Engineering Planning and Design IA3

C&ENVENG 1009 Civil and Environmental Engineering I.....3

C&ENVENG 1010 Engineering Mechanics - Statics3

C&ENVENG 1012 Engineering Modelling & Analysis IA3

ECON 1004 Principles of Microeconomics I.....3

MATHS 1011 Mathematics IA3

MATHS 1012 Mathematics IB3

MATHS 1013 Mathematics IMA*3

ECON 1000 Principles of Macroeconomics.....3

* See Clause 6.2 regarding Level I Mathematics requirements.

Level II

C&ENVENG 2025 Strength of Materials IIA3

C&ENVENG 2067 Construction Management and Surveying3

C&ENVENG 2068 Environmental Engineering and Sustainability II.....3

C&ENVENG 2069 Geotechnical Engineering IIA...3

C&ENVENG 2070 Engineering Modelling and Analysis IIA3

C&ENVENG 2071 Water Engineering IIA.....3

C&ENVENG 2072 Structural Engineering Design..3

MATHS 2201 Engineering Mathematics I.....3

ECON 1000 Principles of Macroeconomics.....3

Level III

ECON 2506 Intermediate Microeconomics II3

ECON 2507 Intermediate Macroeconomics II3

C&ENVENG 3001 Structural Mechanics IIIA3

C&ENVENG 3005 Structural Design III (Concrete)3

C&ENVENG 3007 Structural Design III (Steel).....3

C&ENVENG 3012 Geotechnical Engineering Design III3

C&ENVENG 3077 Engineering Hydrology3

C&ENVENG 3079 Water Engineering and Design III (S2)3

Level IV

ECON 2504 Intermediate Econometrics or
ECON 2503 Mathematical Economics II.....3

COMMGMT 2500 Organisational Behaviour II3

Level III Economics courses* 18

*Level III Economics courses chosen from those listed in the

specific Academic Program Rules of the degree of Bachelor of Economics.

Level V

Civil & Structural Engineering courses:

C&ENVENG 4003A/B Civil and Structural Engineering Research Project ^6

C&ENVENG 4034 Engineering Management IV....3

C&ENVENG 4068 Computer Methods of Structural Analysis and Design3

Specialisations 12

^ Students who are not selected for Honours will be required to complete two additional final year specialisation courses instead of the Civil & Structural Research Project.

Specialisations

Students should take at least two courses from the one group. The remaining may be chosen from any group. Alternatively, students may take up to 3 units of Level II or III courses offered by the School of Mathematical Sciences. In special circumstances other combinations of specialisation courses may be acceptable but must be approved by the Head of School. Students may also, with the approval of the Head of School, replace one or more specialisation courses with appropriate courses offered by other schools in the University.

Students should undertake at least two specialisations from the Structural Engineering group, and may only undertake one 'Mining' specialisation in any one year.

The specialisation courses offered by the School in any one year will depend on staff availability, and will be chosen from the following:

Group I: Structural Engineering

C&ENVENG 4069 Advanced Reinforced Concrete3

C&ENVENG 4070 Seismic Design of Masonry Buildings3

C&ENVENG 4099 Structural Response to Blast Loading3

C&ENVENG 4096 FRP Retrofitting of Concrete Structures3

Group II: Geotechnical Engineering

MINING 3070 Rock Breakage3

MINING 3072 Mining Geomechanics3

C&ENVENG 4081 Engineering Problematic Soils...3

MINING 4102 Mine Geotechnical Engineering.....3

C&ENVENG 4106 Introduction to Geostatistics.....3

Group III: Water Engineering

C&ENVENG 4073 Water Distribution Systems and Design.....3

C&ENVENG 4077 Coastal Engineering and Design.....3

Group IV: Management Engineering

C&ENVENG 4085 Traffic Engineering and Design.....	3
MINING 4110 Mine Asset Management and Services	3

6.5.6.4 B.E.(Civil & Structural)/B.Fin.

To qualify for both the award of the degree of B.E.(Civil & Structural) and the degree of B.Fin., students are required to complete satisfactorily courses listed below:

Level I

C&ENVENG 1008 Engineering Planning and Design IA	3
C&ENVENG 1009 Civil and Environmental Engineering IA	3
C&ENVENG 1012 Engineering Modelling and Analysis IA	3
C&ENVENG 1010 Engineering Mechanics - Statics	3
ECON 1004 Principles of Microeconomics I.....	3
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
MATHS 1013 Mathematics IMA*	3
ECON 1000 Principles of Macroeconomics I.....	3

* See Clause 6.2 regarding Level I Mathematics requirements.

Level II

ACCTING 1002 Accounting for Decision Makers I...3	
C&ENVENG 2025 Strength of Materials IIA	3
C&ENVENG 2069 Geotechnical Engineering IIA...3	
C&ENVENG 2070 Engineering Modelling and Analysis II.....	3
C&ENVENG 2071 Water Engineering IIA.....	3
C&ENVENG 2072 Structural Engineering Design...3	
ECON 1009 International Finance Institutions and Markets I.....	3
MATHS 2201 Engineering Mathematics 1	3

Level III

CORPFIN 2500 Business Finance II	3
ECON 2504 Intermediate Econometrics II	3
ECON 2508 Financial Economics II.....	3
C&ENVENG 3001 Structural Mechanics IIIA	3
C&ENVENG 3005 Structural Design III (Concrete)	3
C&ENVENG 3007 Structural Design III (Steel).....	3
C&ENVENG 3012 Geotechnical Engineering Design III.....	3
C&ENVENG 3077 Engineering Hydrology	3

Level IV

CORPFIN 2501 Financial Institutions Management II.....	3
C&ENVENG 3078 Engineering Management and Planning IIIA.....	3

C&ENVENG 3079 Water Engineering and Design III (S2)	3
CHEM ENG Water and Wastewater Treatment or C&ENVENG 4087 Environmental Modelling and Management	3
CORPFIN 3501 Portfolio Theory and Management III	3
<i>and either</i>	
APP MTH 3012 Financial Modelling: Tools and Techniques.....	3
<i>or</i>	
CORPFIN 3502 Options, Futures and Risk Management III	3
Level III Finance courses	6

Level V

C&ENVENG 4003A/B Civil & Structural Engineering Research Project ^	6
C&ENVENG 4034 Engineering Management IV....	3
C&ENVENG 4068 Computer Methods of Structural Analysis and Design	3
Electives chosen from specialisations below.....	12

^ Students who are not selected for Honours will be required to complete 2 additional final year specialisation courses instead of the Civil & Structural Research Project.

Specialisations

Students should take at least two courses from the one group. The remaining may be chosen from any group. Alternatively, students may take up to 3 units of Level II or III courses offered by the School of Mathematical Sciences. In special circumstances other combinations of specialisation courses may be acceptable but must be approved by the Head of School. Students may also, with the approval of the Head of School, replace one or more specialisation courses with appropriate courses offered by other schools in the University.

Students should undertake at least two specialisations from the Structural Engineering group, and may only undertake one 'Mining' specialisation in any one year.

The specialisation courses offered by the School in any one year will depend on staff availability, and will be chosen from the following:

Group I: Structural Engineering

C&ENVENG 4069 Advanced Reinforced Concrete	3
C&ENVENG 4070 Seismic Design of Masonry Buildings	3
C&ENVENG 4099 Structural Response to Blast Loading	3
C&ENVENG 4096 FRP Retrofitting of Concrete Structures	3

Group II: Geotechnical/Mining Engineering

MINING 3070 Rock Breakage	3
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MINING 3072 Mining Geomechanics	3
C&ENVENG 4081 Engineering Problematic Soils ...	3
MINING 4102 Mine Geotechnical Engineering.....	3
C&ENVENG 4106 Introduction to Geostatistics.....	3

Group III: Water Engineering

C&ENVENG 4073 Water Distribution Systems and Design.....	3
C&ENVENG 4077 Coastal Engineering and Design.....	3

Group IV: Management Engineering

C&ENVENG 4085 Traffic Engineering and Design.....	3
MINING 4110 Mine Asset Management and Services	3

6.5.6.5 B.E.(Civil & Structural)/ B.Ma.&Comp.Sc. (Computer Science focus)

To qualify for both the award of the degree of B.E.(Civil & Structural) and the degree of B.Ma. Comp.Sc. with a Computer Science Major, students are required to complete satisfactorily:

Level I

C&ENVENG 1008 Engineering Planning & Design IA	3
C&ENVENG 1009 Civil & Environmental Engineering IA	3
C&ENVENG 1010 Engineering Mechanics - Statics	3
COMP SCI 1008 Computer Science IA	3
COMP SCI 1009 Computer Science IB	3
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
MATHS 1013 Mathematics IMA*.....	3
MECH ENG 1007 Engineering Mechanics - Dynamics	3

* See Clause 6.2 regarding Level I Mathematics requirements.

Level II

MATHS 2201 Engineering Mathematics I.....	3
MATHS 2202 Engineering Mathematics II.....	3
C&ENVENG 2068 Environmental Engineering & Sustainability II.....	3
C&ENVENG 2025 Strength of Materials IIA	3
C&ENVENG 2067 Construction Management & Surveying	3
C&ENVENG 2069 Geotechnical Engineering IIA ...	3
C&ENVENG 2071 Water Engineering IIA.....	3
C&ENVENG 2072 Structural Engineering Design..	3

Level III

C&ENVENG 3001 Structural Mechanics IIIA	3
C&ENVENG 3005 Structural Design III	

(Concrete)	3
C&ENVENG 3007 Structural Design III (Steel).....	3
C&ENVENG 3012 Geotechnical Engineering Design III.....	3
C&ENVENG 3077 Engineering Hydrology	3
C&ENVENG 3078 Engineering Management and Planning IIIA.....	3
Level II Computer Science Course.....	6

Level IV

Level III Computer Science courses*.....	18
C&ENVENG 3079 Water Engineering and Design III (S2)	3
CHEM ENG Water and Wastewater Treatment or C&ENVENG 4087 Environmental Modelling and Management	3

Level V

C&ENVENG 4003A/B Civil & Structural Engineering Research Project ^	6
C&ENVENG 4034 Engineering Management IV.....	3
C&ENVENG 4068 Computer Methods of Structural Analysis and Design	3
Specialisation courses to the value of at least 12 units	12

*Level III Computer Science courses chosen from those listed in the specific Academic Program Rules of the degree of Bachelor of Computer Science.

^ Students who are not selected for Honours will be required to complete two additional final year specialisation courses instead of the Civil & Structural Research Project.

Specialisations

Students should take at least two courses from the one group. The remaining may be chosen from any group. Alternatively, students may take up to 3 units of Level II or III courses offered by the School of Mathematical Sciences. In special circumstances other combinations of specialisation courses may be acceptable but must be approved by the Head of School. Students may also, with the approval of the Head of School, replace one or more specialisation courses with appropriate courses offered by other schools in the University.

Students should undertake at least two specialisations from the Structural Engineering group, and may only undertake one 'Mining' specialisation in any one year.

The specialisation courses offered by the School in any one year will depend on staff availability, and will be chosen from the following:

Group I: Structural Engineering

C&ENVENG 4069 Advanced Reinforced Concrete	3
C&ENVENG 4070 Seismic Design of Masonry Buildings	3
C&ENVENG 4099 Structural Response to Blast	

Loading	3
C&ENVENG 4096 FRP Retrofitting of Concrete Structures	3
<i>Group II: Geotechnical/Mining Engineering</i>	
MINING 3070 Rock Breakage	3
MINING 3072 Mining Geomechanics	3
C&ENVENG 4081 Engineering Problematic Soils	3
MINING 4102 Mine Geotechnical Engineering	3
C&ENVENG 4106 Introduction to Geostatistics	3
<i>Group III: Water Engineering</i>	
C&ENVENG 4073 Water Distribution Systems and Design	3
C&ENVENG 4077 Coastal Engineering and Design	3
<i>Group IV: Management Engineering</i>	
C&ENVENG 4085 Traffic Engineering and Design	3
MINING 4110 Mine Asset Management and Services	3
6.5.6.6 B.E (Civil & Structural)/ B.Ma.&Comp.Sc. (Mathematics focus)	
To qualify for both the award of the degree of B.E.(Civil & Structural) and the degree of B.Ma. Comp.Sc. with a Mathematics focus, students are required to complete satisfactorily:	
Level I	
C&ENVENG 1008 Engineering Planning and Design IA	3
C&ENVENG 1009 Civil and Environmental Engineering IA	3
C&ENVENG 1010 Engineering Mechanics - Statics	3
C&ENVENG 1012 Engineering Modelling and Analysis IA	3
GEOLOGY 1104 Geology for Engineers.....	3
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
MATHS 1013 Mathematics IMA*	3
MECH ENG 1007 Engineering Mechanics - Dynamics	3
* See Clause 6.2 regarding Level I Mathematics requirements.	
Level II	
C&ENVENG 2025 Strength of Materials IIA	3
C&ENVENG 2068 Environmental Engineering and Sustainability II.....	3
C&ENVENG 2069 Geotechnical Engineering IIA	3
C&ENVENG 2070 Engineering Modelling & Analysis IIA	3
C&ENVENG 2071 Water Engineering IIA.....	3
C&ENVENG 2072 Structural Engineering Design..	3

MATHS 2201 Engineering Mathematics I	3
MATHS 2202 Engineering Maths II	3
Level III	
C&ENVENG 3001 Structural Mechanics IIIA	3
C&ENVENG 3005 Structural Design III (Concrete)	3
C&ENVENG 3007 Structural Design III (Steel).....	3
C&ENVENG 3012 Geotechnical Engineering Design III	3
C&ENVENG 3077 Engineering Hydrology	3
C&ENVENG 3078 Engineering Management and Planning IIIA.....	3
C&ENVENG 3079 Water Engineering and Design II (S2)	3
Water and Wastewater Treatment <i>or</i>	
C&ENVENG 4087 Environmental Modelling and Management	3

Level IV
 Mathematics courses*24
 *24 units of additional Mathematics courses of which 18 units must be at Level III.

Level V

C&ENVENG 4003A/B Civil & Structural Engineering Research Project ^	6	
C&ENVENG 4034 Engineering Management IV.....	3	
C&ENVENG 4068 Computer Methods of Structural Analysis and Design	3	
Specialisation courses to the value of at least 12 units		12

^ Students who are not selected for Honours will be required to complete two additional final year specialisation courses instead of the Civil & Structural Research Project.

Specialisations

Students should take at least two courses from the one group. The remaining may be chosen from any group. Alternatively, students may take up to 3 units of Level II or III courses offered by the School of Mathematical Sciences. In special circumstances other combinations of specialisation courses may be acceptable but must be approved by the Head of School. Students may also, with the approval of the Head of School, replace one or more specialisation courses with appropriate courses offered by other schools in the University.

Students should undertake at least two specialisations from the Structural Engineering group, and may only undertake one 'Mining' specialisation in any one year.

The specialisation courses offered by the School in any one year will depend on staff availability, and will be chosen from the following:

Group I: Structural Engineering

C&ENVENG 4069 Advanced Reinforced Concrete	3
C&ENVENG 4070 Seismic Design of Masonry Buildings	3
C&ENVENG 4099 Structural Response to Blast Loading	3
C&ENVENG 4096 FRP Retrofitting of Concrete Structures	3
<i>Group II: Geotechnical/Mining Engineering</i>	
MINING 3070 Rock Breakage	3
MINING 3072 Mining Geomechanics	3
C&ENVENG 4081 Engineering Problematic Soils.....	3
MINING 4102 Mine Geotechnical Engineering.....	3
C&ENVENG 4106 Introduction to Geostatistics.....	3
<i>Group III: Water Engineering</i>	
C&ENVENG 4073 Water Distribution Systems and Design.....	3
C&ENVENG 4077 Coastal Engineering and Design.....	3
<i>Group IV: Management Engineering</i>	
C&ENVENG 4085 Traffic Engineering and Design.....	3
MINING 4110 Mine Asset Management and Services	3

6.5.6.7 B.E.(Civil & Structural)/B.Sc.

To qualify for a Bachelor of Science award, students must complete a major pursuant to Bachelor of Science Program Rules.

To qualify for both the award of the degree of B.E.(Civil & Structural) and the degree of B.Sc., students are required to complete satisfactorily courses as indicated below:

Level I

C&ENVENG 1008 Engineering Planning and Design IA	3
C&ENVENG 1009 Civil and Environmental Engineering I.....	3
C&ENVENG 1010 Engineering Mechanics - Statics.....	3
C&ENVENG 1012 Engineering Modelling and Analysis IA	3
MATHS 1011 Mathematics IA.....	3
MATHS 1012 Mathematics IB.....	3
MATHS 1013 Mathematics IMA*	3
Level I Science courses.....	6

* See Clause 6.2 regarding Level I Mathematics requirements.

Level II

C&ENVENG 2025 Strength of Materials IIA	3
C&ENVENG 2069 Geotechnical Engineering IIA ...	3
C&ENVENG 2070 Engineering Modelling and Analysis IIA	3
C&ENVENG 2071 Water Engineering IIA.....	3

C&ENVENG 2072 Structural Engineering Design IIA	3
MATHS 2201 Engineering Mathematics I.....	3
MATHS 2202 Engineering Mathematics II <i>or</i> Level II Science course.....	3
Level II Science course.....	3
Level III	
C&ENVENG 3001 Structural Mechanics IIIA	3
C&ENVENG 3005 Structural Design III (Concrete)	3
C&ENVENG 3007 Structural Design III (Steel).....	3
C&ENVENG 3012 Geotechnical Engineering Design III.....	3
C&ENVENG 3077 Engineering Hydrology	3
C&ENVENG 3079 Water Engineering and Design III S2	3
Level II Science courses.....	6
Level IV	
Level III Science Courses	24
Level V	
C&ENVENG 4003A/B Civil & Structural Engineering Research Project ^	6
C&ENVENG 4034 Engineering Management IV.....	3
C&ENVENG 4068 Computer Methods of Structural Analysis and Design	3
Specialisations	12

^ Students who are not selected for Honours will be required to complete two additional final year specialisation courses instead of the Civil & Structural Research Project.

Specialisations

Students should take at least two courses from the one group. The remaining may be chosen from any group. Alternatively, students may take up to 3 units of Level II or III courses offered by the School of Mathematical Sciences. In special circumstances other combinations of specialisation courses may be acceptable but must be approved by the Head of School. Students may also, with the approval of the Head of School, replace one or more specialisation courses with appropriate courses offered by other schools in the University.

Students should undertake at least two specialisations from the Structural Engineering group, and may only undertake one 'Mining' specialisation in any one year.

The specialisation courses offered by the School in any one year will depend on staff availability, and will be chosen from the following:

Group I: Structural Engineering

C&ENVENG 4069 Advanced Reinforced Concrete	3
C&ENVENG 4070 Seismic Design of Masonry Buildings	3

C&ENVENG 4099 Structural Response to Blast Loading	3
C&ENVENG 4096 FRP Retrofitting of Concrete Structures	3
<i>Group II: Geotechnical/Mining Engineering</i>	
MINING 3070 Rock Breakage	3
MINING 3072 Mining Geomechanics	3
C&ENVENG 4081 Engineering Problematic Soils ...	3
MINING 4102 Mine Geotechnical Engineering.....	3
C&ENVENG 4106 Introduction to Geostatistics.....	3
<i>Group III: Water Engineering</i>	
C&ENVENG 4073 Water Distribution Systems and Design.....	3
C&ENVENG 4077 Coastal Engineering and Design.....	3
<i>Group IV: Management Engineering</i>	
C&ENVENG 4085 Traffic Engineering and Design.....	3
MINING 4110 Mine Asset Management and Services	3

6.5.6.8 B.E.(Civil & Structural)/ B.E.(Civil & Environmental)

To qualify for the combined award of B.E.(Civil & Structural) and B.E.(Civil & Environmental), students are required to complete satisfactorily courses listed below:

Level I

C&ENVENG 1008 Engineering Planning and Design IA	3
C&ENVENG 1009 Civil and Environmental Engineering IA	3
C&ENVENG 1010 Engineering Mechanics - Statics	3
C&ENVENG 1012 Engineering Modelling and Analysis IA	3
GEOLOGY 1104 Geology for Engineers I.....	3
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
MATHS 1013 Mathematics IMA*	
ENV BIOL 1002 Ecological Issues I.....	3

* See Clause 6.2 regarding Level I Mathematics requirements.

Level II

C&ENVENG 2025 Strength of Materials IIA	3
C&ENVENG 2067 Construction Management and Surveying	3
C&ENVENG 2068 Environmental Engineering and Sustainability II.....	3
C&ENVENG 2069 Geotechnical Engineering IIA ...	3
C&ENVENG 2070 Engineering Modelling and Analysis IIA	3
C&ENVENG 2071 Water Engineering IIA.....	3
C&ENVENG 2072 Structural Engineering Design	3

MATHS 2201 Engineering Mathematics I.....	3
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Level III

CHEM ENG 2071 Transport Processes in the Environment.....	3
C&ENVENG 3001 Structural Mechanics IIIA	3
C&ENVENG 3005 Structural Design III (Concrete)	3
C&ENVENG 3007 Structural Design III (Steel).....	3
C&ENVENG 3012 Geotechnical Engineering Design III.....	3
C&ENVENG 3077 Engineering Hydrology	3
C&ENVENG 3078 Engineering Management and Planning IIA.....	3
C&ENVENG 3079 Water Engineering and Design III (S2)	3

Level IV

CHEM ENG Water and Wastewater Treatment	3
ENV BIOL 2005 Ecology for Engineers II.....	3
ENV BIOL 3012WT Integrated Catchment Management III.....	3
ECON 3018 Environmental Economics E III	3
C&ENVENG 4037 Introduction to Environmental Law	3
C&ENVENG 4087 Environmental Modelling and Management	3
Specialisations.....	6

Level V

C&ENVENG 4003A Civil & Structural Engineering Research Project ^	6
<i>or</i>	
C&ENVENG 4005A Civil & Environmental Research Project ^	6
C&ENVENG 4034 Engineering Management IV....	3
C&ENVENG 4068 Computer Methods of Structural Analysis & Design	3
Specialisations.....	12

^ The Civil Engineering Research Project must be in the area of Structural or Geotechnical Engineering while the Environmental Engineering Research Project must be in the area of Water or Environmental Engineering. Students not selected for Honours Civil Engineering Research Project or the Honours Environmental Engineering Research Project will be required to complete two additional final year specialisation courses instead of the Research Project.

Specialisations

Students should take at least two courses from the one group. The remaining may be chosen from any group. Alternatively, students may take up to 3 units of Level II or III courses offered by the School of Mathematical Sciences. In special circumstances other combinations of specialisation courses may be acceptable but must be approved by the Head of School. At least 2 of the specialisation courses must be in the areas of Structural and/or Geotechnical

Engineering and at least 2 must be in the areas of Water and/or Environmental Engineering.

Students may also, with the approval of the Head of School, replace one or more specialisation courses with appropriate courses offered by other schools in the University.

Students should undertake at least two specialisations from the Structural Engineering group, and may only undertake one 'Mining' specialisation in any one year.

The specialisation courses offered by the School in any one year will depend on staff availability, and will be chosen from the following:

Group I: Structural Engineering

C&ENVENG 4069 Advanced Reinforced Concrete	3
C&ENVENG 4070 Seismic Design of Masonry Buildings	3
C&ENVENG 4099 Structural Response to Blast Loading	3
C&ENVENG 4096 FRP Retrofitting of Concrete Structures	3

Group II: Geotechnical/Mining Engineering

MINING 3070 Rock Breakage	3
MINING 3072 Mining Geomechanics	3
C&ENVENG 4081 Engineering Problematic Soils	3
MINING 4102 Mine Geotechnical Engineering	3
C&ENVENG 4106 Introduction to Geostatistics	3

Group III: Water Engineering

C&ENVENG 4073 Water Distribution Systems and Design	3
C&ENVENG 4077 Coastal Engineering and Design	3

Group IV: Management Engineering

C&ENVENG 4085 Traffic Engineering and Design	3
MINING 4110 Mine Asset Management and Services	3

Group V: Environmental Engineering

SOIL&WAT 3007WT GIS for Environmental Management	3
ENV BIOL 3012WT Integrated Catchment Management	3
C&ENVENG 4087 Environmental Modelling and Management	3
C&ENVENG 4091 Waste Management Analysis and Design	3
C&ENVENG 4092 Wastewater Engineering and Design	3
MINING 4104 Socio-Environmental Aspects of Mining	3

6.5.7 Computational Engineering

6.5.7.1 B.E.(Computational)

Students are required to complete satisfactorily courses to the value of 24 units at each of Levels I, II, III and IV:

Level I

COMP SCI 1012 Scientific Computing	3
C&ENVENG 1010 Engineering Mechanics - Statics	3
CHEM ENG 1009 Materials I	3
ELEC ENG 1008 Electrical & Electronic Engineering IA	3
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
MATHS 1013 Mathematics IMA*	3
MECH ENG 1006 Design Graphics & Communication M	3
MECH ENG 1007 Engineering Mechanics - Dynamics	3

* See Clause 6.2 regarding Level I Mathematics requirements.

Level II

C&ENVENG 2025 Strength of Materials IIA	3
MECH ENG 2002 Stress Analysis and Design	3
MECH ENG 2019 Dynamics and Control I	3
MECH ENG 2020 Materials and Manufacturing ...	3
MECH ENG 2021 Thermo Fluids I	3
MATHS 2201 Engineering Mathematics I	3
MATHS 2202 Engineering Mathematics II	3
MATHS 2104 Numerical Methods	3

Level III

APP MTH 3002 Fluid Mechanics III	3
APP MTH 3010 Variational Methods and Optimal Control	3
APP MTH 3013 Differential Equations III	3
APP MTH 3014 Optimisation III	3
MECH ENG 3102 Heat Transfer and Thermodynamics	3
MECH ENG 3027 Engineering Systems Design & Communication	3
MECH ENG 3028 Dynamics and Control II	3
MECH ENG 3030 Structural Design and Solid Mechanics	3

Level IV

Note: Level IV is indicative only

APP MTH 3000 Computational Mathematics III ...	3
Computational Project Part 1 & 2 ^	6
MECH ENG 4116 Engineering Management and Quality Systems	3
Elective courses to the value of 12 units	12

^ Students who are not selected for Honours will be required to complete two additional final year specialisation courses instead of the Computational Engineering Honours Project, in consultation with the Head of Mathematical Sciences.

Electives

Applied Mathematics Elective Course	3
APP MTH 3017 Waves	3
Computer Science course:	
Distributed High Performance Computing	3

Mechanical Engineering course:

CFD for Engineering Applications	3
Finite Element Analysis of Structures	3
PHYSICS 3000 Computational Physics	3

6.5.8 Computer Systems Engineering

6.5.8.1 B.E.(Computer Systems)

Students are required to complete satisfactorily courses to the value of 24 units at each of Levels I, II, III and IV:

Level I

COMP SCI 1008 Computer Science IA	3
COMP SCI 1009 Computer Science IB	3
ELEC ENG 1009 Electrical & Electronic Engineering IA	3
ELEC ENG 1010 Electrical & Electronic Engineering IB	3
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
PHYSICS 1100 Physics IA	3
PHYSICS 1200 Physics IB	3

Level II

COMP SCI 2000 Computer Systems	3
COMP SCI 2004 Data Structures & Algorithms	3
ELEC ENG 2007 Signals & Systems II	3
ELEC ENG 2008 Electronics II	3
ELEC ENG 2009 Engineering Electromagnetics	3
ELEC ENG 2011 Circuit Analysis	3
MATHS 2201 Engineering Mathematics I	3
MATHS 2202 Engineering Mathematics II	3

Level III

COMP SCI 3001 Computer Networks and Applications	3
COMP SCI 3005 Computer Architecture <i>or</i>	
ELEC ENG 3026 Engineering Systems: Avionics	3
COMP SCI 3006 Software Engineering and Project	3
ELEC ENG 3015 Communications, Signals and Systems	3
ELEC ENG 3017 Digital Electronics	3
ELEC ENG 3018 RF Engineering III	3
ELEC ENG 3024 Project Management for Electrical Engineering	3

ELEC ENG 3027 Control III	3
ELEC ENG 3028 Digital Systems	3
ELEC ENG 3033 Signal Processing III	3

Level IV

Note: Level IV is indicative only—for enrolment information continuing students should visit www.ecms.adelaide.edu.au/enrol/guide/

COMP SCI 3001 Computer Networks and Applications	3
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Electrical & Electronic Engineering course:

Core and elective courses	15
ELEC ENG 4036A/B Design Project*	6

or

ELEC ENG 4039A Honours Project*	6
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*Students accepted into the Honours Stream will take ELEC ENG 4039A/B Honours Project and other students will take ELEC ENG 4036A/B Design Project

Electives

APP MTH 3016 Telecommunications Systems Modelling III	3
COMP SCI 3004 Operating Systems	3
COMP SCI 3005 Computer Architecture	3
ELEC ENG 3021 Electric Energy Systems	3
ELEC ENG 4049 Analog Microelectronic Systems	3
PURE MTH 3018 Coding and Cryptology III	3

and other courses as approved by the Head of the School of Electrical and Electronic Engineering

6.5.8.2 B.E.(Computer Systems)/B.A

To satisfy the Arts component of this program, students commencing in 2010 must undertake 30 units of Arts courses, which includes an approved major sequence (24 units). The remaining 6 units can be undertaken at any level. Students should consult the Bachelor of Arts academic program rules for the list of approved major sequences and the specific requirements of each.

To satisfy the BE (Computer Systems) component of this program students are required to satisfactorily complete the courses listed below:

Level I

COMP SCI 1008 Computer Science IA	3
COMP SCI 1009 Computer Science IB	3
ELEC ENG 1009 Electrical & Electronic Engineering IA	3
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
MATHS 1013 Mathematics IMA*	3
PHYSICS 1100 Physics IA	3
PHYSICS 1200 Physics IB	3
Arts Course	3

* See Clause 6.2 regarding Level I Mathematics requirements.

Level II	
ELEC ENG 1010 Electrical & Electronic Engineering IB	3
ELEC ENG 2007 Signals & Systems II.....	3
ELEC ENG 2011 Circuit Analysis.....	3
ELEC ENG 2009 Engineering Electromagnetics...	3
MATHS 2201 Engineering Mathematics I.....	3
MATHS 2202 Engineering Mathematics II.....	3
Arts Course.....	6

Level III	
COMP SCI 2000 Computer Systems	3
COMP SCI 2004 Data Structure and Algorithms....	3
ELEC ENG 2008 Electronics II.....	3
ELEC ENG 3028 Digital Systems	3
ELEC ENG 3026 Engineering Systems: Avionics <i>or</i>	
COMP SCI 3005 Computer Architecture	3
ELEC ENG 3033 Signal Processing III.....	3
Arts courses.....	6

Level IV	
COMP SCI 3006 Software Engineering and Project.....	3
ELEC ENG 3018 RF Engineering III.....	3
ELEC ENG 3024 Project Management for Electrical Engineers.....	3
ELEC ENG 4040 Management and Professional Practice for Engineers	3
Arts courses.....	12

Level V	
Note: Level IV is indicative only—for enrolment information continuing students should visit www.ecms.adelaide.edu.au/enrol/guides/	
<i>Electrical & Electronic Engineering courses:</i>	
Electrical & Electronic Engineering core course ...	6
Systems Engineering.....	3
ELEC ENG 4036A/B Design Project Part I*	6
<i>or</i>	
ELEC ENG 4039A/B Honours Project*	6
ELEC ENG 3022 Real Time Systems IV	3
Advanced Level Arts courses.....	6

* Students accepted into the Honours Stream will take ELEC ENG 4039A/B Honours Project and other students will take ELEC ENG 4036A/B Design Project

6.5.8.3 B.E.(Computer Systems)/B.Ec. program

To qualify for both the award of the degree of B.E.(Computer Systems) and the degree of B.Ec., students are required to complete satisfactorily courses listed below:

Level I	
COMP SCI 1008 Computer Science IA	3
COMP SCI 1009 Computer Science IB	3

ECON 1004 Principles of Microeconomics I.....	3
ELEC ENG 1009 Electrical & Electronic Engineering IA.....	3
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
MATHS 1013 Mathematics IMA*.....	3
PHYSICS 1100 Physics IA.....	3
PHYSICS 1200 Physics IB.....	3
* See Clause 6.2 regarding Level I Mathematics requirements.	

Level II	
ECON 1000 Principles of Macroeconomics I.....	3
ECON 2504 Intermediate Econometrics <i>or</i>	
ECON 2503 Mathematical Economics II.....	3
ELEC ENG 1010 Electrical and Electronic Engineering IB	3
ELEC ENG 2007 Signals and Systems II.....	3
ELEC ENG 2009 Engineering Electromagnetics...	3
ELEC ENG 2011 Circuit Analysis.....	3
MATHS 2201 Engineering Mathematics I.....	3
MATHS 2202 Engineering Mathematics II.....	3

Level III	
COMP SCI 2000 Computer Systems UG.....	3
COMP SCI 2004 Data Structures and Algorithms	3
ELEC ENG 2008 Electronics II.....	3
ECON 2506 Intermediate Microeconomics	3
ECON 2507 Intermediate Macroeconomics	3
ELEC ENG 3026 Engineering Systems: Avionics <i>or</i>	
COMP SCI 3005 Computer Architecture	3
ELEC ENG 3028 Digital Systems	3
ELEC ENG 3033 Signal Processing II.....	3

Level IV	
COMMGMT 2500 Organisational Behaviour II	3
COMP SCI 3006 Software Engineering and Project.....	3
ELEC ENG 3018 RF Engineering III.....	3
ELEC ENG 3024 Project Management for Electrical Engineers.....	3
ELEC ENG 3026 Engineering Systems: Avionics <i>or</i>	
COMP SCI 3005 Computer Architecture	3
Level III Economics Courses*	9

* Level III Economics courses chosen from those listed in the specific Academic Program Rules of the degree of Bachelor of Economics.

Level V	
Note: Level V is indicative only—for enrolment information continuing students should visit www.ecms.adelaide.edu.au/enrol/guides/	
ELEC ENG 3022 Real Time Systems IV	3
ELEC ENG 4036A/B Design Project#	6

or

ELEC ENG 4039A/B Honours Project#	6
ELEC ENG 4050 Systems Engineering	3
Level III Economics Courses	9

Students accepted into the Honours Stream will take 4039A/B Honours Project and other students will take 4036A/B Design Project

6.5.8.4 B.E.(Computer Systems)/B.Fin.

To qualify for both the award of the degree of B.E.(Computer Systems) and the degree of B.Fin., students are required to complete satisfactorily courses listed below:

Level I

COMP SCI 1008 Computer Science IA	3
COMP SCI 1009 Computer Science IB	3
ECON 1004 Principles of Microeconomics	3
ELEC ENG 1009 Electrical & Electronic Engineering IA	3
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
MATHS 1013 Mathematics IMA*	3
PHYSICS 1100 Physics IA	3
PHYSICS 1200 Physics IB	3

* See Clause 6.2 regarding Level I Mathematics requirements.

Level II

ECON 1000 Principles of Macroeconomics I	3
ECON 1009 International Financial Institutions & Markets I	3
ELEC ENG 1010 Electrical & Electronic IB	3
ELEC ENG 2007 Signals & Systems	3
ELEC ENG 2009 Engineering Electromagnetics	3
ELEC ENG 2011 Circuit Analysis	3
MATHS 2201 Engineering Mathematics I	3
MATHS 2202 Engineering Mathematics II	3

Level III

ACCTING 1002 Accounting for Decision Makers I	3
COMP SCI 2000 Computer Systems	3
COMP SCI 2004 Data Structures and Algorithms	3
CORPFIN 2500 Business Finance II	3
ECON 2504 Intermediate Econometrics II	3
ELEC ENG 2008 Electronics II	3
ELEC ENG 3028 Digital Systems	3
ELEC ENG 3033 Signal Processing III	3

Level IV

CORPFIN 2501 Financial Institutions Management II	3
ECON 2508 Financial Economics II	3
ELEC ENG 3018 RF Engineering III	3
ELEC ENG 3024 Project Management for	

Electrical Engineers	3
ELEC ENG 3027 Control III	3
ELEC ENG 3033 Signal Processing III	3
Level III Finance course	3

Level V

Note: Level V is indicative only—for enrolment information continuing students should visit

www.ecms.adelaide.edu.au/enrol/guides/

Electrical & Electronic Engineering courses:

Systems Engineering	3
ELEC ENG 3022 Real Time Systems IV	3
ELEC ENG 4036A/B Design Project#	6

or

ELEC ENG 4039A/B Honours Project#	6
Level III Finance Courses	12

Students accepted into the Honours Stream will take ELEC ENG 4039A/B Honours Project and other students will take ELEC ENG 4036A/B Design Project

6.5.8.5 B.E.(Computer Systems)/LLB.

Level I

ELEC ENG 1009 Electrical & Electronic Engineering IA	3
ELEC ENG 1010 Electrical & Electronic Engineering 1B	3
LAW 1501 Foundations of Law	3
LAW 1502 Law of Torts 1	3
LAW 1504 Principles of Public Law	3
LAW 1505 Law of Torts 2	3
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
MATHS 1013 Mathematics IMA*	3

* See Clause 6.2 regarding Level I Mathematics requirements.

Level II

COMP SCI 1008 Computer Science 1A	3
COMP SCI 1009 Computer Science 1B	3
PHYSICS 1100 Physics 1A	3
PHYSICS 1200 Physics 1B	3
Law courses to be advised by the Law School	12

Level III

ELEC ENG 2007 Signals and Systems	3
ELEC ENG 2008 Electronics II	3
ELEC ENG 2009 Engineering Electromagnetics	3
ELEC ENG 2011 Circuit Analysis	3
MATHS 2201 Engineering Mathematics 1	3
MATHS 2202 Engineering Mathematics II	3
Law courses to be advised by Law School	6

Level IV

COMP SCI 3006 Software Engineering and Project	3
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ELEC ENG 3018 RF Engineering III.....	3
ELEC ENG 3024 Project Management for Electrical Engineers	3
ELEC ENG 3026 Engineering Systems: Avionics <i>or</i> COMP SCI 3005 Computer Architecture	3
ELEC ENG 3027 Control III.....	3
ELEC ENG 3028 Digital Systems	3
ELEC ENG 3033 Signal Processing III.....	3
Law courses to be advised by Law School	6

Level V

Note: Level V is indicative only—for enrolment information continuing students should visit www.ecms.adelaide.edu.au/enrol/guides/

ELEC ENG 3022 Real Time Systems IV	3
ELEC ENG 4036A/B Design Project*	6
<i>or</i>	
ELEC ENG 4039A/B Honours Project*	6
ELEC ENG 4050 Systems Engineering	3
Law courses to be advised by Law School	12
Plus 24 additional Units as required by Law School	

* Students accepted into the Honours Stream will take ELEC ENG 4039A/B Honours Project Part 1 & 2 and other students will take ELEC ENG 4036A/B Design Project Part 1 & 2.

6.5.8.6 B.E.(Computer Systems)/B.Ma.&Comp.Sc.

To qualify for both the award of the degree of B.E.(Computer Systems) and the degree of B.Ma.&Comp.Sc., students are required to complete satisfactorily:

Level I

COMP SCI 1008 Computer Science IA	3
COMP SCI 1009 Computer Science IB	3
ELEC ENG 1009 Electrical and Electronic Engineering IA	3
ELEC ENG 1010 Electrical and Electronic Engineering 1B	3
MATHS 1011 Mathematics IA.....	3
MATHS 1012 Mathematics IB.....	3
MATHS 1013 Mathematics IMA*	3
PHYSICS 1100 Physics IA.....	3
PHYSICS 1200 Physics IB.....	3

* See Clause 6.2 regarding Level I Mathematics requirements.

Level II

COMP SCI 2000 Computer Systems	3
COMP SCI 2004 Data Structures & Algorithms	3
ELEC ENG 2007 Signals and Systems II.....	3
ELEC ENG 2008 Electronics II.....	3
ELEC ENG 2009 Engineering Electromagnetics...	3
ELEC ENG 2011 Circuit Analysis.....	3
MATHS 2201 Engineering Mathematics I.....	3
MATHS 2202 Engineering Mathematics II.....	3

Level III

COMP SCI 3001 Computer Networks and Applications	3
COMP SCI 3005 Computer Architecture <i>or</i> ELEC ENG 3026 Engineering Systems: Avionics...	3
COMP SCI 3006 Software Engineering and Project.....	3
ELEC ENG 3027 Control III.....	3
ELEC ENG 3018 RF Engineering III.....	3
ELEC ENG 3024 Project Management for Electrical Engineering.....	3
ELEC ENG 3028 Digital Systems	3
ELEC ENG 3033 Signal Processing III	3

Level IV

Mathematics/Computer Science courses*	24
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*24 units of additional Mathematics/Computer Science courses of which 18 units must be at Level III

Level V

Note: Level V is indicative only—for enrolment information continuing students should visit www.ecms.adelaide.edu.au/enrol/guides/

COMP SCI 3001 Computer Networks and Applications	3
<i>Electrical & Electronic Engineering courses:</i>	
Electrical & Electronic core or elective courses ...	6
Financial Management	3
Management & Professional Practice	3
Systems Engineering.....	3
ELEC ENG 4036A/B Design Project*	6
<i>or</i>	
ELEC ENG 4039A/B Honours Project*	6

*Students accepted into the Honours Stream will take ELEC ENG 4039A/B Honours Project and other students will take ELEC ENG 4036A/B Design Project

Electives

APP MTH 3016 Telecommunications Systems Modelling III	3
COMP SCI 3004 Operating Systems	3
COMP SCI 3005 Computer Architecture	3
ELEC ENG 4049 Analog Microelectronic Systems	3
ELEC ENG 3021 Electric Energy Systems	3
PURE MTH 3018 Coding and Cryptology III	3
and other courses as approved by the Head of the School of Electrical and Electronic Engineering.	

6.5.9 Electrical & Electronic Engineering

6.5.9.1 B.E.(Electrical & Electronic)

Students are required to complete satisfactorily courses to the value of 24 units at each of Levels I, II, III and IV:

Level I

COMP SCI 1008 Computer Science IA	3
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COMP SCI 1009 Computer Science IB	3
ELEC ENG 1009 Electrical & Electronic Engineering IA	3
ELEC ENG 1010 Electrical & Electronic Engineering IB	3
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
PHYSICS 1100 Physics IA	3
PHYSICS 1200 Physics IB	3

Level II

COMP SCI 2000 Computer Systems	3
COMP SCI 2004 Data Structures & Algorithms ...	3
ELEC ENG 2007 Signals & Systems	3
ELEC ENG 2008 Electronics II	3
ELEC ENG 2009 Engineering Electromagnetics ...	3
ELEC ENG 2011 Circuit Analysis	3
MATHS 2201 Engineering Mathematics I	3
MATHS 2202 Engineering Mathematics II	3

Level III

ELEC ENG 3027 Control III	3
ELEC ENG 3018 RF Engineering III	3
ELEC ENG 3021 Electric Energy Systems	3
ELEC ENG 3024 Project Management for Electrical Engineering	3
ELEC ENG 3028 Digital Systems	3
ELEC ENG 3031 Power Systems	3
ELEC ENG 3033 Signal Processing III	3
ELEC ENG 3034 Telecommunications III	3

Level IV

Note: Level IV is indicative only—for enrolment information continuing students should visit www.ecms.adelaide.edu.au/enrol/guides/

Electrical & Electronic Engineering courses:

Digital Microelectronics	3
Financial Management	3
Management and Professional Practice	3
Power Electronics and Drive Systems	3
RF Engineering IV	3
Telecommunications IV	3
ELEC ENG 4036A/B Design Project*	6

or

ELEC ENG 4039A/B Honours Project *	6
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*Students accepted into the Honours Stream will take ELEC ENG 4039A/B Honours Project and other students will take ELEC ENG 4036A/B Design Project

6.5.9.2 B.E.(Electrical & Electronic)/B.A.

To satisfy the Arts component of this program, students commencing in 2010 must undertake 30 units of Arts courses, which includes an approved

major sequence (24 units). The remaining 6 units can be undertaken at any level. Students should consult the Bachelor of Arts academic program rules for the list of approved major sequences and the specific requirements of each.

To satisfy the BE (Electrical & Electronic) component of this program students are required to satisfactorily complete the courses listed below:

Level I

COMP SCI 1008 Computer Science IA	3
COMP SCI 1009 Computer Science IB	3
ELEC ENG 1009 Electrical & Electronic Engineering IA	3
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
MATHS 1013 Mathematics IMA*	3
PHYSICS 1100 Physics IA	3
PHYSICS 1200 Physics IB	3
Level I Arts course	3

* See Clause 6.2 regarding Level I Mathematics requirements.

Level II

Arts courses	6
ELEC ENG 1010 Electrical & Electronic Engineering IB	3
ELEC ENG 2007 Signals and Systems II	3
ELEC ENG 2009 Engineering Electromagnetics ...	3
ELEC ENG 2011 Circuit Analysis	3
MATHS 2201 Engineering Mathematics I	3
MATHS 2202 Engineering Mathematics II	3

Level III

Arts courses	9
COMP SCI 2000 Computer Systems	3
COMP SCI 2004 Data Structures and Algorithms	3
ELEC ENG 2008 Electronics II	3
ELEC ENG 3028 Digital Systems	3
ELEC ENG 3033 Signal Processing III	3
ELEC ENG 3034 Telecommunications III	3

Level IV

ELEC ENG 3018 RF Engineering III	3
ELEC ENG 3021 Electric Energy Systems	3
ELEC ENG 3024 Project Management for Electrical Engineers	3
Arts courses	15

Level V

Note: Level V is indicative only—for enrolment information continuing students should visit www.ecms.adelaide.edu.au/enrol/guides/

Advanced Level Arts Courses	9
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Electrical & Electronic Engineering courses:

ELEC ENG 4036A/B Design Project*	6
<i>or</i>	
ELEC ENG 4039A/B Honours Project*	6
ELEC ENG 4040 Management & Professional Practice for Engineers	3
Elective	6

*Students accepted into the Honours Stream will take ELEC ENG 4039A/B Honours Project and other students will take ELEC ENG 4036A/B Design Project

Electives

COMP SCI 3001 Computer Networks and Applications	3
COMP SCI 3004 Operating Systems	3
COMP SCI 3005 Computer Architecture	3

Electrical & Electronic Engineering courses:

Advanced Control	3
Advanced Signal Processing	3
Image Processing	3
Power Quality & Condition Monitoring	3
Power Systems	3
ELEC ENG 3022 Real Time Systems IV	3
ELEC ENG 4035 Communications IV	3
ELEC ENG 4037 Digital Microelectronics	3
ELEC ENG 4042 Power Electronics and Drive Systems	3
ELEC ENG 4044 RF Engineering IV	3
ELEC ENG 4046 Telecommunications IV	3
PURE MTH 3018 Coding and Cryptology III	3

6.5.9.3 B.E. (Electrical & Electronic)/B.Ec.

To qualify for both the award of the degree of B.E.(Electrical & Electronic) and the degree of B.Ec. students are required to complete satisfactorily courses listed below:

Level I

COMP SCI 1008 Computer Science IA	3
COMP SCI 1009 Computer Science IB	3
ECON 1004 Principles of Microeconomics I	3
ELEC ENG 1009 Electrical and Electronic Engineering IA	3
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
MATHS 1013 Mathematics IMA*	3
PHYSICS 1100 Physics IA	3
PHYSICS 1200 Physics IB	3

* See Clause 6.2 regarding Level I Mathematics requirements.

Level II

ECON 1000 Principles of Macroeconomics I	3
ECON 2504 Intermediate Econometrics II <i>or</i>	
ECON 2503 Mathematical Economics II	3

ELEC ENG 1010 Electrical & Electronic Engineering IB	3
ELEC ENG 2007 Signals and Systems	3
ELEC ENG 2009 Engineering Electromagnetics	3
ELEC ENG 2011 Circuit Analysis	3
MATHS 2201 Engineering Mathematics I	3
MATHS 2202 Engineering Mathematics II	3

Level III

COMP SCI 2000 Computer Systems	3
COMP SCI 2004 Data Structures and Algorithms	3
ELEC ENG 2008 Electronics II	3
ECON 2507 Intermediate Macroeconomics II	3
ECON 2506 Intermediate Microeconomics II	3
ELEC ENG 3028 Digital Systems	3
ELEC ENG 3033 Signal Processing III	3
ELEC ENG 3034 Telecommunications III	3

Level IV

COMMGMT 2500 Organisational Behaviour II	3
ELEC ENG 3018 RF Engineering III	3
ELEC ENG 3021 Electric Energy Systems	3
ELEC ENG 3024 Project Management for Electrical Engineers	3
ELEC ENG 3031 Power Systems	3
Level III Economics Courses*	9

*Level III Economics courses chosen from those listed in the specific Academic Program Rules of the degree of Bachelor of Economics.

Level V

Note: Level V is indicative only—for enrolment information continuing students should visit www.ecms.adelaide.edu.au/enrol/guides/

ELEC ENG 4036A/B Design Project#	6
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or

ELEC ENG 4039A/B Honours Project#	6
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ELEC ENG 4037 Digital Microelectronics	2
ELEC ENG 4042 Power Electronics and Drive Systems	2
ELEC ENG 4044 RF Engineering IV	2
ELEC ENG 4046 Telecommunications IV	2
STATS 4001 Reliability and Quality Control	2
At least 8 units of Level III Economics Courses	8

Students accepted into the Honours Stream will take ELEC ENG 4039A/B Honours Project and other students will take ELEC ENG 4036A/B Design Project

6.5.9.4 B.E.(Electrical & Electronic)/B.Fin.

To qualify for both the award of the degree of B.E.(Electrical & Electronic) and the degree of B.Fin., students are required to complete satisfactorily courses listed below:

Level I

COMP SCI 1008 Computer Science IA.....	3
COMP SCI 1009 Computer Science IB.....	3
ECON 1004 Principles of Microeconomics I.....	3
ELEC ENG 1009 Electrical & Electronic Engineering IA.....	3
MATHS 1011 Mathematics IA.....	3
MATHS 1012 Mathematics IB.....	3
MATHS 1013 Mathematics IMA*.....	3
PHYSICS 1100 Physics IA.....	3
PHYSICS 1200 Physics IB.....	3

* See Clause 6.2 regarding Level I Mathematics requirements.

Level II

ECON 1009 International Finance Institutions and Markets I.....	3
ELEC ENG 1010 Electrical & Electronic Engineering IB.....	3
ELEC ENG 2007 Signals & Systems.....	3
ELEC ENG 2009 Engineering Electromagnetics...3	
ELEC ENG 2011 Circuit Analysis.....	3
ECON 1000 Principles of Macroeconomics I.....	3
MATHS 2201 Engineering Mathematics I.....	3
MATHS 2202 Engineering Mathematics II.....	3

Level III

ACCTING 1002 Accounting for Decision Makers I.....	3
COMP SCI 2000 Computer Systems.....	3
COMP SCI 2004 Data Structures and Algorithms.....	3
ELEC ENG 2008 Electronics II.....	3
CORPFIN 2500 Business Finance II.....	3
ECON 2504 Intermediate Economics II.....	3
ELEC ENG 3028 Digital Systems.....	3
ELEC ENG 3033 Signal Processing III.....	3

Level IV

ECON 2508 Financial Economics II.....	3
ELEC ENG 3027 Control III.....	3
ELEC ENG 3018 RF Engineering III.....	3
ELEC ENG 3024 Project Management for Electrical Engineering.....	3
ELEC ENG 3033 Signal Processing III.....	3
CORPFIN 2501 Financial Institutions Management II.....	3
Level III Finance course.....	3

Level V

Note: Level V is indicative only—for enrolment information continuing students should visit www.ecms.adelaide.edu.au/enrol/guides/

ELEC ENG 4036A/B Design Project ^.....	6
or	
ELEC ENG 4039A/B Honours Project ^.....	6

ELEC ENG 4037 Digital Microelectronics.....	3
ELEC ENG 4042 Power Electronics & Drive Systems.....	3
ELEC ENG 4044 RF Engineering IV.....	3
ELEC ENG 4046 Telecommunications IV.....	3

or

At least 9 units of Level III Finance Courses.....9

^ Students accepted into the Honours Stream will take ELEC ENG 4039A/B. Honours Project and other students will take ELEC ENG 4036A/B Design Project.

6.5.9.5 B.E.(Electrical & Electronic)/LLB

Level I

ELEC ENG 1009 Electrical & Electronic Engineering IA.....	3
ELEC ENG 1010 Electrical & Electronic Engineering IB.....	3
MATHS 1011 Mathematics IA.....	3
MATHS 1012 Mathematics IB.....	3
MATHS 1013 Mathematics IMA*.....	3
LAW 1501 Foundations of Law.....	3
LAW 1502 Law of Torts I.....	3
LAW 1504 Principles of Public Law.....	3
LAW 1505 Law of Torts 2.....	3

* See Clause 6.2 regarding Level I Mathematics requirements.

Level II

COMP SCI 1008 Computer Science IA.....	3
COMP SCI 1009 Computer Science IB.....	3
PHYSICS 1100 Physics IA.....	3
PHYSICS 1200 Physics IB.....	3
Law courses to be advised by Law School.....	12

Level III

ELEC ENG 2007 Signals and Systems.....	3
ELEC ENG 2008 Electronics II.....	3
ELEC ENG 2009 Engineering Electromagnetics...3	
ELEC ENG 2011 Circuit Analysis.....	3
MATHS 2201 Engineering Mathematics I.....	3
MATHS 2202 Engineering Mathematics II.....	3
Law courses to be advised by Law School.....	6

Level IV

ELEC ENG 3018 RF Engineering III.....	3
ELEC ENG 3021 Electric Energy Systems.....	3
ELEC ENG 3024 Project Management for Electrical Engineering.....	3
ELEC ENG 3028 Digital Systems.....	3
ELEC ENG 3033 Signal Processing III.....	3
ELEC ENG 3027 Control III.....	3
Law courses to be advised by Law School.....	6

Level V

Electrical & Electronic Engineering courses:

Practical Electrical & Electronic Design III.....	3
Project Management for Electrical Engineers	3
Signal Processing III	3
Telecommunications III.....	3
ELEC ENG 3018 RF Engineering III.....	3
ELEC ENG 3023 Electric Energy Systems M.....	3
Law courses to be advised by Law School	6

Level VI

Electrical & Electronic Engineering courses:

ELEC ENG 4036A/B Design Project ^	6
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or

ELEC ENG 4039A Honours Project ^	6
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Law courses to be advised by Law School

Plus 24 units of Law Courses to be specified by the Law School

^ Students accepted into the Honours Stream will take ELEC ENG 4039A/B . Honours Project and other students will take ELEC ENG 4036A/B Design Project.

6.5.9.6 B.E.(Electrical & Electronic)/B.Ma.&Comp.Sc.

To qualify for both the award of the degree of B.E.(Electrical & Electronic) and the degree of B.Ma.Comp.Sc., students are required to complete satisfactorily:

Level I

COMP SCI 1008 Computer Science IA	3
COMP SCI 1009 Computer Science IB	3
ELEC ENG 1009 Electrical & Electronic Engineering IA	3
ELEC ENG 1010 Electrical & Electronic Engineering IB	3
MATHS 1011 Mathematics IA.....	3
MATHS 1012 Mathematics IB.....	3
MATHS 1013 Mathematics IMA*	3
PHYSICS 1100 Physics IA.....	3
PHYSICS 1200 Physics IB.....	3

* See Clause 6.2 regarding Level I Mathematics requirements.

Level II

COMP SCI 2000 Computer Systems	3
COMP SCI 2004 Data Structures & Algorithms	3
ELEC ENG 2011 Circuit Analysis	3
ELEC ENG 2007 Signals & Systems.....	3
ELEC ENG 2008 Electronics II.....	3
ELEC ENG 2009 Engineering Electromagnetics.....	3
MATHS 2201 Engineering Mathematics I.....	3
MATHS 2202 Engineering Mathematics II.....	3

Level III

ELEC ENG 3027 Control III	3
ELEC ENG 3018 RF Engineering III.....	3
ELEC ENG 3021 Electric Energy Systems	3

ELEC ENG 3024 Project Management for Electrical Engineering	3
ELEC ENG 3028 Digital Systems	3
ELEC ENG 3031 Power Systems	3
ELEC ENG 3033 Signal Processing III	3
ELEC ENG 3034 Telecommunications III	3

Level IV

Mathematics/Computer Science courses*	24
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*24 units of additional Mathematics/Computer Science courses of which 18 units must be at Level III.

Level V

Note: Level V is indicative only—for enrolment information continuing students should visit

www.ecms.adelaide.edu.au/enrol/guides/

Electrical and Electronic Engineering courses:

Financial Management for Engineers	3
Management & Professional Practice for Engineers	3
ELEC ENG 4036A/B Design Project ^	6

or

ELEC ENG 4039A/B Honours Project ^	6
Electives.....	12

^ Students accepted into the Honours Stream will take ELEC ENG 4039A/B . Honours Project and other students will take ELEC ENG 4036A/B Design Project.

Electives

COMP SCI 3001 Computer Networks and Applications	3
COMP SCI 3004 Operating Systems	3
COMP SCI 3005 Computer Architecture	3
<i>Electrical & Electronic Engineering courses:</i>	
Advanced Control	3
Advanced Signal Processing	3
Communications IV	3
Digital Microelectronics.....	3
Image Processing	3
Power Electronics & Drive Systems	3
Power Quality & Condition Monitoring	3
Power Systems.....	3
RF Engineering IV	3
Systems Engineering.....	3
Telecommunications IV.....	3
PURE MTH 3018 Coding & Cryptology III	3

6.5.9.7 B.E.(Electrical & Electronic)/B.Sc.

To qualify for the combined award of B.E.(Electrical & Electronic) and B.Sc. students are required to complete satisfactorily courses as indicated below.

Level I

COMP SCI 1008 Computer Science IA	3
COMP SCI 1009 Computer Science IB	3

ELEC ENG 1009 Electrical & Electronic Engineering IA	3
ELEC ENG 1010 Electrical & Electronic Engineering IB	3
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
MATHS 1013 Mathematics IMA*	3
PHYSICS 1100 Physics IA	3
PHYSICS 1200 Physics IB	3

* See Clause 6.2 regarding Level I Mathematics requirements.

Level II

COMP SCI 2000 Computer Systems	3
COMP SCI 2004 Data Structures & Algorithms ...	3
ELEC ENG 2007 Signals and Systems II	3
ELEC ENG 2008 Electronics II	3
ELEC ENG 2009 Engineering Electromagnetics ...	3
ELEC ENG 2011 Circuit Analysis	3
MATHS 2201 Engineering Mathematics I	3
MATHS 2202 Engineering Mathematics II	3

Level III

PHYSICS 2510 Physics IIA	3
PHYSICS 2520 Physics IIB	3
PHYSICS 2532 Classical Physics II	3
PHYSICS 2534 Electromagnetism II	3
ELEC ENG 3018 RF Engineering III	3
ELEC ENG 3024 Project Management for Electrical Engineers	3
ELEC ENG 3027 Control III	3
ELEC ENG 3033 Signal Processing III	3

Level IV

ELEC ENG 3021 Electric Energy Systems	3
ELEC ENG 3028 Digital Systems	3
ELEC ENG 3031 Power Systems	3
ELEC ENG 3034 Telecommunications III	3
PHYSICS 3542 Physics III	6
Level III Physics courses	6

Level V

Note: Level V is indicative only—for enrolment information continuing students should visit www.ecms.adelaide.edu.au/enrol/guides/

Electrical & Electronic Engineering courses:

Management & Professional Practice for Engineers	3
ELEC ENG 4036A/B Design Project ^	6
<i>or</i>	
ELEC ENG 4039A Honours Project ^	6
ELEC ENG 4038 Financial Management for Engineers	3
Level III Physics courses	6

Level III Science elective	6
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^ Students accepted into the Honours Stream will take ELEC ENG 4039A/B . Honours Project and other students will take ELEC ENG 4036A/B Design Project.

Electives

COMP SCI 3001 Computer Networks and Applications	3
COMP SCI 3004 Operating Systems	3
COMP SCI 3005 Computer Architecture	3
<i>Electrical & Electronic Engineering courses:</i>	
Advanced Control	3
Advanced Signal Processing	3
Communications IV	3
Digital Microelectronics	3
Image Processing	3
Power Electronics & Drive Systems	3
Power Quality & Condition Monitoring	3
Power Systems	3
RF Engineering IV	3
Systems Engineering	3
Telecommunications III	3
ELEC ENG 3022 Real Time Systems IV	3
PURE MTH 3018 Coding & Cryptology III	3

6.5.10 Mechanical Engineering

6.5.10.1 B.E.(Mechanical)

Students are required to complete satisfactorily courses to the value of 24 units at each of Levels I, II, III and IV:

Level I

C&ENVENG 1010 Engineering Mechanics - Statics	3
CHEM ENG 1009 Materials I	3
ELEC ENG 1009 Electrical and Electronic Engineering IA	3
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
MECH ENG 1006 Design Graphics and Communication	3
MECH ENG 1007 Engineering Mechanics - Dynamics	3
MECH ENG 1100 Introduction to Mechanical Engineering	3

Level II

MECH ENG 2002 Stress Analysis & Design	3
MECH ENG 2019 Dynamics and Control I	3
MECH ENG 2020 Materials and Manufacturing ...	3
MECH ENG 2021 Thermo-Fluids I	3
MECH ENG 2100 Design Practice	3
MECH ENG 2101 Mechatronics IM+	3
MATHS 2201 Engineering Mathematics I	3

MATHS 2202 Engineering Mathematics II.....	3	and Emission Control	3
+includes workshop practical		MECH ENG 4113 Computational Acoustics	3
Level III		MECH ENG 4114 Corrosion: Principles and Prevention	3
APP MTH 2104 Numerical Methods (replaces APP MTH 3017 Waves III).....	3	MECH ENG 4115 Engineering Acoustics.....	3
MECH ENG 3027 Engineering Systems Design and Communication	3	MECH ENG 4117 Finance for Engineers.....	3
MECH ENG 3028 Dynamics and Control II.....	3	MECH ENG 4118 Finite Element Analysis of Structures	3
MECH ENG 3030 Structural Design and Solid Mechanics	3	MECH ENG 4119 Fire Engineering.....	3
MECH ENG 3101 Applied Aerodynamics	3	MECH ENG 4120 Fracture Mechanics.....	3
MECH ENG 3102 Heat Transfer and Thermodynamics	3	MECH ENG 4121 Materials Selection and Failure Analysis ⁺	3
MECH ENG 3103 Manufacturing Engineering and Quality Systems.....	3	MECH ENG 4124 Robotics M	3
MECH ENG 3105 Sustainability and the Environment.....	3	MECH ENG 4125 Stresses in Plates and Shells...3	
		MECH ENG 4126 Topics in Welded Structures ....3	
		MECH ENG 4127 Wind Engineering	3
		*Not offered by the School of Mechanical Engineering	
Level IV		6.5.10.2 B.E.(Mechanical)/B.A.	
MECH ENG 4132A/B Mechanical Design Project Level IV ^	6	To satisfy the BE (Mechanical) component of this program students are required to satisfactorily complete the courses listed below:	
or		Level I	
MECH ENG 4133A/B Mechanical Honours Project Level IV ^	6	Arts Course.....	6
or		C&ENVENG 1010 Engineering Mechanics - Statics	3
MECH ENG 4116 Engineering Management and Professional Practice.....	3	MATHS 1013 Mathematics IMA*	3
Elective courses to the value of at least 15 units	15	MATHS 1011 Mathematics IA	3
^ Students accepted into the Honours Stream will take MECH ENG 4133A/B Mechanical Engineering Honours Project and other students will take MECH ENG 4133A/B Mechanical Engineering Design Project		MATHS 1012 Mathematics IB	3
Electives		MECH ENG 1006 Design Graphics & Communication M	3
APP MTH 4050 System Modelling and Simulation*3		MECH ENG 1007 Engineering Mechanics - Dynamics	3
APP MTH 4007 Computational Fluid Dynamics (Engineering)*	3	MECH ENG 1100 Introduction to Mechanical Engineering	3
MECH ENG 4101 Biomechanical Engineering.....	3	* See Clause 6.2 regarding Level I Mathematics requirements.	
MECH ENG 4102 Advanced PID Control	3	Level II	
MECH ENG 4103 Advanced Computer Aided Engineering.....	3	CHEM ENG 1009 Materials I.....	3
MECH ENG 4104 Advanced Topics in Fluid Mechanics	3	ELEC ENG 1009 Electrical & Electronic Engineering IA	3
MECH ENG 4105 Advanced Vibrations.....	3	MATHS 2201 Engineering Mathematics I.....	3
MECH ENG 4107 Airconditioning	3	MATHS 2202 Engineering Mathematics II.....	3
MECH ENG 4109 Automotive Combustion, Power Train and NVH.....	3	MECH ENG 2002 Stress Analysis and Design.....	3
MECH ENG 4110 Automotive Vehicle Dynamics and Safety.....	3	MECH ENG 2100 Design Practice.....	3
MECH ENG 4111 CFD for Engineering Applications	3	Arts Course.....	6
MECH ENG 4112 Combustion Technology		Level III	
		Arts courses.....	12
		MECH ENG 2019 Dynamics and Control I.....	3
		MECH ENG 2020 Materials and Manufacturing...3	
		MECH ENG 2021 Thermo-Fluids I.....	3
		MECH ENG 2102 Mechatronics IM ⁺	3

⁺includes workshop practical

Level IV

APP MTH 2104 Numerical Methods (replaces APP MTH 3017 Waves III).....	3
ELEC ENG 3027 Engineering Systems Design and Communication	3
MECH ENG 3028 Dynamics and Control II.....	3
MECH ENG 3030 Structural Design and Solid Mechanics	3
MECH ENG 3101 Applied Aerodynamics	3
MECH ENG 3102 Heat Transfer and Thermodynamics	3
MECH ENG 3103 Manufacturing Engineering and Quality Systems.....	3
MECH ENG 3105 Sustainability and the Environment.....	3

Level V

Arts Courses	6
MECH ENG 4116 Engineering Management and Professional Practice	3
MECH ENG 4132A/B Mechanical Design Project Level IV ^	6

or

MECH ENG 4133A/B Mechanical Honours Project Level IV ^	6
Mechanical Engineering Electives	9

^ Students accepted into the Honours Stream will take MECH ENG 4133A/B Mechanical Engineering Honours Project and other students will take MECH ENG 4133A/B Mechanical Engineering Design Project

Electives

MECH ENG 4101 Biomechanical Engineering.....	3
MECH ENG 4102 Advanced PID Control.....	3
MECH ENG 4104 Advanced Topics in Fluid Mechanics	3
MECH ENG 4105 Advanced Vibrations.....	3
MECH ENG 4107 Airconditioning	3
MECH ENG 4109 Automotive Combustion, Power Train and NVH.....	3
MECH ENG 4110 Automotive Vehicle Dynamics and Safety.....	3
MECH ENG 4111 CFD for Engineering Applications	3
MECH ENG 4112 Combustion Technology and Emission Control	3
MECH ENG 4113 Computational Acoustics	3
MECH ENG 4114 Corrosion: Principles and Prevention.....	3
MECH ENG 4115 Engineering Acoustics.....	3
MECH ENG 4117 Finance for Engineers.....	3
MECH ENG 4118 Finite Element Analysis of	

Structures	3
MECH ENG 4119 Fire Engineering.....	3
MECH ENG 4120 Fracture Mechanics.....	3
MECH ENG 4121 Materials Selection and Failure Analysis.....	3
MECH ENG 4124 Robotics M	3
MECH ENG 4125 Stresses in Plates and Shells...3	
MECH ENG 4126 Topics in Welded Structures ...3	
MECH ENG 4127 Wind Engineering	3

6.5.10.3 B.E.(Mechanical)/B.Ec.

To qualify for both the award of the degree of B.E.(Mechanical) and the degree of B.Ec., students are required to complete satisfactorily courses as indicated below:

Level I

C&ENVENG 1010 Engineering Mechanics - Statics	3
CHEM ENG 1009 Materials I.....	3
ECON 1004 Principles of Microeconomics I.....	3
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
MATHS 1013 Mathematics IMA*.....	3
MECH ENG 1006 Design Graphics and Communication	3
MECH ENG 1007 Engineering Mechanics - Dynamics	3
MECH ENG 1100 Introduction to Mechanical Engineering	3

* See Clause 6.2 regarding Level I Mathematics requirements.

Level II

ECON 1000 Principles of Macroeconomics I.....	3
ELEC ENG 1009 Electrical & Electronic Engineering 1A	3
MATHS 2201 Engineering Mathematics I.....	3
MATHS 2202 Engineering Mathematics II.....	3
MECH ENG 2002 Stress Analysis and Design.....	3
MECH ENG 2019 Dynamics and Control I.....	3
MECH ENG 2100 Design Practice.....	3
MECH ENG 2101 Mechatronics IM ⁺	3

⁺includes workshop practical

Level III

ECON 2507 Intermediate Macroeconomics II	3
ECON 2506 Intermediate Microeconomics II.....	3
MECH ENG 2020 Materials and Manufacturing ...3	
MECH ENG 2021 Thermo-Fluids I.....	3
MECH ENG 3027 Engineering Systems Design and Communication	3
MECH ENG 3030 Structural Design and Solid Mechanics	3

MECH ENG 3101 Applied Aerodynamics	3
MECH ENG 3103 Manufacturing Engineering and Quality Systems.....	3
Level IV	
COMMMGT 2500 Organisational Behaviour II	3
ECON 2504 Intermediate Econometrics II <i>or</i>	
ECON 2503 Mathematical Economics.....	3
Level III Economics courses*	18

* Level III Economics courses chosen from those listed in the Specific Academic Program Rules of the Degree of Bachelor of Economics.

Level V	
APP MTH 2104 Numerical Methods (replaces APP MTH 3017 Waves III).....	3
MECH ENG 3102 Heat Transfer and Thermodynamics	3
MECH ENG 3105 Sustainability and the Environment.....	3
MECH ENG 3028 Dynamics and Control II	3
MECH ENG 3102 Heat Transfer and Thermodynamics	3
MECH ENG 4116 Engineering Management and Professional Practice	3
MECH ENG 4132A/B Mechanical Design Project Level IV ^	6
<i>or</i>	
MECH ENG 4133A/B Mechanical Honours Project Level IV ^	6
Mechanical Level IV Elective from below	3

^ Students accepted into the Honours Stream will take MECH ENG 4133A/B Mechanical Engineering Honours Project and other students will take MECH ENG 4133A/B Mechanical Engineering Design Project

Level IV Electives	
MECH ENG 4101 Biomechanical Engineering.....	3
MECH ENG 4102 Advanced PID Control	3
MECH ENG 4103 Advanced Computer Aided Engineering.....	3
MECH ENG 4104 Advanced Topics in Fluid Mechanics	3
MECH ENG 4105 Advanced Vibrations.....	3
MECH ENG 4107 Airconditioning	3
MECH ENG 4109 Automotive Combustion, Power Train and NVH.....	3
MECH ENG 4110 Automotive Vehicle Dynamics and Safety.....	3
MECH ENG 4111 CFD for Engineering Applications	3
MECH ENG 4112 Combustion Technology and Emission Control	3
MECH ENG 4114 Corrosion: Principles and	

Prevention	3
MECH ENG 4118 Finite Element Analysis of Structures	3
MECH ENG 4119 Fire Engineering.....	3
MECH ENG 4120 Fracture Mechanics.....	3
MECH ENG 4121 Materials Selection and Failure Analysis.....	3
MECH ENG 4124 Robotics M	3
MECH ENG 4125 Stresses in Plates and Shells...3	
MECH ENG 4126 Topics in Welded Structures	3
MECH ENG 4127 Wind Engineering	3

6.5.10.4 B.E.(Mechanical)/B.Fin.

To qualify for both the award of the degree of B.E.(Mechanical) and the degree of B.Fin., students are required to complete satisfactorily courses listed below:

Level I	
C&ENVENG 1010 Engineering Mechanics - Statics	3
CHEM ENG 1009 Materials I.....	3
ECON 1004 Principles of Microeconomics I.....	3
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
MATHS 1013 Mathematics IMA *	3
MECH ENG 1006 Design Graphics and Communication M.....	3
MECH ENG 1007 Engineering Mechanics - Dynamics	3
MECH ENG 1100 Introduction to Mechanical Engineering.....	3

* See Clause 6.2 regarding Level I Mathematics requirements.

Level II	
ECON 1000 Principles of Macroeconomics I.....	3
ECON 1009 International Financial Institutions and Markets I.....	3
ELEC ENG 1009 Electrical and Electronic Engineering IA	3
MATHS 2201 Engineering Mathematics I.....	3
MATHS 2202 Engineering Mathematics II.....	3
MECH ENG 2002 Stress Analysis and Design.....	3
MECH ENG 2100 Design Practice.....	3
MECH ENG 2101 Mechatronics IM ⁺	3
+includes workshop practical	

Level III	
ACCTING 1002 Accounting for Decision Makers I	3
CORPFIN 2500 Business Finance II	3
ECON 2504 Intermediate Econometrics II.....	3
ECON 2508 Financial Economics II.....	3

MECH ENG 2020 Materials and Manufacturing ...	3
MECH ENG 2021 Thermo-Fluids I.....	3
MECH ENG 3027 Engineering Systems Design and Communication	3
MECH ENG 3030 Structural Design and Solid Mechanics	3
Level IV	
CORPFIN 2501 Financial Institutions Management II.....	3
MECH ENG 2019 Dynamics and Control I.....	3
MECH ENG 3101 Applied Aerodynamics	3
MECH ENG 3103 Manufacturing Engineering and Quality Systems.....	3
MECH ENG 3105 Sustainability & the Environment.....	3
CORPFIN 3501 Portfolio Theory and Management III.....	3
<i>and either</i>	
APP MATH 3012 Financial Modelling III: Tools and Techniques	3
<i>or</i>	
CORPFIN 3502 Options, Futures and Risk Management III	3
Level III Finance course	3
Level V	
MATHS 2104 Numerical Methods.....	3
MECH ENG 3028 Dynamics and Control II.....	3
MECH ENG 3102 Heat Transfer and Thermodynamics	3
MECH ENG 4116 Engineering Management and Professional Practice	3
MECH ENG 4132A/B Mechanical Design Project Level IV ^	6
<i>or</i>	
MECH ENG 4133A/B Mechanical Honours Project Level IV ^	6
Level III Finance Course.....	3
Elective course	3
^ Students accepted into the Honours Stream will take MECH ENG 4133A/B Mechanical Engineering Honours Project and other students will take MECH ENG 4133A/B Mechanical Engineering Design Project	
Level IV Electives	
MECH ENG 4101 Biomechanical Engineering.....	3
MECH ENG 4102 Advanced PID Control.....	3
MECH ENG 4103 Advanced Computer Aided Engineering.....	3
MECH ENG 4104 Advanced Topics in Fluid Mechanics	3
MECH ENG 4105 Advanced Vibrations.....	3
MECH ENG 4107 Airconditioning	3
MECH ENG 4109 Automotive Combustion, Power	

Train and NVH.....	3
MECH ENG 4110 Automotive Vehicle Dynamics and Safety	3
MECH ENG 4111 CFD for Engineering Applications	3
MECH ENG 4112 Combustion Technology and Emission Control	3
MECH ENG 4113 Computational Acoustics	3
MECH ENG 4114 Corrosion: Principles and Prevention	3
MECH ENG 4115 Engineering Acoustics.....	3
MECH ENG 4118 Finite Element Analysis of Structures	3
MECH ENG 4119 Fire Engineering.....	3
MECH ENG 4120 Fracture Mechanics.....	3
MECH ENG 4121 Materials Selection and Failure Analysis.....	3
MECH ENG 4124 Robotics M	3
MECH ENG 4125 Stresses in Plates and Shells...3	
MECH ENG 4126 Topics in Welded Structures ...3	
MECH ENG 4127 Wind Engineering.....	3

6.5.10.5 B.E.(Mechanical)/LLB

To qualify for the award of the degree of B.E.(Mech.) and the degree of LL.B., students are required to complete satisfactorily courses below:

Level I

LAW 1501 Foundation of Law	3
LAW 1502 Law of Torts 1	3
LAW 1504 Principles of Public Law.....	3
LAW 1505 Law of Torts 2	3
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
MATHS 1013 Mathematics IMA*.....	3
MECH ENG 1006 Design Graphics & Communication M.....	3
MECH ENG 1100 Introduction to Mechanical Engineering.....	3

* See Clause 6.2 regarding Level I Mathematics requirements.

Level II

C&ENVENG 1010 Engineering Mechanics - Statics	3
CHEM ENG 1009 Materials I.....	3
ELEC ENG 1009 Electrical and Electronic Engineering IA	3
MECH ENG 1007 Engineering Mechanics - Dynamics	3
Law courses to be advised by Law School	12

Level III

MATHS 2201 Engineering Mathematics I	3
MATHS 2202 Engineering Mathematics II.....	3

MECH ENG 2018 Design Practice.....	3
MECH ENG 2101 Mechatronics IM+	3
MECH ENG 2002 Stress Analysis and Design.....	3
Law courses to be advised by Law School	9

+includes workshop practical

Level IV

MECH ENG 2019 Dynamics and Control I.....	3
MECH ENG 2020 Materials and Manufacturing...3	
MECH ENG 2021 Thermo-Fluids I.....	3
MECH ENG 3027 Engineering Systems Design and Communication	3
MECH ENG 3030 Structural Design and Solid Mechanics	3
MECH ENG 3103 Manufacturing Engineering and Quality Systems.....	3
Law courses to be advised by Law School	6

Level V

APP MTH 2104 Numerical Methods (replaces APP MTH 3017 Waves II)	3
MECH ENG 3028 Dynamics and Control II.....	3
MECH ENG 3101 Applied Aerodynamics	3
MECH ENG 3102 Heat Transfer and Thermodynamics.....	3
MECH ENG 3105 Sustainability and the Environment.....	3
MECH ENG 4116 Engineering Management and Professional Practice	3
Law courses.....	6

Level VI

MECH ENG 4132A/B Mechanical Design Project Level IV ^	6
<i>or</i>	
MECH ENG 4133A/B Mechanical Honours Project Level IV ^	6
Law courses.....	15
Mechanical Engineering elective	3
Plus Law courses to be specified by Law School.	

^ Students accepted into the Honours Stream will take MECH ENG 4133A/B Mechanical Engineering Honours Project and other students will take MECH ENG 4132A/B Mechanical Engineering Design Project

6.5.10.6 B.E.(Mechanical)/B.Ma.&Comp.Sc. (Computer Science focus)

To qualify for both the award of the degree of B.E.(Mechanical) and the degree of B.Ma.Comp.Sc. with a Computer Science Focus, students are required to complete satisfactorily:

Level I

C&ENVENG 1010 Engineering Mechanics - Statics	3
COMP SCI 1008 Computer Science IA	3

COMP SCI 1009 Computer Science IB	3
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
MATHS 1013 Mathematics IMA*	3
MECH ENG 1006 Design Graphics and Communication M.....	3
MECH ENG 1007 Engineering Mechanics - Dynamics	3
MECH ENG 1100 Introduction to Mechanical Engineering.....	3

* See Clause 6.2 regarding Level I Mathematics requirements.

Level II

CHEM ENG 1009 Materials I.....	3
ELEC ENG 1009 Electrical and Electronic Engineering IA	3
MATHS 2201 Engineering Mathematics I.....	3
MATHS 2202 Engineering Mathematics II.....	3
MECH ENG 2002 Stress Analysis and Design.....	3
MECH ENG 2021 Thermo-Fluids I.....	3
MECH ENG 2019 Dynamics and Control I.....	3
MECH ENG 2100 Design Practice.....	3

Level III

APP MTH 2104 Numerical Methods (replaces APP MTH 3017 Waves III)	3
COMP SCI 2000 Computer Systems	3
COMP SCI 2004 Data Structures & Algorithms	3
MECH ENG 2020 Materials and Manufacturing ...3	
MECH ENG 2101 Mechatronics IM (includes Workshop Practice).....	3
MECH ENG 3027 Engineering Systems Design and Communication	3
MECH ENG 3028 Dynamics and Control I.....	3
MECH ENG 3030 Structural Design and Solid Mechanics	3

Level IV

Level III Computer Science courses*	18
MECH ENG 3101 Applied Aerodynamics	3
MECH ENG 3103 Manufacturing Engineering and Quality Systems.....	3

* This is a focus on Computer Science only - a major in Computer Science requires in addition, the presentation of 3 units at Level II, and 12 units of the 18 units at Level III should be Computer Science courses of which one must be Software Engineering & Project. For further advice contact a Faculty Program Adviser.

Level V

MECH ENG 3102 Heat Transfer and Thermodynamics	3
MECH ENG 3105 Sustainability and the Environment.....	3

MECH ENG 4116 Engineering Management and Professional Practice	3
MECH ENG 4132A/B Mechanical Design Project Level IV ^	6
<i>or</i>	
MECH ENG 4133A/B Mechanical Honours Project Level IV ^	6
Mechanical Engineering Electives	9
^ Students accepted into the Honours Stream will take MECH ENG 4133A/B Mechanical Engineering Honours Project and other students will take MECH ENG 4133A/B Mechanical Engineering Design Project	

Electives

APP MTH 4050 System Modelling and Simulation*	3
APP MTH 4007 Computational Fluid Dynamics (Engineering)*	3
MECH ENG 4101 Biomechanical Engineering.....	3
MECH ENG 4102 Advanced PID Control.....	3
MECH ENG 4103 Advanced Computer Aided Engineering.....	3
MECH ENG 4104 Advanced Topics in Fluid Mechanics	3
MECH ENG 4105 Advanced Vibrations.....	3
MECH ENG 4107 Airconditioning	3
MECH ENG 4109 Automotive Combustion, Power Train and NVH.....	3
MECH ENG 4110 Automotive Vehicle Dynamics and Safety.....	3
MECH ENG 4111 CFD for Engineering Applications	3
MECH ENG 4112 Combustion Technology and Emission Control	3
MECH ENG 4113 Computational Acoustics	3
MECH ENG 4114 Corrosion: Principles and Prevention.....	3
MECH ENG 4115 Engineering Acoustics.....	3
MECH ENG 4117 Finance for Engineers.....	3
MECH ENG 4118 Finite Element Analysis of Structures	3
MECH ENG 4119 Fire Engineering.....	3
MECH ENG 4120 Fracture Mechanics.....	3
MECH ENG 4121 Materials Selection and Failure Analysis.....	3
MECH ENG 4124 Robotics M	3
MECH ENG 4125 Stresses in Plates and Shells...3	
MECH ENG 4126 Topics in Welded Structures ....3	
MECH ENG 4127 Wind Engineering	3

Note: Only one elective not offered by the School of Mechanical Engineering may be taken.

*Not offered by Engineering.

6.5.10.7 B.E (Mechanical)/

B.Ma.&Comp.Sc. (Mathematics focus)

To qualify for both the award of the degree of B.E.(Mechanical) and the degree of B.Ma.Comp.Sc. with a Mathematics focus, students are required to complete satisfactorily:

Level I

C8ENVENG 1010 Engineering Mechanics - Statics	3
CHEM ENG 1009 Materials I.....	3
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
MATHS 1013 Mathematics IMA*.....	3
MECH ENG 1006 Design Graphics and Communication	3
MECH ENG 1007 Engineering Mechanics - Dynamics	3
ELEC ENG 1009 Electrical and Electronic Engineering IA	3
MECH ENG 1100 Introduction to Mechanical Engineering.....	3

* See Clause 6.2 regarding Level I Mathematics requirements.

Level II

MATHS 2201 Engineering Mathematics I.....	3
MATHS 2202 Engineering Mathematics II.....	3
MECH ENG 2002 Stress Analysis and Design.....	3
MECH ENG 2101 Mechatronics IM*	3
MECH ENG 2019 Dynamics and Control I.....	3
MECH ENG 2020 Materials and Manufacturing ...3	
MECH ENG 2021 Thermo-Fluids I.....	3
MECH ENG 2100 Design Practice.....	3

* Includes Workshop Practical

Level III

APP MTH 2104 Numerical Methods (replaces APP MTH 3017 Waves III).....	3
MECH ENG 3102 Heat Transfer and Thermodynamics	3
MECH ENG 3027 Engineering Systems Design and Communication	3
MECH ENG 3028 Dynamics and Control II.....	3
MECH ENG 3030 Structural Design and Solid Mechanics	3
MECH ENG 3101 Applied Aerodynamics	3
MECH ENG 3103 Manufacturing Engineering and Quality Systems.....	3
MECH ENG 3105 Sustainability and the Environment.....	3

Level IV

Mathematics courses*	24
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*24 units of additional Mathematics courses of which 18 units must be at Level III

Level V

MECH ENG 4116 Engineering Management and Professional Practice	3
MECH ENG 4132A/B Mechanical Design Project Level IV ^	6
<i>or</i>	
MECH ENG 4133A/B Mechanical Honours Project Level IV ^	6
Electives.....	15

^ Students accepted into the Honours Stream will take MECH ENG 4133A/B Mechanical Engineering Honours Project and other students will take MECH ENG 4133A/B Mechanical Engineering Design Project

Electives

APP MTH 4050 System Modelling and Simulation*	3
APP MTH 4007 Computational Fluid Dynamics (Engineering)*	3
MECH ENG 4101 Biomechanical Engineering.....	3
MECH ENG 4102 Advanced PID Control	3
MECH ENG 4103 Advanced Computer Aided Engineering.....	3
MECH ENG 4104 Advanced Topics in Fluid Mechanics	3
MECH ENG 4105 Advanced Vibrations.....	3
MECH ENG 4107 Airconditioning	3
MECH ENG 4109 Automotive Combustion, Power Train and NVH.....	3
MECH ENG 4110 Automotive Vehicle Dynamics and Safety.....	3
MECH ENG 4111 CFD for Engineering Applications	3
MECH ENG 4112 Combustion Technology and Emission Control	3
MECH ENG 4113 Computational Acoustics	3
MECH ENG 4114 Corrosion: Principles and Prevention	3
MECH ENG 4115 Engineering Acoustics.....	3
MECH ENG 4117 Finance for Engineers.....	3
MECH ENG 4118 Finite Element Analysis of Structures	3
MECH ENG 4119 Fire Engineering.....	3
MECH ENG 4120 Fracture Mechanics.....	3
MECH ENG 4121 Materials Selection and Failure Analysis.....	3
MECH ENG 4124 Robotics M	3
MECH ENG 4125 Stresses in Plates and Shells....	3
MECH ENG 4126 Topics in Welded Structures	3
MECH ENG 4127 Wind Engineering	3

Note: Only one elective not offered by the School of Mechanical Engineering may be taken.

* Not offered by Engineering.

6.5.10.8 B.E.(Mechanical)/B.Sc.

To qualify for a Bachelor of Science award, students must complete a major pursuant to Bachelor of Science Program Rules.

To qualify for the award of the degrees of B.E.(Mech) and B.Sc. students are required to complete satisfactorily courses as indicated below:

Level I

C&ENVENG 1010 Engineering Mechanics - Statics	3
CHEM ENG 1009 Materials I.....	3
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
MATHS 1013 Mathematics IMA*.....	3
MECH ENG 1006 Design Graphics and Communication M	3
MECH ENG 1007 Engineering Mechanics - Dynamics	3
MECH ENG 1100 Introduction to Mechanical Engineering	3
Level I Science Course	3

* See Clause 6.2 regarding Level I Mathematics requirements.

Level II

MATHS 2201 Engineering Mathematics I.....	3
MATHS 2202 Engineering Mathematics II.....	3
MECH ENG 2002 Stress Analysis and Design.....	3
MECH ENG 2020 Materials and Manufacturing....	3
MECH ENG 2021 Thermo-Fluids I.....	3
MECH ENG 2100 Design Practice.....	3
MECH ENG 2101 Mechatronics IM+	3
Level I Science course.....	3

+includes workshop practical

Level III

MECH ENG 2019 Dynamics and Control I.....	3
MECH ENG 3027 Engineering Systems Design and Communication	3
MECH ENG 3030 Structural Design and Solid Mechanics	3
MECH ENG 3102 Heat Transfer and Thermodynamics.....	3
Level II Science courses*	12

*Check with the Faculty of Science on requirements for majors

Level IV

Level III Science courses.....	24
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Level V

MECH ENG 3101 Applied Aerodynamics	3
MECH ENG 3028 Dynamics and Control II.....	3
MECH ENG 3103 Manufacturing Engineering and Quality Systems.....	3

MECH 3105 Sustainability and the Environment..	3
MECH ENG 4132A/B Mechanical Design Project Level IV ^	6
<i>or</i>	
MECH ENG 4133A/B Mechanical Honours Project Level IV ^	6
MECH ENG 4116 Engineering Management and Professional Practice	3
Elective course	3
^ Students accepted into the Honours Stream will take MECH ENG 4133A/B Mechanical Engineering Honours Project and other students will take MECH ENG 4133A/B Mechanical Engineering Design Project	

Level IV Electives

MECH ENG 4101 Biomechanical Engineering.....	3
MECH ENG 4102 Advanced PID Control.....	3
MECH ENG 4103 Advanced Computer Aided Engineering.....	3
MECH ENG 4104 Advanced Topics in Fluid Mechanics	3
MECH ENG 4105 Advanced Vibrations.....	3
MECH ENG 4107 Airconditioning	3
MECH ENG 4109 Automotive Combustion, Power Train and NVH.....	3
MECH ENG 4110 Automotive Vehicle Dynamics and Safety.....	3
MECH ENG 4111 CFD for Engineering Applications	3
MECH ENG 4112 Combustion Technology and Emission Control	3
MECH ENG 4113 Computational Acoustics	3
MECH ENG 4114 Corrosion: Principles and Prevention.....	3
MECH ENG 4118 Finite Element Analysis of Structures	3
MECH ENG 4119 Fire Engineering.....	3
MECH ENG 4120 Fracture Mechanics	3
MECH ENG 4121 Materials Selection and Failure Analysis.....	3
MECH ENG 4124 Robotics M	3
MECH ENG 4125 Stresses in Plates and Shells...3	
MECH ENG 4126 Topics in Welded Structures ...3	
MECH ENG 4127 Wind Engineering.....	3

6.5.11 Mechanical and Automotive Engineering

6.5.11.1B.E.(Mechanical and Automotive)

Students are required to complete satisfactorily courses to the value of 24 units at each of Levels I, II, III and IV.

Level I

C&ENVENG 1010 Engineering Mechanics

- Statics	3
CHEM ENG 1009 Materials I.....	3
ELEC ENG 1009 Electrical and Electronic Engineering IA	3
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
MECH ENG 1006 Design Graphics and Communication	3
MECH ENG 1007 Engineering Mechanics - Dynamics.....	3
MECH ENG 1101 Introduction to Automotive Engineering.....	3

Level II

APP MATHS 2202 Engineering Mathematics II....3	
MATHS 2201 Engineering Mathematics I.....	3
MECH ENG 2002 Stress Analysis and Design.....	3
MECH ENG 2019 Dynamics and Control I.....	3
MECH ENG 2020 Materials and Manufacturing ...3	
MECH ENG 2021 Thermo-Fluids I.....	3
MECH ENG 2100 Design Practice.....	3
MECH ENG 2101 Mechatronics IM ⁺	3
+ includes Workshop Practical	

Level III

ELEC ENG 3025 Power Electronics and Drive Systems M.....	3
MECH ENG 3027 Engineering Systems Design and Communication	3
MECH ENG 3033 Automotive Materials and Structures	3
MECH ENG 3101 Applied Aerodynamics	3
MECH ENG 3102 Heat Transfer and Thermodynamics	3
MECH ENG 3103 Manufacturing Engineering and Quality Systems.....	3
MECH ENG 3105 Sustainability and the Environment.....	3
MECH ENG 3028 Dynamics and Control II.....	3

Level IV

MECH ENG 4103 Advanced Computer Aided Engineering.....	3
MECH ENG 4110 Automotive Vehicle Dynamics and Safety.....	3
MECH ENG 4111 CFD for Engineering Applications	3
MECH ENG 4118 Finite Element Analysis of Structures	3
MECH ENG 4116 Engineering Management and Professional Practice	3
MECH ENG 4109 Automotive Combustion, Power Train and NVH.....	3

MECH ENG 4130A/B Automotive Design Project Level IV Part 1 & 2#	and Structures	3
<i>or</i>	Level IV	
MECH ENG 4131A/B Automotive Honours Project Level IV Part 1 & 2#	Level III Computer Science courses.....	18
# Students accepted into the Honours stream will take MECH ENG 4131A/B Automotive Honours Project and other students will take MECH ENG 4130A/B Automotive Design Project.	MECH ENG 3101 Applied Aerodynamics	3
	MECH ENG 3102 Heat Transfer and Thermodynamics	3
6.5.11.2 B.E.(Mechanical & Automotive)/ B.Ma.&Comp.Sc. (Computer Science focus)	Level V	
To qualify for both the award of the degree of B.E.(Mechanical and Automotive) and the degree of B.Ma.Comp.Sc. with a Computer Science Focus, students are required to complete satisfactorily:	MECH ENG 3105 Sustainability and the Environment.....	3
Level I	MECH ENG 4103 Advanced Computer Aided Engineering.....	3
C&ENVENG 1010 Engineering Mechanics - Statics	MECH ENG 4110 Automotive Vehicle Dynamics and Safety.....	3
COMP SCI 1008 Computer Science IA	MECH ENG 4116 Engineering Management and Professional Practice	3
COMP SCI 1009 Computer Science IB	MECH ENG 4109 Automotive Combustion, Power Train and NVH.....	3
MATHS 1011 Mathematics IA	MECH ENG 4118 Finite Element Analysis of Structures	3
MATHS 1012 Mathematics IB	MECH ENG 4130A/B Automotive Design Project Level IV Part A & B#	6
MATHS 1013 Mathematics IMA*	<i>or</i>	
MECH ENG 1006 Design Graphics and Communication M.....	MECH ENG 4131A/B Automotive Honours Project Part 1 & 2#	6
MECH ENG 1007 Engineering Mechanics - Dynamics	# Students accepted into the Honours stream will take MECH ENG 4131A/B Automotive Honours Project Parts A & B and other students will take MECH ENG 4130A/B Automotive Design Project Parts A & B.	
MECH ENG 1101 Introduction to Automotive Engineering.....		
* See Clause 6.2 regarding Level I Mathematics requirements.	6.5.11.3 B.E.(Mechanical & Automotive)/ B.Ma.&Comp.Sc. (Mathematics focus)	
Level II	To qualify for both the award of the degree of B.E.(Mechanical and Automotive) and the degree of B.Ma.Comp.Sc. with a Mathematics Focus, students are required to complete satisfactorily:	
CHEM ENG 1009 Materials I.....	Level I	
ELEC ENG 1009 Electrical & Electronic Engineering IA	C&ENVENG 1010 Engineering Mechanics - Statics	3
MATHS 2201 Engineering Mathematics I.....	CHEM ENG 1009 Materials I.....	3
MATHS 2202 Engineering Mathematics II.....	ELEC ENG 1009 Electrical and Electronic Engineering IA	3
MECH ENG 2002 Stress Analysis & Design.....	MATHS 1011 Mathematics IA	3
MECH ENG 2019 Dynamics and Control I.....	MATHS 1012 Mathematics IB	3
MECH ENG 2021 Thermo-Fluids I.....	MATHS 1013 Mathematics IMA*	3
MECH ENG 2100 Design Practice.....	MECH ENG 1006 Design Graphics and Communication M.....	3
Level III	MECH ENG 1007 Engineering Mechanics - Dynamics	3
COMP SCI 2000 Computer Systems	MECH ENG 1101 Introduction to Automotive Engineering	3
COMP SCI 2004 Data Structures and Algorithms..	* See Clause 6.2 regarding Level I Mathematics requirements.	
ELEC ENG 3025 Power Electronics and Drive Systems M.....	Level II	
MECH ENG 2020 Materials and Manufacturing...3	MATHS 2201 Engineering Mathematics I.....	3
MECH ENG 2101 Mechatronics IM (includes Workshop Practical).....	MATHS 2202 Engineering Mathematics II.....	3
MECH ENG 3027 Engineering Systems Design and Communication		
MECH ENG 3028 Dynamics and Control II.....		
MECH ENG 3033 Automotive Materials		

MECH ENG 2002 Stress Analysis and Design.....	3
MECH ENG 2019 Dynamics and Control I.....	3
MECH ENG 2020 Materials and Manufacturing ...	3
MECH ENG 2021 Thermo-Fluids I.....	3
MECH ENG 2100 Design Practice.....	3
MECH ENG 2101 Mechatronics IM+	3

Level III

ELEC ENG 3025 Power Electronics and Drive Systems M.....	3
MECH ENG 3027 Engineering Systems Design and Communication	3
MECH ENG 3028 Dynamics and Control II.....	3
MECH ENG 3102 Heat Transfer and Thermodynamics.....	3
MECH ENG 3103 Manufacturing Engineering and Quality Systems	3
MECH ENG 3105 Sustainability and the Environment.....	3

Level IV

Mathematics Courses*.....	24
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* 24 units of additional Mathematics courses of which 18 units must be at Level III.

Level V

ELEC ENG 4103 Advanced Computer Aided Engineering.....	3
MECH ENG 4130A/B Automotive Design Project Level IV Part 1 & 2#	6
<i>or</i>	
MECH ENG 4131A/B Automotive Honours Project Level IV Part 1 & 2#	6
MECH ENG 4110 Automotive Vehicle Dynamics and Safety.....	3
MECH ENG 4111 CFD for Engineering Applications	3
MECH ENG 4118 Finite Element Analysis of Structures	3
MECH ENG 4116 Engineering Management and Professional Practice	3
MECH ENG 4109 Automotive Combustion, Power Train and NVH.....	3

Students accepted into the Honours stream will take MECH ENG 4131A/B Automotive Honours Project and other students will take MECH ENG 4130A/B Automotive Design Project.

6.5.12 Mechatronic Engineering

6.5.12.1 B.E.(Mechatronic)

Students are required to complete satisfactorily courses to the value of 24 units at each of Levels I, II, III and IV:

Level I

C&ENVENG 1010 Engineering Mechanics - Statics	3
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CHEM ENG 1009 Materials I.....	3
ELEC ENG 1009 Electrical and Electronic Engineering IA	3
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
MECH ENG 1006 Design Graphics and Communication	3
MECH ENG 1007 Engineering Mechanics - Dynamics.....	3
MECH ENG 1103 Introduction to Mechatronic Engineering.....	3

Level II

MATHS 2201 Engineering Mathematics I.....	3
MATHS 2202 Engineering Mathematics II.....	3
MECH ENG 2002 Stress Analysis and Design.....	3
MECH ENG 2015 Electronics IIM.....	3
MECH ENG 2019 Dynamics and Control I.....	3
MECH ENG 2021 Thermo-Fluids I.....	3
MECH ENG 2100 Design Practice.....	3
MECH ENG 2101 Mechatronics IM+	3

+includes workshop practical

Level III

ELEC ENG 3025 Power Electronics and Drive Systems M.....	3
MECH ENG 3027 Engineering Systems Design and Communication	3
MECH ENG 3028 Dynamics and Control II.....	3
MECH ENG 3032 Microcontroller Programming ..	3
MECH ENG 3102 Heat Transfer and Thermodynamics.....	3
MECH ENG 3103 Manufacturing Engineering and Quality Systems.....	3
MECH ENG 3105 Sustainability and the Environment.....	3
MECH ENG 3106 Mechatronics II.....	3

Level IV

MECH ENG 4102 Advanced PID Control.....	3
MECH ENG 4116 Engineering Management and Professional Practice.....	3
MECH ENG 4123 Advanced Digital Control.....	3
MECH ENG 4124 Robotics M	3
MECH ENG 4134A/B Mechatronics Design Project Level IV ^	6

or

MECH ENG 4135A/B Mechatronics Honours Project ^	6
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Elective courses to the value of at least 6 units

^ Students accepted into the Honours Stream will take MECH ENG 4135A/B Mechatronics Engineering Honours Project and other students will take MECH ENG 4134A/B Mechatronics Engineering Design Project

Electives

MECH ENG 4101 Biomechanical Engineering.....	3
MECH ENG 4105 Advanced Vibrations.....	3
MECH ENG 4110 Automotive Vehicle Dynamics and Safety.....	3
MECH ENG 4113 Computational Acoustics.....	3
MECH ENG 4114 Corrosion: Principles and Prevention.....	3
MECH ENG 4115 Engineering Acoustics.....	3
MECH ENG 4117 Finance for Engineers.....	3
MECH ENG 4119 Fire Engineering.....	3
MECH ENG 4121 Materials Selection and Failure Analysis.....	3
MECH ENG 4126 Topics in Welded Structures....	3

6.5.12.2 B.E.(Mechatronic)/B.A.

To satisfy the BE (Mechatronic) component of this program students are required to satisfactorily complete the courses listed below:

Level I

C&ENVENG 1010 Engineering Mechanics - Statics.....	3
MATHS 1011 Mathematics IA.....	3
MATHS 1012 Mathematics IB.....	3
MATHS 1013 Mathematics IMA*.....	3
MECH ENG 1006 Design Graphics and Communication M.....	3
MECH ENG 1007 Engineering Mechanics - Dynamics.....	3
MECH ENG 1103 Introduction to Mechatronic Engineering.....	3
Level I Arts courses.....	6

* See Clause 6.2 regarding Level I Mathematics requirements.

Level II

Arts courses.....	6
CHEM ENG 1009 Materials I.....	3
ELEC ENG 1009 Electrical and Electronic Engineering IA.....	3
MATHS 2201 Engineering Mathematics I.....	3
MATHS 2202 Engineering Mathematics II.....	3
MECH ENG 2002 Stress Analysis and Design.....	3
MECH ENG 2100 Design Practice.....	3

Level III

Arts courses.....	12
MECH ENG 2011 Mechatronics IM*.....	3
MECH ENG 2015 Electronics IIM.....	3
MECH ENG 2019 Dynamics and Control I.....	3
MECH ENG 2021 Thermo-Fluids I.....	3

* Includes workshop practical

Level IV

ELEC ENG 3025 Power Electronics and Drive Systems M.....	3
MECH ENG 3027 Engineering Systems Design and Communication.....	3
MECH ENG 3028 Dynamics and Control II.....	3
MECH ENG 3032 Micro-Controller Programming..	3
MECH ENG 3102 Heat Transfer and Thermodynamics.....	3
MECH ENG 3103 Manufacturing Engineering and Quality Systems.....	3
MECH ENG 3105 Sustainability and the Environment.....	3
MECH ENG 3106 Mechatronics II.....	3

Level V

Arts courses.....	6
MECH ENG 4102 Advanced PID Control.....	3
MECH ENG 4116 Engineering Management and Professional Practice.....	3
MECH ENG 4123 Advanced Digital Control.....	3
MECH ENG 4124 Robotics M.....	3
MECH ENG 4134A/B Mechatronics Design Project Level IV ^.....	6

or

MECH ENG 4135A/B Mechatronics Honours Project ^.....	6
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^ Students accepted into the Honours Stream will take MECH ENG 4135A/B Mechatronics Engineering Honours Project and other students will take MECH ENG 4134A/B Mechatronics Engineering Design Project

6.5.12.3 B.E.(Mechatronic)/B.Ma. & Comp. Sc. (Computer Science focus)

To qualify for both the award of the degree of B.E.(Mechatronic) and the degree of B.Ma.Comp. Sc. with a Computer Science Focus, students are required to complete satisfactorily:

Level I

C&ENVENG 1010 Engineering Mechanics- Statics.....	3
COMP SCI 1008 Computer Science IA.....	3
COMP SCI 1009 Computer Science IB.....	3
MATHS 1011 Mathematics IA.....	3
MATHS 1012 Mathematics IB.....	3
MATHS 1013 Mathematics IMA*.....	3
MECH ENG 1006 Design Graphics & Communication M.....	3
MECH ENG 1007 Engineering Mechanics - Dynamics.....	3
MECH ENG 1103 Introduction to Mechatronic Engineering.....	3

* See Clause 6.2 regarding Level I Mathematics requirements.

Level II

CHEM ENG 1009 Materials I.....	3
ELEC ENG 1009 Electrical and Electronic Engineering IA	3
MATHS 2201 Engineering Mathematics I.....	3
MATHS 2202 Engineering Mathematics II.....	3
MECH ENG 2002 Stress Analysis and Design.....	3
MECH ENG 2019 Dynamics and Control I.....	3
MECH ENG 2021 Thermo-Fluids I.....	3
MECH ENG 2100 Design Practice.....	3

Level III

COMP SCI 2000 Computer Systems	3
COMP SCI 2004 Data Structures and Algorithms..	3
ELEC ENG 3025 Power Electronics and Drive Systems M.....	3
MECH ENG 2015 Electronics IIM.....	3
MECH ENG 2101 Mechatronics IM*	3
MECH ENG 3027 Engineering Systems Design & Communication	3
MECH ENG 3032 Micro-Controller Programming	3
MECH ENG 3106 Mechatronics II.....	3

* Includes workshop practical

Level IV

Level III Computer Science courses*.....	18
MECH ENG 3102 Heat Transfer and Thermodynamics	3
MECH ENG 3028 Dynamics and Control II.....	3

Level V

MECH ENG 4102 Advanced PID Control.....	3
MECH ENG 4116 Engineering Management and Professional Practice	3
MECH ENG 4122 Mechanical Signature Analysis	3
MECH ENG 4123 Advanced Digital Control.....	3
MECH ENG 4124 Robotics M	3
MECH ENG 4134A Mechatronic Design Project Level IV ^.....	6

or

MECH ENG 4135A/B Mechatronics Honours Project ^	6
MECH ENG 3015 Sustainability and the Environment.....	3
Elective (chosen from list).....	3

^ Students accepted into the Honours Stream will take MECH ENG 4135A/B Mechatronics Engineering Honours Project and other students will take MECH ENG 4134A/B Mechatronics Engineering Design Project

Electives

MECH ENG 4101 Biomechanical Engineering.....	3
MECH ENG 4105 Advanced Vibrations.....	3
MECH ENG 4110 Automotive Vehicle Dynamics and Safety.....	3

MECH ENG 4113 Computational Acoustics	3
MECH ENG 4114 Corrosion: Principles and Prevention	3
MECH ENG 4115 Engineering Acoustics.....	3
MECH ENG 4117 Finance for Engineers.....	3
MECH ENG 4119 Fire Engineering.....	3
MECH ENG 4121 Materials Selection and Failure Analysis.....	3
MECH ENG 4126 Topics in Welded Structures	3

6.5.12.4 B.E (Mechatronic)/ B.Ma.& Comp.Sc. (Mathematics focus)

To qualify for both the award of the degree of B.E.(Mechatronic) and the degree of B.Ma.&Comp.Sc. with a Mathematics Focus, students are required to complete satisfactorily:

Level I

C&ENVENG 1010 Engineering Mechanics - Statics	3
CHEM ENG 1009 Materials I.....	3
ELEC ENG 1009 Electrical and Electronic Engineering IA	3
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
MATHS 1013 Mathematics IMA*	3
MECH ENG 1006 Design Graphics and Communication M.....	3
MECH ENG 1007 Engineering Mechanics - Dynamics	3
MECH ENG 1103 Introduction to Mechatronic Engineering Intro	3

* See Clause 6.2 regarding Level I Mathematics requirements.

Level II

MATHS 2201 Engineering Mathematics I.....	3
MATHS 2202 Engineering Mathematics II.....	3
MECH ENG 2002 Stress Analysis and Design.....	3
MECH ENG 2015 Electronics IIM.....	3
MECH ENG 2021 Thermo-Fluids I.....	3
MECH ENG 2100 Design Practice.....	3
MECH ENG 2101 Mechatronics IM*	3
MECH ENG 2019 Dynamics & Control I.....	3

* Includes workshop practical

Level III

ELEC ENG 3025 Power Electronics and Drive Systems	3
MECH ENG 3027 Engineering Systems Design and Communication	3
MECH ENG 3028 Dynamics and Control II.....	3
MECH ENG 3032 Micro-Controller Programming..	3
MECH ENG 3102 Heat Transfer and Thermodynamics	3
MECH ENG 3105 Sustainability and the	

Environment.....	3
MECH ENG 3106 Mechatronics II.....	3
MECH ENG 3103 Manufacturing Engineering and Quality Systems.....	3

Level IV

Mathematics courses*	24
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* 24 units of additional Mathematics courses of which 18 units must be at Level III.

Level V

MECH ENG 4102 Advanced PID Control	3
MECH ENG 4116 Engineering Management and Professional Practice	3
MECH ENG 4122 Mechanical Signature Analysis.....	3
MECH ENG 4123 Advanced Digital Control.....	3
MECH ENG 4124 Robotics M	3
MECH ENG 4134A Mechatronic Design Project Level IV ^	6
<i>or</i>	
MECH ENG 4019A/B Mechatronics Honours Project ^	6
Elective (chosen from list).....	3

^ Students accepted into the Honours Stream will take MECH ENG 4019A/B Mechatronics Engineering Honours Project and other students will take MECH ENG 4134A/B Mechatronics Engineering Design Project

Electives

MECH ENG 4101 Biomechanical Engineering.....	3
MECH ENG 4105 Advanced Vibrations.....	3
MECH ENG 4110 Automotive Vehicle Dynamics and Safety.....	3
MECH ENG 4113 Computational Acoustics	3
MECH ENG 4114 Corrosion: Principles and Prevention	3
MECH ENG 4115 Engineering Acoustics.....	3
MECH ENG 4117 Finance for Engineers.....	3
MECH ENG 4119 Fire Engineering.....	3
MECH ENG 4121 Materials Selection and Failure Analysis.....	3
MECH ENG 4126 Topics in Welded Structures	3

6.5.13 Mining Engineering

6.5.13.1 B.E.(Mining)

Students are required to complete satisfactorily courses to the value of 24 units at each of Levels I, II, III and IV:

Level I

C&ENVENG 1008 Engineering Planning and Design IA	3
C&ENVENG 1010 Engineering Mechanics - Statics	3
MINING 1011 Introduction to Mining	

Engineering IA	3
C&ENVENG 1012 Engineering Modelling and Analysis IA	3
GEOLOGY 1104 Geology for Engineers.....	3
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
MECHENG 1007 Engineering Mechanics-Dynamics	3

Level II

MECH ENG 2021 Thermo-Fluids I.....	3
CHEM ENG Introduction to Minerals Processing Engineering.....	3
C&ENVENG 2025 Strength of Materials IIA	3
C&ENVENG 2068 Environmental Engineering and Sustainability II.....	3
C&ENVENG 2069 Geotechnical Engineering IIA ...	3
C&ENVENG 2070 Engineering Modelling and Analysis IIA	3
GEOLOGY 2504 Economic and Mine Geology	3
MATHS 2201 Engineering Mathematics I.....	3

Level III

CHEM ENG Introduction to Minerals Processing Engineering.....	3
MINING 3068 Mine Ventilation.....	3
MINING 3069 Rock Breakage	3
MINING 3070 Resource Estimation	3
MINING 3071 Mining Systems.....	3
MINING 3072 Mining Geomechanics	3
MINING 3073 Mine Planning.....	3
Elective	3

Level IV

C&ENVENG 4101 Mine Management	3
C&ENVENG 4102 Mine Geotechnical Engineering.....	3
C&ENVENG 4106 Hard Rock Mine Design and Feasibility	3
C&ENVENG 4100A/B Mining Research Project* ...	6
C&ENVENG 4111 Coal Mine Design and Feasibility	3
Electives.....	6

* Students who are not selected for Honours will be required to complete two additional final year elective courses instead of the Mining Research Project.

Electives:

MINING 3074 Special Topics in Mining Engineering#	3
MINING 4104 Socio-Environmental Aspects of Mining	3
MINING 4105 Minerals Processing Engineering	3
C&ENVENG 4106 Introduction to Geostatistics....	3

MINING 4107 Surface Mining Systems	3
MINING 4108 Underground Mining Systems	3
MINING 4109 Mining in a Global Environment.....	3
MINING 4110 Mine Asset Management and Services	3
MINING 4113 Advanced Mine Ventilation	3

subject to availability

6.5.13.2 B.E.(Mining)/B.Ma.& Comp.Sc. (Mathematics focus)

To qualify for both the award of the degree of B.E.(Mining) and the degree of B.Ma.&Comp.Sc. with a Mathematics focus, students are required to complete satisfactorily:

Level I

C&ENVENG 1008 Engineering Planning and Design IA	3
C&ENVENG 1010 Engineering Mechanics - Statics	3
MINING 1011 Introduction to Mining Engineering IA	3
C&ENVENG 1012 Engineering Modelling and Analysis IA	3
GEOLOGY 1104 Geology for Engineers.....	3
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
MATHS 1013 Mathematics IMA*	3

MECHENG 1007 Engineering Mechanics - Dynamics	3
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* See Clause 6.2 regarding Level I Mathematics requirements.

Level II

MECH ENG 2021 Thermo-Fluids I.....	3
CHEM ENG 2019 Introduction to Minerals Processing Engineering	3
C&ENVENG 2025 Strength of Materials IIA	3
C&ENVENG 2068 Environmental Engineering and Sustainability II.....	3
C&ENVENG 2069 Geotechnical Engineering IIA ...	3
MATHS 2201 Engineering Maths I.....	3
MATHS 2202 Engineering Maths II	3
GEOLOGY 2504 Economic and Mine Geology.....	3

Level III

CHEM ENG 2019 Introduction to Minerals Processing Engineering	3
MINING 3068 Mine Ventilation.....	3
MINING 3069 Rock Breakage	3
MINING 3070 Resource Estimation	3
MINING 3071 Mining Systems.....	3
MINING 3072 Mining Geomechanics	3
MINING 3073 Mine Planning.....	3
Elective	3

Level IV

Mathematics courses*	24
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*24 units of additional Mathematics courses of which 18 units must be at Level III.

Level V

C&ENVENG 4101 Mine Management	3
C&ENVENG 4102 Mine Geotechnical Engineering.....	3
C&ENVENG 4106 Hard Rock Mine Design and Feasibility	3
C&ENVENG 4100A/B Mining Research Project* ...	6
C&ENVENG 4111 Coal Mine Design and Feasibility	3
Electives.....	6

*Students who are not selected for Honours will be required to complete two additional final year elective courses instead of the Mining Research Project.

Electives:

MINING 3074 Special Topics in Mining Engineering#	3
MINING 4104 Socio-Environmental Aspects of Mining	3
MINING 4105 Minerals Processing Engineering ...	3
C&ENVENG 4106 Introduction to Geostatistics ...	3
MINING 4107 Surface Mining Systems	3
MINING 4108 Underground Mining Systems	3
MINING 4109 Mining in a Global Environment.....	3
MINING 4110 Mine Asset Management and Services	3
MINING 4113 Advanced Mine Ventilation	3

#Subject to availability

6.5.13.3 B.E.(Mining)/B.Sc.

To qualify for a Bachelor of Science award, students must complete a major pursuant to Bachelor of Science Program Rules.

To qualify for the award of the degrees of B.E.(Mining) and B.Sc. students are required to complete satisfactorily courses as indicated:

Level I

C&ENVENG 1010 Engineering Mechanics - Statics	3
MINING 1011 Introduction to Mining Engineering IA	3
GEOLOGY 1100 Earth's Interior I	3
GEOLOGY 1103 Earth Systems	3
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
MATHS 1013 Mathematics IMA*	3
PHYSICS 1100 Physics IA.....	3
PHYSICS 1200 Physics IB.....	3

* See Clause 6.2 regarding Level I Mathematics requirements.

Level II	
MECH ENG 2021 Thermo-Fluids I.....	3
CHEM ENG Introduction to Minerals Processing Engineering.....	3
C&ENVENG 2025 Strength of Materials IIA	3
C&ENVENG 2069 Geotechnical Engineering IIA.....	3
GEOLOGY 2503 Landscape Processes and Environments II.....	3
GEOLOGY 2504 Economic and Mine Geology.....	3
MATHS 2201 Engineering Mathematics I.....	3

Level III	
C&ENVENG 3068 Mine Ventilation.....	3
C&ENVENG 3069 Rock Breakage.....	3
C&ENVENG 3070 Resource Estimation.....	3
C&ENVENG 3071 Mining Systems.....	3
C&ENVENG 3072 Mining Geomechanics.....	3
C&ENVENG 3073 Mine Planning.....	3
GEOLOGY 2501 Structural Geology II.....	3
GEOLOGY 2502 Igneous & Metamorphic Geology II.....	3

Level IV	
GEOLOGY 3008 Geophysics III	3
GEOLOGY 3010 Remote Sensing (S).....	3
GEOLOGY 3013 Tectonics III.....	3
GEOLOGY 3015 Environmental Geoscience Processes III.....	3
GEOLOGY 3016 Igneous & Metamorphic Geology III.....	3
GEOLOGY 3017 Petroleum Exploration III	3
GEOLOGY 3018 Mineral Exploration III.....	3
GEOLOGY 3019 Field Geoscience Program III	3

Level V	
C&ENVENG 4101 Mine Management	3
C&ENVENG 4102 Mine Geotechnical Engineering.....	3
C&ENVENG 4106 Hard Rock Mine Design and Feasibility	3
C&ENVENG 4100A/B Mining Research Project*...6	
C&ENVENG 4111 Coal Mine Design and Feasibility	3
Electives.....	6

* Students who are not selected for Honours will be required to complete two additional final year elective courses instead of the Mining Research Project.

Electives	
MINING 3074 Special Topics in Mining Engineering#	3
MINING 4104 Socio-Environmental Aspects of Mining	3
MINING 4105 Minerals Processing Engineering ..3	

C&ENVENG 4106 Introduction to Geostatistics.....	3
MINING 4107 Surface Mining Systems	3
MINING 4108 Underground Mining Systems.....	3
MINING 4109 Mining in a Global Environment.....	3
MINING 4110 Mine Asset Management and Services	3
MINING 4113 Advanced Mine Ventilation	3
#subject to availability	

6.5.14 Petroleum Engineering

6.5.14.1 B.E.(Petroleum)

Students are required to complete satisfactorily courses to the value of at least 24 units at each of Levels I, II, III and IV:

Level I

C&ENVENG 1012 Engineering Modelling & Analysis IA	3
CHEM 1100 Chemistry IA ⁺	3

or

CHEM 1101 Foundations of Chemistry IA ⁺	3
MATHS 1011 Mathematics IA.....	3
MATHS 1012 Mathematics IB	3
MATHS 1013 Mathematics IMA*.....	3

PETROENG 1005 Introduction to Petroleum Geosciences and the Oil Industry.....	3
PETROENG 1006 Introduction to Petroleum Engineering.....	3
PHYSICS 1100 Physics IA.....	3
CHEM ENG 1007 Process Engineering I.....	3

⁺ Students with a Subject Achievement score of at least 13 in SACE Stage 2 Chemistry or equivalent must enrol in CHEM 1100 Chemistry IA. All other students must enrol in CHEM 1101 Foundations of Chemistry IA.

* See Clause 6.2 regarding Level I Mathematics requirements.

Level II

C&ENVENG 1010 Engineering Mechanics - Statics	3
MATHS 2104 Numerical Methods.....	3
MATHS 2201 Engineering Mathematics I.....	3
MECH ENG 2021 Thermo-fluids I*.....	3
PETROENG 2001 Reservoir Thermodynamics and Fluid Properties.....	3
PETROENG 2005 Sedimentology & Stratigraphy..3	
PETROENG 2009 Formation Evaluation, Petrophysics & Rock Properties.....	3
PETROENG 2010 Drilling Engineering	3

*International students are required to present ENG 3003 Engineering Communication EAL in lieu of MECH ENG 2021 Thermo Fluids.

Level III	
PETROENG 3001 Reservoir Simulation.....	3

PETROENG 3005 Reservoir Characterisation and Modelling	3
PETROENG 3007 Well Testing and Pressure Transient Analysis	3
PETROENG 3019 Structural Geology and Seismic Methods.....	3
PETROENG 3020 Production Engineering	3
PETROENG 3023 Well Completion	3
PETROENG 3025 Reservoir Engineering	3
PETROENG 3026 Formation Damage and Productivity Enhancement.....	3
Level IV	
PETROENG 4002 Enhanced Oil Recovery	3
PETROENG 4004A/B Petroleum Engineering Honours Project ^	6
<i>or</i>	
PETROENG 4020A/B Petroleum Engineering Design Project ^	6
PETROENG 4022 Integrated Field Development Planning and Economics Project.....	3
PETROENG 4027 Decision-Making and Risk Analysis.....	3
PETROENG 4033 Integrated Reservoir and Project Management	3
PETROENG 4034 Petroleum Business and Project Economics	3
PETROENG 4035 Reservoirs, Resources and Reserves	3
^ Students accepted into the Honours stream will take PETROENG 4004A/B Petroleum Engineering Honours Project and other students will take PETROENG 4020A/B Petroleum Engineering Design Project	

6.5.14.2 B.E.(Petroleum)/B.E.(Chemical)

To qualify for the combined award of B.E.(Petroleum) and B.E.(Chemical), students are required to complete satisfactorily the courses as indicated below:

Level I

CHEM 1101 Foundations of Chemistry IA ⁺	3
<i>and</i>	
CHEM 1201 Foundations of Chemistry IB ⁺	3
<i>or</i>	
CHEM 1100 Chemistry IA ⁺	3
<i>and</i>	
CHEM 1200 Chemistry IB ⁺	3
CHEM ENG 1008 Engineering Computing.....	3
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
MATHS 1013 Mathematics IMA*	3
PETROENG 1005 Introduction to the Petroleum Industry and Petroleum Geoscience	3
PETROENG 1006 Introduction to Petroleum Engineering.....	3

CHEM ENG 1007 Process Engineering I.....	3
+ Students with a Subject Achievement score of at least 13 in SACE Stage 2 Chemistry (or equiv) must enrol in CHEM 1100/ CHEM 1200. All other students must enrol in CHEM 110 /CHEM 1201.	

* See Clause 6.2 regarding Level I Mathematics requirements.

Level II

CHEM ENG 2010 Introduction to Process Simulation	3
CHEM ENG 2014 Process Engineering IIA	3
CHEM ENG 2018 Process Engineering IIB	3
MATHS 2201 Engineering Mathematics I	3
PETROENG 2010 Drilling Engineering	3
MATHS 2104 Numerical Methods.....	3
CHEM ENG 2011 Chemical Engineering Thermodynamics	3
PETROENG 2009 Formation Evaluation, Petrophysics and Rock Properties.....	3

Level III

CHEM ENG 3024 Professional Practice III	3
CHEM ENG 3030 Simulation and Concept Design.....	3
CHEM ENG 3031 Process Control and Utilities...	3
CHEM ENG 3034 Chemical Engineering Applications B.....	3
CHEM ENG 3035 Chemical Engineering Applications A.....	3
PETROENG 3001 Reservoir Simulation.....	3
PETROENG 3005 Reservoir Characterisation and Modelling	3
PETROENG 3025 Reservoir Engineering	3

Level IV

CHEM ENG 3023 Chemical Engineering Unit Operations Lab	3
CHEM ENG 3032 Chemical Engineering Applications D	3
CHEM ENG 3033 Chemical Engineering Applications C.....	3
CHEM ENG 4014 Plant Design Project	6
CHEM ENG 4034 Professional Practice IV	3
CHEM ENG 4042 Chemical Engineering Research Project (N) [#] <i>or</i>	
CHEM ENG 4047 Chemical Engineering Research Project (H) [#]	3
PETROENG 3007 Well Testing and Pressure Transient Analysis	3
[#] Students accepted into the Honours Stream will take Chemical Engineering Research Project H and other students will take Chemical Engineering Research Project N.	

Level V

PETROENG 4002 Enhanced Oil Recovery	3
PETROENG 4004A/B Petroleum Engineering Honours Project ^	6

<i>or</i>	ENV BIOL 2005 Ecology E.....	3
PETROENG 4020A/B Petroleum Engineering Design Project ^	MATHS 2201 Engineering Mathematics I.....	3
PETROENG 4022 Integrated Field Development Planning and Economics Project.....	PETROENG 2005 Sedimentology and Stratigraphy.....	3
PETROENG 4027 Decision-Making and Risk Analysis.....	PETROENG 2009 Formation Evaluation, Petrophysics and Rock Properties.....	3
PETROENG 4034 Petroleum Business and Project Economics	PETROENG 2010 Drilling Engineering	3
Electives.....	Level III	
^ Students accepted into the Honours stream will take PETROENG 4004A/B Petroleum Engineering Honours Project and other students will take PETROENG 4020A/B Petroleum Engineering Design Project	C&ENVENG 3012 Geotechnical Engineering Design III.....	3
Electives	PETROENG 3005 Reservoir Characterisation and Modelling	3
PETROENG 3007 Well Testing and Pressure Transient Analysis.....	PETROENG 3019 Structural Geology and Seismic Methods.....	3
PETROENG 3020 Production Engineering	PETROENG 3020 Production Engineering	3
PETROENG 3023 Well Completion and Simulation	PETROENG 3025 Reservoir Engineering	3
PETROENG 3026 Formation Damage and Productivity Enhancement.....	C&ENVENG 3077 Engineering Hydrology	3
PETROENG 4033 Integrated Reservoir and Project Management	C&ENVENG 3079 Water Engineering and Design III (S2).....	3
PETROENG 4035 Reservoirs, Resources and Reserves	C&ENVENG 4087 Environmental Modelling and Management	3
6.5.14.3 B.E.(Petroleum)/B.E.(Civil & Environmental)	Level IV	
To qualify for the combined award of B.E.(Petroleum) and B.E.(Civil & Environmental), students are required to complete satisfactorily the courses as indicated below:	C&ENVENG 4034 Engineering Management IV....	3
Level I	C&ENVENG 4005 A/B Civil & Environmental Research Project Part 1 ^	6
C&ENVENG 1008 Engineering Planning and Design IA	C&ENVENG 4037 Introduction to Environmental Law	3
C&ENVENG 1010 Engineering Mechanics - Statics	MATHS 2104 Numerical Methods.....	3
C&ENVENG 1012 Engineering Modelling and Analysis IA	C&ENVENG specialisations	9
ENV BIOL 1002 Ecological Issues.....	^ Students who are not selected for Honours will be required to complete two additional final year specialisation courses instead of the Civil & Environmental Research Project.	
MATHS 1011 Mathematics IA	Specialisations	
MATHS 1012 Mathematics IB	Students may take up to 3 units of Level II or III courses offered by the School of Mathematical Sciences. Students may also, with the approval of the Head of School, replace one or more specialisation courses with appropriate courses offered by other schools in the University	
MATHS 1013 Mathematics IMA*.....	C&ENVENG 4073 Water Distribution Systems and Design.....	3
PETROENG 1005 Introduction to the Petroleum Industry & the Oil Industry.....	C&ENVENG 4075 Water Resources Optimisation and Modelling.....	3
PETROENG 1006 Introduction to Petroleum Engineering.....	C&ENVENG 4077 Coastal Engineering and Design.....	3
* See Clause 6.2 regarding Level I Mathematics requirements.	C&ENVENG 4079 Deep Foundation Engineering and Design.....	3
Level II	C&ENVENG 4081 Expansive Soils and Footing Design.....	3
C&ENVENG 2068 Environmental Engineering and Sustainability II.....	C&ENVENG 4085 Traffic Engineering and Design.....	3
C&ENVENG 2069 Geotechnical Engineering II.....	C&ENVENG 4087 Environmental Modelling and Management	3
C&ENVENG 2071 Water Engineering IIA.....		

C&ENVENG 4091 Waste Management Analysis and Design.....	3
C&ENVENG 4092 Wastewater Engineering and Design.....	3
C&ENVENG 4097 Analysis of Rivers and Sediment Transport.....	3
C&ENVENG 4098 Water Resources Sustainability and Design.....	3
Level V	
PETROENG 4004A/B Petroleum Engineering Honours Project ^	6
<i>or</i>	
PETROENG 4020A/B Petroleum Engineering Design Project ^	6
PETROENG 4022 Integrated Field Development and Economics Project.....	3
PETROENG 4027 Decision-Making and Risk Analysis.....	3
PETROENG 4034 Petroleum Business & Project Economics	3
PETROENG 4035 Reservoirs, Resources & Reserves	3
Electives.....	6
^ Students accepted into the Honours stream will take PETROENG 4004A/B Petroleum Engineering Honours Project and other students will take PETROENG 4020A/B Petroleum Engineering Design Project	

Electives*

Note: Not all electives are available each year and students should check Class Planner.

PETROENG 3001 Reservoir Simulation.....	3
PETROENG 3007 Well Testing and Pressure Transient Analysis	3
PETROENG 3023 Well Completion and Simulation	3
PETROENG 3026 Formation Damage and Productivity Enhancement.....	3
PETROENG 4002 Enhanced Oil Recovery	3
PETROENG 4033 Integrated Reservoir and Project Management	3

*Approval is required from the Head of the Australian School of Petroleum or nominee to finalise the choice of elective courses.

6.5.14.4 B.E.(Petroleum)/B.E.(Civil & Structural)

To qualify for the combined award of B.E.(Petroleum) and B.E.(Civil & Structural), students are required to complete satisfactorily the courses as indicated below:

Level I

C&ENVENG 1008 Engineering Planning & Design IA	3
C&ENVENG 1009 Civil & Environmental Engineering IA	3
C&ENVENG 1010 Engineering Mechanics - Statics.....	3

C&ENVENG 1012 Engineering Modelling and Analysis IA	3
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
MATHS 1013 Mathematics IMA*.....	3
PETROENG 1005 Introduction to the Petroleum Geosciences and the Oil Industry	3
PETROENG 1006 Introduction to Petroleum Engineering.....	3

* See Clause 6.2 regarding Level I Mathematics requirements.

Level II

C&ENVENG 2025 Strength of Materials IIA	3
C&ENVENG 2069 Geotechnical Engineering IIA ...	3
C&ENVENG 2071 Water Engineering IIA.....	3
C&ENVENG 2072 Structural Engineering Design..	3
MATHS 2201 Engineering Mathematics I.....	3
PETROENG 2005 Sedimentology and Stratigraphy.....	3
PETROENG 2009 Formation Evaluation, Petrophysics and Rock Properties.....	3
PETROENG 2010 Drilling Engineering	3

Level III

C&ENVENG 3001 Structural Mechanics IIIA	3
C&ENVENG 3005 Structural Design III (Concrete)	3
C&ENVENG 3007 Structural Design III (Steel).....	3
C&ENVENG 3012 Geotechnical Engineering Design III.....	3
PETROENG 3019 Structural Geology and Seismic Methods.....	3
PETROENG 3020 Production Engineering	3
PETROENG 3025 Reservoir Engineering	3
PETROENG 3026 Formation Damage and Productivity Enhancement.....	3

Level IV

C&ENVENG 4003A/BV Civil & Structural Engineering Research Project Part 1 ^	6
C&ENVENG 4034 Engineering Management IV	3
C&ENVENG 3077 Engineering Hydrology	3
C&ENVENG 3079 Water Engineering and Design III (S2)	3
MATHS 2104 Numerical Methods.....	3
Specialisations.....	6

^ Students who are not selected for Honours will be required to complete two additional final year specialisation courses instead of the Civil & Structural Research Project.

Specialisations

Alternatively, students may take up to 3 units of Level II or III courses offered by the School of Mathematical Sciences. In special circumstances other combinations of specialisation courses may

be acceptable but must be approved by the Head of School. Students may also, with the approval of the Head of School, replace one or more specialisation courses with appropriate courses offered by other schools in the University.

The specialisation courses offered by the School in any one year will depend on staff availability, and will be chosen from the following:

C&ENVENG 4066 Computer Methods of Structural Analysis and Design	3
C&ENVENG 4069 Advanced Reinforced Concrete	3
C&ENVENG 4070 Structural Dynamics Due to Wind and Earthquake	3
C&ENVENG 4073 Water Distribution Systems and Design.....	3
C&ENVENG 4075 Water Resources Optimisation and Modelling.....	3
C&ENVENG 4077 Coastal Engineering and Design.....	3
C&ENVENG 4079 Deep Foundation Engineering and Design.....	3
C&ENVENG 4081 Engineering Problematic Soils..	3
C&ENVENG 4085 Traffic Engineering and Design.....	3
C&ENVENG 4087 Environmental Modelling and Management	3
C&ENVENG 4091 Waste Management Analysis and Design.....	3
C&ENVENG 4092 Wastewater Engineering and Design.....	3
C&ENVENG 4096 FRP Retrofitting of Concrete Structures	3
C&ENVENG 4097 Analysis of Rivers and Sediment Transport	3
C&ENVENG 4098 Water Resources Sustainability and Design.....	3
C&ENVENG 4099 Structural Response to Blast Loading.....	3

Level V

PETROENG 4004A/B Petroleum Engineering Honours Project ^	6
<i>or</i>	
PETROENG 4020A/B Petroleum Engineering Design Project ^	6
PETROENG 4022 Integrated Field Development and Economics Project.....	3
PETROENG 4027 Decision-Making and Risk Analysis.....	3
PETROENG 4034 Petroleum Business and Project Economics	3
PETROENG 4035 Reservoirs, Resources and Reserves	3
Electives.....	6

^ Students accepted into the Honours stream will take PETROENG 4004A/B Petroleum Engineering Honours Project and other students will take PETROENG 4020A/B Petroleum Engineering Design Project

Electives

PETROENG 3001 Reservoir Simulation.....	3
PETROENG 3007 Well Testing and Pressure Transient Analysis	3
PETROENG 3023 Well Completion and Simulation	3
PETROENG 3026 Formation Damage and Productivity Enhancement.....	3
PETROENG 4002 Enhanced Oil Recovery	3
PETROENG 4033 Integrated Reservoir and Project Management	3

6.5.14.5 B.E.(Petroleum)/B.E.(Mechanical)

To qualify for the combined award of B.E.(Petroleum) and B.E.(Mechanical), students are required to complete satisfactorily the courses as indicated below:

Level I

C&ENVENG 1010 Engineering Mechanics - Statics	3
ELEC ENG 1009 Electrical & Electronic Engineering IA	3
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
MATHS 1013 Mathematics IMA*	3
MECH ENG 1006 Design Graphics & Communication	3
MECH ENG 1007 Engineering Mechanics - Dynamics	3
PETROENG 1005 Introduction to the Petroleum Industry & Geosciences & the Oil Industry.....	3
PETROENG 1006 Introduction to Petroleum Engineering.....	3

* See Clause 6.2 regarding Level I Mathematics requirements.

Level II

CHEM ENG 1009 Materials I.....	3
MATHS 2201 Engineering Mathematics I.....	3
MECH ENG 2002 Stress Analysis & Design.....	3
MECH ENG 2021 Thermo-Fluids I.....	3
MECH ENG 2100 Design Practice.....	3
PETROENG 2005 Sedimentology and Stratigraphy	3
PETROENG 2009 Formation Evaluation, Petrophysics and Rock Properties.....	3
PETROENG 2010 Drilling Engineering	3

Level III

MECH ENG 2019 Dynamics and Control I.....	3
MECH ENG 2020 Materials and Manufacturing...3	
MECH ENG 3027 Engineering Systems Design and Communication	3

MECH ENG 3030 Structural Design & Solid Mechanics	3
MECH ENG 3102 Heat Transfer and Thermodynamics	3
PETROENG 3023 Well Completion and Simulation	3
PETROENG 3025 Reservoir Engineering	3
PETROENG 3026 Formation Damage and Productivity Enhancement.....	3
Level IV	
MECH ENG 4132A/B Mechanical Design Project Level IV ^	6
<i>or</i>	
MECH ENG 4133A/B Mechanical Honours Project Level IV ^	6
MECH ENG 3105 Sustainability and the Environment.....	3
MECH ENG 3028 Dynamics and Control II.....	3
MECH ENG 3102 Heat Transfer Thermodynamics	3
Mechanical Engineering Electives	12
^ Students accepted into the Honours stream will take MECH ENG 4133A Mechanical Honours Project and other students will take MECH ENG 4132A/B Mechanical Design Project.	
Electives	
MECH ENG 4107 Airconditioning	3
MECH ENG 4112 Combustion Technology and Emission Control	3
MECH ENG 4115 Engineering Acoustics.....	3
MECH ENG 4117 Finance for Engineers.....	3
MECH ENG 4118 Finite Element Analysis of Structures	3
MECH ENG 4119 Fire Engineering.....	3
MECH ENG 4120 Fracture Mechanics.....	3
MECH ENG 4121 Materials Selection & Failure Analysis.....	3
MECH ENG 4124 Robotics M	3
MECH ENG 4125 Stresses in Plates and Shells...3	
MECH ENG 4126 Topics in Welded Structures ...3	
Level V	
PETROENG 3020 Production Engineering	3
PETROENG 4004A/B Petroleum Engineering Honours Project ^	6
<i>or</i>	
PETROENG 4020A/B Petroleum Engineering Design Project ^	6
PETROENG 4022 Integrated Field Development and Economics Project.....	3
PETROENG 4027 Decision-Making and Risk Analysis.....	3
PETROENG 4034 Petroleum Business & Project Economics	3

Electives.....	6
^ Students accepted into the Honours stream will take PETROENG 4004A/B Petroleum Engineering Honours Project and other students will take PETROENG 4020A/B Petroleum Engineering Design Project	

Electives

PETROENG 3001 Reservoir Simulation.....	3
PETROENG 3007 Well Testing and Pressure Transient Analysis	3
PETROENG 3026 Formation Damage and Productivity Enhancement.....	3
PETROENG 4002 Enhanced Oil Recovery	3
PETROENG 4033 Integrated Reservoir and Project Management	3
PETROENG 4035 Reservoirs, Resources and Reserves	3

6.5.14.6 B.E.(Petroleum)/B.E.(Mining)

To qualify for the combined award of B.E.(Petroleum) and B.E.(Mining), students are required to complete satisfactorily the courses as indicated below:

Level I

C&ENVENG 1010 Engineering Mechanics - Statics	3
C&ENVENG 1012 Engineering Modelling and Analysis IA	3
MINING 1011 Introduction to Mining Engineering IA	3
CHEM 1100 Chemistry IA.....	3
MATHS 1011 Mathematics IA*	3
MATHS 1012 Mathematics IB	3
MATHS 1013 Mathematics IMA*	3
PETROENG 1005 Introduction to Petroleum Geosciences and the Oil Industry	3
PETROENG 1006 Introduction to Petroleum Engineering.....	3
* See Clause 6.2 regarding Level I Mathematics requirements.	

Level II

C&ENVENG 2025 Strength of Materials IIA	3
C&ENVENG 2069 Geotechnical Engineering IIA ...3	
C&ENVENG 2071 Water Engineering IIA.....	3
GEOLOGY 2009 Economic and Mine Geology....3	
MATHS 2104 Numerical Methods.....	3
MATHS 2201 Engineering Mathematics I.....	3
PETROENG 2009 Formation Evaluation, Petrophysics and Rock Properties.....	3
PETROENG 2010 Drilling Engineering	3

Level III

MINING 3068 Mine Ventilation.....	3
MINING 3069 Rock Breakage	3
MINING 3070 Resource Estimation	3

MINING 3071 Mining Systems.....	3	PETROENG 1006 Introduction to Petroleum Engineering.....	3
MINING 3072 Mining Geomechanics	3	PHYSICS 1100 Physics IA.....	3
MINING 3073 Mine Planning.....	3	CHEM ENG 1008 Process Engineering I.....	3
MINING 4101 Mine Management.....	3	*See Clause 6.2 regarding Level I Mathematics requirements.	
MINING 4102 Mine Geotechnical Engineering.....	3	Level II	
Level IV		C&ENVENG 1010 Engineering Mechanics - Statics	3
MINING 4103A/B Mine Design and Feasibility	6	CHEM ENG 1008 Engineering Computing.....	3
PETROENG 3001 Reservoir Simulation.....	3	PETROENG 2001 Reservoir Thermodynamics and Fluid Properties.....	3
PETROENG 3005 Reservoir Characterisation and Modelling.....	3	PETROENG 2005 Sedimentology and Stratigraphy.....	3
PETROENG 3007 Well Testing and Pressure Transient Analysis	3	PETROENG 2009 Formation Evaluation, Petrophysics and Rock Properties.....	3
PETROENG 3019 Structural Geology and Seismic Methods.....	3	PETROENG 2010 Drilling Engineering	3
PETROENG 3020 Production Engineering	3	MATHS 2201 Engineering Maths I.....	3
PETROENG 3025 Reservoir Engineering	3	MATHS 2202 Engineering Maths II.....	3
Level V		Level III	
PETROENG 4002 Enhanced Oil Recovery	3	GEOLOGY 2501 Structural Geology II.....	3
PETROENG 4004A/B Petroleum Engineering Honours Project.....	6	GEOLOGY 2502 Igneous and Metamorphic Geology II.....	3
<i>or</i>		GEOLOGY 2503 Landscape Processes and Environments II.....	3
PETROENG 4020A/B Petroleum Engineering Design Project	6	PETROENG 3005 Reservoir Characterisation and Modelling.....	3
<i>or</i>		PETROENG 3019 Structural Geology and Seismic Methods.....	3
MINING 4100A/B Mining Research Project Part 1&2.....	6	PETROENG 3020 Production Engineering	3
<i>or</i>		PETROENG 3025 Reservoir Engineering	3
Electives.....	6	PETROENG 3026 Formation Damage and Productivity Enhancement.....	3
PETROENG 4022 Integrated Field Development Planning and Economics Project.....	3	Level IV	
PETROENG 4027 Decision-Making and Risk Analysis.....	3	GEOLOGY 3008 Geophysics III.....	3
PETROENG 4033 Integrated Reservoir and Project Management	3	SOIL & WAT 3010 Remote Sensing (S).....	3
PETROENG 4034 Petroleum Business and Project Economics	3	GEOLOGY 3013 Tectonics III.....	3
PETROENG 4035 Reservoir, Resources and Reserves	3	GEOLOGY 3015 Environmental Geoscience Processes III.....	3
6.5.14.7 B.E.(Petroleum)/B.Sc.(Geology & Geophysics)		GEOLOGY 3016 Igneous and Metamorphic Geology III.....	3
To qualify for the combined award of B.E.(Petroleum) and B.Sc.(Geology & Geophysics), candidates are required to complete satisfactorily the courses as indicated below:		GEOLOGY 3017 Petroleum Exploration III	3
Level I		GEOLOGY 3018 Mineral Exploration III.....	3
GEOLOGY 1100 Earth's Interior I	3	GEOLOGY 3019 Field Geoscience Program III	3
GEOLOGY 1103 Earth Systems	3	Level V	
MATHS 1011 Mathematics IA*	3	PETROENG 4004A/B Petroleum Engineering Honours Project ^	6
MATHS 1012 Mathematics IB.....	3	<i>or</i>	
MATHS 1013 Mathematics IMA*.....	3	PETROENG 4020A/B Petroleum Engineering Design Project ^	6
PETROENG 1005 Introduction to the Petroleum Industry and the Oil Industry	3	PETROENG 4022 Integrated Field Development and Economics Project.....	3

PETROENG 4027 Decision-Making and Risk Analysis.....	3
PETROENG 4034 Petroleum Business and Project Economics	3
PETROENG 4035 Reservoirs, Resources and Reserves	3
Electives.....	6

^ Students accepted into the Honours stream will take PETROENG 4004A/B Petroleum Engineering Honours Project and other students will take PETROENG 4020A/B Petroleum Engineering Design Project

Electives

PETROENG 3001 Reservoir Simulation.....	3
PETROENG 3007 Well Testing and Pressure Transient Analysis	3
PETROENG 3026 Formation Damage and Productivity Enhancement.....	3
PETROENG 4002 Enhanced Oil Recovery	3
PETROENG 4033 Integrated Reservoir and Project Management	3

6.5.15 Pharmaceutical Engineering

6.5.15.1 B.E.(Pharmaceutical)

Students are required to complete satisfactorily courses to the value of 24 units at each of Levels I, II, III and IV:

Level I

BIOLOGY 1101 Biology I: Molecules, Genes & Cells.....	3
CHEM 1101 Foundations of Chemistry IA ⁺	3
<i>and</i>	
CHEM 1201 Foundations of Chemistry IB ⁺	3
<i>or</i>	
CHEM 1100 Chemistry IA ⁺	3
<i>and</i>	
CHEM 1200 Chemistry IB ⁺	3
CHEM ENG 1006 Introduction to Pharmaceutical Engineering	3
CHEM ENG 1007 Process Engineering I.....	3
CHEM ENG 1009 Materials I.....	3
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
MATHS 1013 Mathematics IMA*	3

+ Students with a Subject Achievement score of at least 13 in SACE Stage 2 Chemistry or equivalent must enrol in CHEM/CHEM 1200. All other students must enrol in CHEM 1101/CHEM 1201

* See Clause 6.2 regarding Level I Mathematics requirements.

Level II

CHEM 2510 Chemistry IIA ⁺	3
CHEM 2540 Medicinal & Biological Chemistry II ..	3
CHEM ENG 2010 Introduction to Process Simulation	3

CHEM ENG 2011 Chemical Engineering Thermodynamics	3
CHEM ENG 2012 Principles of Pharmaceutical Engineering.....	3
CHEM ENG 2014 Process Engineering IIA	3
BIOCHEM 2501 Biochemistry II: Metabolism	3
CHEM ENG 2018 Process Engineering IIB	3
+CHEM 2510 requires either passes in both CHEM 1100 & CHEM 1200 or credits in both CHEM 1101 & CHEM 1201	

Level III

CHEM 3214 Medicinal & Biological Chemistry III...3	
CHEM ENG 3019 Pharmaceutical Plant Design and Process Engineering	3
CHEM ENG 3021 Advanced Pharmaceutical Unit Operations	3
CHEM ENG 3024 Professional Practice III	3
CHEM ENG 3026 Pharmaceutical Engineering Projects and Experimental Design III	3
CHEM ENG 3034 Pharmaceutical Engineering Applications B.....	3
CHEM ENG 3035 Pharmaceutical Engineering Applications A.....	3
PHARM 2100 Drugs, Chemicals and Health	3

Level IV

Note: Level IV is indicative only

Pharmaceutical Engineering courses:

Biochemical Engineering	3
Design of Batch Processes	3
Fundamentals of Drug Development.....	3
Intellectual Property Law	3
Materials in Biomedical Applications.....	3
Molecular Engineering.....	3
Particulate Processes & Colloid Science	3
Pharmaceutical Manufacturing (Validation & Regulation) & Packaging Systems	3
Pharmaceutical Plant Design Project Part 1 & 2 ^ ..	6
<i>or</i>	
Pharmaceutical Engineering Research Project H ^ ..	6
Statistical Quality Control	3
Elective	3

^ Students accepted into the Honours stream will take Pharmaceutical Research Project H and other students will take Pharmaceutical Plant Design Project .

6.5.16 Software Engineering

6.5.16.1 B.E.(Software)

Level I

COMP SCI 1003 Internet Computing	3
COMP SCI 1008 Computer Science IA	3
COMP SCI 1009 Computer Science IB	3

ELEC ENG 1009 Electrical & Electronic Engineering IA	3
ELEC ENG 1010 Electrical & Electronic Engineering IB	3
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
MATHS 1013 Mathematics IMA*	3
STATS 1000 Statistical Practice I	3

* See Clause 6.2 regarding Level I Mathematics requirements.

Level II

COMP SCI 2000 Computer Systems	3
COMP SCI 2002 Database & Information Systems	3
COMP SCI 2004 Data Structures & Algorithms	3
COMP SCI 2005 Systems Programming in C & C++	3
COMP SCI 2006 Introduction to Software Engineering	3
Electives*	9

Level III

COMP SCI 3001 Computer Networks & Applications	3
COMP SCI 3002 Programming Techniques	3
COMP SCI 3004 Operating Systems	3
COMP SCI 3005 Computer Architecture	3
COMP SCI 3013 Event Driven Computing	3
COMP SCI 3015A/B Software Engineering Group Project II	6
Elective*	3

Level IV

COMP SCI 4001A/B Software Engineering Group Project II	8
<i>or</i>	
COMP SCI 4002A/B Software Engineering Honours Project ^	8
COMP SCI 4023 Software Process Improvement	3
ELEC ENG 4038 Financial Management for Engineers	2
ELEC ENG 4040 Management and Professional Practice for Engineers	2
COMP SCI 4054 High Integrity Software Engineering	3
Electives*	6

* Electives can be courses offered within the Faculty of Engineering, Computer and Mathematical Sciences but require the approval of the Faculty.

^ Students accepted into the Honours stream will take COMP SCI 4002A/B Software Engineering Honours Project and other students will take Software Engineering Group Project

Level IV Electives

(Other electives may be acceptable but require the

approval of the Faculty.)

COMP SCI 3007 Artificial Intelligence	3
COMP SCI 3009 Advanced Programming Paradigms	3
COMP SCI 3012 Distributed Systems UG	3
COMP SCI 3014 Computer Graphics	3
COMP SCI 4022 Computer Vision	3
COMP SCI 4041 Language Translators	3
COMP SCI 4077 Systems Modelling and Simulation	3
COMP SCI 4094 Distributed Databases and Data Mining	3
ELEC ENG 3022 Real Time Systems IV	3
PURE MTH 3018 Coding and Cryptology III	3

6.5.17 Sports Engineering

6.5.17.1 B.E.(Sports)

Students are required to complete satisfactorily courses to the value of 24 units at each of Levels I, II, III and IV:

Level I

C&ENVENG 1010 Engineering Mechanics - Statics	3
CHEM ENG 1009 Materials I	3
ELEC ENG 1009 Electrical and Electronic Engineering IA	3
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
MATHS 1013 Mathematics IMA*	3
MECH ENG 1006 Design Graphics and Communication	3
MECH ENG 1007 Engineering Mechanics - Dynamics	3
MECH ENG1104 Introduction to Sports Engineering	3

* See Clause 6.2 regarding Level I Mathematics requirements.

Level II

MECH ENG 2002 Stress Analysis & Design	3
MECH ENG 2019 Dynamics & Control I	3
MECH ENG 2021 Thermo-Fluids I	3
MECH ENG 2100 Design Practice	3
MECH ENG 2102 Sports Engineering I*	3
MATHS 2201 Engineering Mathematics I	3
MATHS 2202 Engineering Maths II	3
ATATSC 2200 Functional Human Anatomy II (replaces PHYSIOL 2510 Human Physiology IIA)..	3

*Includes Workshop Practice

Level III

MECH ENG 3027 Engineering Systems Design & Communication	3
MECH ENG 3028 Dynamics and Control II	3

MECH ENG 3101 Applied Aerodynamics	3
MECH ENG 3103 Manufacturing Engineering and Quality Systems.....	3
MECH ENG 3105 Sustainability & the Environment.....	3
MECH ENG 3107 Sports Engineering II.....	3
MECH ENG 3108 Sports Materials	3
MECH ENG 3109 Engineering Biomechanics	3

Level IV (not available in 2010)

Note: Level IV is indicative only

MECH ENG 4101 Biomechanical Engineering.....	3
MECH ENG 4103 Advanced Computer Aided Engineering.....	3
MECH ENG 4111 CFD for Engineering Applications	3
MECH ENG 4116 Engineering Management & Quality Systems.....	3
MECH ENG 4118 Finite Element Analysis of Structures	3
MECH ENG 4136A/B Sports Engineering Design Project Level IV ^	6

or

MECH ENG 4137A/B Sports Engineering Honours Project Level IV ^	6
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Sports Engineering courses:

Sports Engineering III	3
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^ Students accepted into the Honours stream will take MECH ENG 4137A/B Sports Engineering Honours Project and other students will take MECH ENG 4136A/B Sports Engineering Design Project.

6.5.18 Sustainable Energy Engineering

Students are required to complete satisfactorily courses to the value of 24 units at each of Levels I, II, III and IV in one of the programs listed under 6.5.18.1 to 6.5.18.3 below:

6.5.18.1 Sustainable Energy (Chemical)

Level I

CHEM 1101 Foundations of Chemistry IA ⁺	3
--	---

and

CHEM 1201 Foundations of Chemistry IB ⁺	3
--	---

or

CHEM 1100 Chemistry IA ⁺	3
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and

CHEM 1200 Chemistry IB ⁺	3
CHEM ENG 1007 Process Engineering 1.....	3
CHEM ENG 1008 Engineering Computing.....	3
CHEM ENG 1010 Professional Practice 1	3
ENV BIOL 1002 Ecological Issues I.....	3
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
MATHS 1013 Mathematics IMA*.....	3

+ Students with a Subject Achievement score of at least 13 in SACE Stage 2 Chemistry or equivalent must enrol in CHEM 1100 /CHEM 1200 - all other students must enrol in CHEM 1101/CHEM 1201

* See Clause 6.2 regarding Level I Mathematics requirements.

Level II

CHEM ENG 2010 Introduction to Process Simulation	3
CHEM ENG 2011 Chemical Engineering Thermodynamics	3
CHEM ENG 2013 Process Modelling and Computations	3
CHEM ENG 2014 Process Engineering IIA	3
CHEM ENG 2016 Professional Practice II	3
CHEM ENG 2018 Process Engineering IIB	3
MATHS 2201 Engineering Mathematics I.....	3
MECH ENG 3017 Sustainability & the Environment.....	3

Level III

CHEM ENG 3023 Chemical Engineering Unit Operations Lab	3
CHEM ENG 3024 Professional Practice III	3
CHEM ENG 3029 Materials III	3
CHEM ENG 3030 Simulations and Concept Design.....	3
CHEM ENG 3031 Process Control & Utilities.....	3
CHEM ENG 3033 Chemical Engineering Applications C.....	3
CHEM ENG 3034 Chemical Engineering Applications B.....	3
CHEM ENG 3035 Chemical Engineering Applications A.....	3

Level IV

Note: Level IV is indicative only

Sustainable Energy Engineering courses:

Bio-Fuels	3
Distributed Generation Technologies.....	3
Plant Design Project (Renewable Energy).....	6
Professional Practice IV.....	3
Research Project (Renewable Energy).....	3
Wind Turbine Design	3
Elective	3

6.5.18.2 Sustainable Energy (Electrical)

Level I

C&ENVENG 1010 Engineering Mechanics - Statics	3
CHEM ENG 1008 Engineering Computing.....	3
CHEM ENG 1009 Materials I.....	3
ELEC ENG 1009 Electrical and Electronic Engineering IA	3

ELEC ENG 1010 Electrical and Electronic Engineering IB	3
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
MATHS 1013 Mathematics IMA*	3
MECH ENG 1007 Engineering Mechanics - Dynamics	3

* See Clause 6.2 regarding Level I Mathematics requirements.

Level II

ELEC ENG 2007 Signals and Systems II	3
ELEC ENG 2008 Electronics II	3
ELEC ENG 2011 Circuit Analysis	3
ELEC ENG 2012 Sustainable Energy Project II	3
ELEC ENG 3028 Digital Systems (replaces ELEC ENG 3020 Embedded Computer Systems)	3
MATHS 2201 Engineering Mathematics I	3
MATHS 2202 Engineering Mathematics II	3
MECH ENG 2021 Thermo-Fluids I	3

Level III

ELEC ENG 3027 Control III	3
ELEC ENG 3021 Electric Energy Systems	3
ELEC ENG 3025 Power Electronics and Drive Systems M	3
ELEC ENG 3029 Project Management for Sustainable Energy	3
ELEC ENG 3031 Power Systems	3
ELEC ENG 3033 Signal Processing III	3
MECH ENG 3101 Applied Aerodynamics	3
MECH ENG 3105 Sustainability and the Environment	3

Level IV

Note: Level IV is indicative only

ELEC ENG 4036A/B Design Project ^	6
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or

ELEC ENG 4039A/B Honours Project ^	6
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Plus courses in the area of:

- Power Quality and Condition Monitoring
- Distributed Generation Technologies
- Management & Professional Practice for Engineers
- Energy Management Economics & Policy
- Wind Turbine Design

^ Students accepted into the Honours stream will take ELEC ENG 4039A/B Honours Project and other students will take ELEC ENG 4036A/B Design Project.

6.5.18.3 Sustainable Energy (Mechanical)

Level I

C&ENVENG 1010 Engineering Mechanics - Statics	3
CHEM ENG 1009 Materials I	3

ELEC ENG 1009 Electrical and Electronic Engineering IA	3
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
MATHS 1013 Mathematics IMA*	3
MECH ENG 1006 Design Graphics and Communication	3
MECH ENG 1007 Engineering Mechanics - Dynamics	3
MECH ENG 1105 Introduction to Sustainable Energy Engineering	3

* See Clause 6.2 regarding Level I Mathematics requirements.

Level II

ELEC ENG 2013 Electric Energy Systems E (swapped with MECH ENG 3105 Sustainability and the Environment)	3
MATHS 2201 Engineering Mathematics I	3
MATHS 2202 Engineering Mathematics II	3
MECH ENG 2002 Stress Analysis and Design	3
MECH ENG 2019 Dynamics & Control I	3
MECH ENG 2021 Thermo-Fluids I	3
MECH ENG 2100 Design Practice	3
MECH ENG 2101 Mechatronics IM (Includes Workshop Practice)	3
MECH ENG 3105 Sustainability & the Environment	3

Level III

CHEM ENG 4048 Biofuels, Biomass & Wastes	3
MECH ENG 3027 Engineering Systems Design and Communication	3
MECH ENG 3028 Dynamics and Control II	3
MECH ENG 3032 Microcontroller Programming	3
MECH ENG 3101 Applied Aerodynamics	3
MECH ENG 3102 Heat Transfer and Thermodynamics II	3
MECH ENG 3105 Sustainability and the Environment (swapped with ELEC ENG 2013)	3
TECHCOMM 3006 Energy Management, Economics and Policy	3

Level IV

MECH ENG 4048 Biofuels, Biomass & Wastes	3
MECH ENG 3027 Engineering Systems Design and Communication	3
MECH ENG 3028 Dynamics and Control II	3
MECH ENG 3032 Microcontroller Programming	3
MECH ENG 3101 Applied Aerodynamics	3
MECH ENG 3102 Heat Transfer and Thermodynamics II	3
MECH ENG 3105 Sustainability and the Environment (swapped with ELEC ENG 2013)	3
TECHCOMM 3006 Energy Management, Economics and Policy	3

Level IV

Note: Level IV is indicative only

Sustainable Energy Engineering courses:

Distributed Generation Technologies	3
Energy Management Economics & Policy	3
Frontier Technologies (Sustainable Energy)	3
Wind Turbine Design	3
MECH ENG 4116 Engineering Management and Quality Systems	3
MECH ENG 4138A/B Sustainable Energy Design Project Level IV ^	6

or

MECH ENG 4139A/B Sustainable Energy Honours Project Level IV ^	6
Elective	3

^ Students accepted into the Honours stream will take MECH ENG 4139A/B Sustainable Energy Honours Project and other students will take MECH ENG 4138A/B Sustainable Energy Design Project.

Electives

MECH ENG 4102 Advanced PID Control	3
MECH ENG 4104 Advanced Topics in Fluid Mechanics	3
MECH ENG 4105 Advanced Vibrations.....	3
MECH ENG 4107 Airconditioning	3
MECH ENG 4111 CFD for Engineering Applications	3
MECH ENG 4112 Combustion Technology & Emission Control	3
MECH ENG 4113 Computational Acoustics	3
MECH ENG 4114 Corrosion: Principles & Prevention	3
MECH ENG 4115 Engineering Acoustics.....	3
MECH ENG 4118 Finite Element Analysis of Structures	3
MECH ENG 4120 Fracture Mechanics.....	3
MECH ENG 4122 Mechanical Signature Analysis	3
MECH ENG 4127 Wind Engineering	3
MECH ENG 4121 Materials Selection & Failure Analysis ⁺	3

6.5.19 Telecommunications Engineering

6.5.19.1 B.E.(Telecommunications)

Students are required to complete satisfactorily courses to the value of 24 units at each of Levels I, II, III and IV:

Level I

COMP SCI 1008 Computer Science IA.....	3
COMP SCI 1009 Computer Science IB	3
ELEC ENG 1009 Electrical & Electronic Engineering IA	3
ELEC ENG 1010 Electrical & Electronic Engineering IB	3
MATHS 1011 Mathematics IA.....	3
MATHS 1012 Mathematics IB	3
PHYSICS 1100 Physics IA.....	3
PHYSICS 1200 Physics IB.....	3

Level II

COMP SCI 2000 Computer Systems UG.....	3
COMP SCI 2004 Data Structures & Algorithms ...	3
ELEC ENG 2007 Signals & Systems.....	3
ELEC ENG 2008 Electronics II.....	3
ELEC ENG 2009 Engineering Electromagnetics...	3

ELEC ENG 2011 Circuit Analysis.....	3
MATHS 2201 Engineering Mathematics I.....	3
MATHS 2202 Engineering Mathematics II.....	3

Level III

COMP SCI 3001 Computer Networks and Applications	3
COMP SCI 3006 Software Engineering & Project ..	3
ELEC ENG 3018 RF Engineering III.....	3
ELEC ENG 3024 Project Management for Electrical Engineering.....	3
ELEC ENG 3027 Control III	3
ELEC ENG 3028 Digital Systems	3
ELEC ENG 3033 Signal Processing III	3
ELEC ENG 3034 Telecommunications III	3

Level IV

Note: Level IV is indicative only—for enrolment information continuing students should visit www.ecms.adelaide.edu.au/enrol/guides/

ELEC ENG 4035 Communications IV	
ELEC ENG 4036A/B Design Project ^	6

or

ELEC ENG 4039A/B Honours Project ^	6
ELEC ENG 4045 Signal Processing IV.....	3
ELEC ENG 4038 Financial Management for Engineers.....	3
ELEC ENG 4040 Management & Professional Practice for Engineers	3
ELEC ENG 4046 Telecommunications IV	3
STATS 4001 Reliability & Quality Control.....	3
Elective.....	3

^ Students accepted into the Honours stream will take ELEC ENG 4039A/B Honours Project and other students will take ELEC ENG 4036A/B Design Project

Electives

APP MTH 4012 Communication Network Design.....	3
COMP SCI 3004 Operating Systems	3
COMP SCI 3005 Computer Architecture	3
ELEC ENG 3021 Electric Energy Systems	3
ELEC ENG 3022 Real Time Systems IV	3
ELEC ENG 4033 Advanced Telecommunications ..	3
ELEC ENG 4037 Digital Microelectronics	3
ELEC ENG 4041 Optical Communication Engineering.....	3
ELEC ENG 4042 Power Electronics & Drive Systems	3
ELEC ENG 4044 RF Engineering IV.....	2
ELEC ENG 4043 Power Quality & Condition Monitoring	3
ELEC ENG 4049 Analog Microelectronic Systems	3

ELEC ENG 4050 Systems Engineering	2	APP MTH 3016 Telecommunications Systems Modelling III	3
ELEC ENG 4051 Introduction to Electronic Defence Systems	3	ELEC ENG 3018 RF Engineering III	3
PURE MTH 3018 Coding & Cryptology III	3	ELEC ENG 3024 Project Management for Electrical Engineers	3
6.5.19.2 B.E.(Telecommunications)/B.A.		ELEC ENG 3027 Control III	3
To satisfy the Arts component of this program, students commencing in 2010 must undertake 30 units of Arts courses, which includes an approved major sequence (24 units). The remaining 6 units can be undertaken at any level. Students should consult the B.A. academic program rules for the list of approved major sequences and specific requirements of each.			
To satisfy the BE (Telecommunications) component of this program students are required to satisfactorily complete the courses listed below:			
Level I			
COMP SCI 1008 Computer Science IA	3	Advanced Level Arts courses	6
COMP SCI 1009 Computer Science IB	3	ELEC ENG 4036A/B Design Project ^	6
ELEC ENG 1009 Electrical & Electronic Engineering IA	3	<i>or</i>	
MATHS 1011 Mathematics IA	3	ELEC ENG 4039A/B Honours Project ^	6
MATHS 1012 Mathematics IB	3	ELEC ENG 3027 Control III	3
MATHS 1013 Mathematics IMA*	3	ELEC ENG 4046 Telecommunications IV	3
PHYSICS 1100 Physics IA	3	<i>Telecommunications Engineering courses:</i>	
PHYSICS 1200 Physics IB	3	Communications IV	3
Level I Arts Course	3	Management & Professional Practice for Engineers	3
* See Clause 6.2 regarding Level I Mathematics requirements.		^ Students accepted into the Honours stream will take ELEC ENG 4039A/B Honours Project Part 1 & 2 and other students will take ELEC ENG 4036A/B Design Project Part 1 & 2.	
Level II		6.5.19.3 B.E.(Telecommunications)/B.Ec.	
Arts Courses	6	To qualify for the combined award of B.E.(Telecommunications) and B.Ec., students are required to complete satisfactorily courses listed below:	
ELEC ENG 2007 Signals & Systems II	3	Level I	
ELEC ENG 2009 Engineering Electromagnetics ...	3	COMP SCI 1008 Computer Science IA	3
ELECENG 2011 Circuit Analysis	3	COMP SCI 1009 Computer Science IB	3
ELEC ENG 1010 Electrical & Electronic Engineering IB	3	ECON 1004 Principles of Microeconomics I	3
MATHS 2201 Engineering Mathematics I	3	ELEC ENG 1009 Electrical & Electronic Engineering IA	3
MATHS 2202 Engineering Mathematics II	3	MATHS 1011 Mathematics IA	3
Level III		MATHS 1012 Mathematics IB	3
Arts courses	6	MATHS 1013 Mathematics IMA*	3
COMP SCI 2000 Computer Systems	3	PHYSICS 1100 Physics IA	3
COMP SCI 2004 Data Structures & Algorithms	3	PHYSICS 1200 Physics IB	3
ELEC ENG 2008 Electronics II	3	* See Clause 6.2 regarding Level I Mathematics requirements.	
ELEC ENG 3028 Digital Systems	3	Level II	
ELEC ENG 3033 Signal Processing III	3	ECON 1000 Principles of Macroeconomics I	3
ELEC ENG 3034 Telecommunications III	3	ECON 2503 Mathematical Economics II <i>or</i>	
Level IV		ECON 2504 Intermediate Econometrics II	3
Arts courses	6	ELEC ENG 1010 Electrical & Electronic Engineering IB	3
COMP SCI 3001 Computer Networks and Applications	3	ELEC ENG 2007 Signals & Systems	3
COMP SCI 3006 Software Engineering and Project	3	ELEC ENG 2009 Engineering Electromagnetics ...	3
		ELEC ENG 2011 Circuit Analysis	3
		MATHS 2201 Engineering Mathematics I	3

MATHS 2202 Engineering Mathematics II.....	3
Level III	
COMP SCI 2000 Computer Systems	3
COMP SCI 2004 Data Structures & Algorithms	3
ELEC ENG 2008 Electronics II.....	3
ECON 2506 Intermediate Microeconomics II.....	3
ECON 2507 Intermediate Macroeconomics II.....	3
ELEC ENG 3028 Digital Systems	3
ELEC ENG 3033 Signal Processing III.....	3
ELEC ENG 3034 Telecommunications III	3

Level IV

COMP SCI 3001 Computer Networks & Applications	3
APP MTH 3016 Telecommunications Systems Modelling III.....	3
COMMGMT 2500 Organisational Behaviour II	3
COMP SCI 3006 Software Engineering & Project	3
ELEC ENG 3018 RF Engineering III.....	3
ELEC ENG 3024 Project Management for Electrical Engineers.....	3
Level III Economics courses*.....	6

* Level III Economics courses chosen from those listed in the Specific Academic Program Rules of the Degree of Bachelor of Economics.

Level V

Note: V is indicative only—for enrolment information continuing students should visit www.ecms.adelaide.edu.au/enrol/guides/

COMP SCI Computer Networks & Applications.....	3
<i>Electrical & Electronic Engineering courses:</i>	
Signal Processing IV	3
ELEC ENG 4036A/B Design Project ^	6
<i>or</i>	
ELEC ENG 4039A/B Honours Project ^	6
<i>Telecommunications Engineering courses:</i>	
Communications IV	3
Reliability & Quality Control	3
Telecommunications IV.....	3
At least 9 units of Level III Economics courses.....	9
^ Students accepted into the Honours stream will take ELEC ENG 4039A/B Honours Project and other students will take ELEC ENG 4036A/B Design Project	

6.5.19.4 B.E.(Telecommunications)/B.Fin. program

To qualify for the combined award of B.E.(Telecommunications) and B.Fin., students are required to complete satisfactorily courses listed below:

Level I

COMP SCI 1008 Computer Science IA.....	3
COMP SCI 1009 Computer Science IB.....	3

ECON 1004 Principles of Microeconomics I.....	3
ELEC ENG 1009 Electrical & Electronic Engineering IA	3
MATHS 1011 Mathematics IA.....	3
MATHS 1012 Mathematics IB.....	3
MATHS 1013 Mathematics IMA*.....	3
PHYSICS 1100 Physics IA.....	3
PHYSICS 1200 Physics IB.....	3

* See Clause 6.2 regarding Level I Mathematics requirements.

Level II

ECON 1000 Principles of Macroeconomics I.....	3
ECON 1009 International Finance Institutions and Markets I.....	3
ELEC ENG 1010 Electrical & Electronic Engineering IB	3
ELEC ENG 2007 Signals & Systems.....	3
ELEC ENG 2009 Engineering Electromagnetics...3	3
ELEC ENG 2011 Circuit Analysis.....	3
MATHS 2201 Engineering Mathematics I.....	3
MATHS 2202 Engineering Mathematics II.....	3

Level III

ACCTING 1002 Accounting for Decision Makers I...3	3
COMP SCI 2000 Computer Systems	3
COMP SCI 2004 Data Structures & Algorithms ...3	3
CORPFIN 2500 Business Finance II	3
ECON 2504 Intermediate Econometrics II.....	3
ELEC ENG 2008 Electronics II.....	3
ELEC ENG 3028 Digital Systems	3
ELEC ENG 3033 Signal Processing III	3

Level IV

CORPFIN 2501 Financial Institutions Management II.....	3
ECON 2508 Financial Economics II.....	3
COMP SCI 3001 Computer Networks & Applications	3
ELEC ENG 3018 RF Engineering III.....	3
ELEC ENG 3024 Project Management for Electrical Engineers	3
ELEC ENG 3033 Signal Processing III.....	3
ELEC ENG 3034 Telecommunications III	3
APP MTH 3012 Financial Modelling: Tools and Techniques.....	3

or

CORPFIN 3502 Options, Futures and Risk Management III.....	3
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Level V

Note: V is indicative only—for enrolment information continuing students should visit www.ecms.adelaide.edu.au/enrol/guides/

Electrical & Electronic Engineering courses:

Communications IV	3
Telecommunications IV.....	3
ELEC ENG 4036A/B Design Project ^	6

or

ELEC ENG 4039A/B Honours Project ^	6
Level III Finance courses	9

^ Students accepted into the Honours stream will take ELEC ENG 4039A/B Honours Project and other students will take ELEC ENG 4036A/B Design Project

6.5.19.5 B.E.(Telecommunications)/LLB

To qualify for the combined award of B.E.(Telecommunications) and LL.B, students are required to complete satisfactorily courses below:

Level I

ELEC ENG 1009 Electrical & Electronic Engineering IA	3
ELEC ENG 1010 Electrical & Electronic Engineering IB	3
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
MATHS 1013 Mathematics IMA*	3
LAW 1501 Foundations of Law	3
LAW 1502 Law of Torts I	3
LAW 1504 Principles of Public Law or equivalent..	3
LAW 1505 Law of Torts II	3

* See Clause 6.2 regarding Level I Mathematics requirements.

Level II

COMP SCI 1008 Computer Science IA	3
COMP SCI 1009 Computer Science IB	3
PHYSICS 1100 Physics IA.....	3
PHYSICS 1200 Physics IB.....	3
Law courses to be advised by Law School	12

Level III

ELEC ENG 2011 Circuit Analysis	3
MATHS 2201 Engineering Mathematics I.....	3
MATHS 2202 Engineering Mathematics II.....	3
ELEC ENG 2007 Signals & Systems.....	3
ELEC ENG 2009 Engineering Electromagnetics...	3
ELEC ENG 2008 Electronics II.....	3
Law courses to be advised by Law School	6

Level IV

COMP SCI 3006 Software Engineering and Project.....	3
APP MTH 3016 Telecommunications Systems Modelling III.....	3
ELEC ENG 3018 RF Engineering III.....	3
ELEC ENG 3027 Control III	3
ELEC ENG 3028 Digital Systems	3

ELEC ENG 3024 Project Management for Electrical Engineers	3
ELEC ENG 3033 Signal Processing III	3
Law courses to be advised by Law School	6

Level V

Note: Level V is indicative only—for enrolment information continuing students should visit www.ecms.adelaide.edu.au/enrol/guides/

Electrical & Electronic Engineering courses:

Communications IV	3
Telecommunications IV.....	3
ELEC ENG 4036A/B Design Project ^	6

or

ELEC ENG 4039A/B Honours Project ^	6
Law courses to be advised by Law School	12

Plus 24 units of Law courses to be specified by the Law School.

^ Students accepted into the Honours stream will take ELEC ENG 4039A/B Honours Project and other students will take ELEC ENG 4036A/B Design Project

6.5.19.6 B.E.(Telecommunications)/B.Ma.& Comp.Sc.

To qualify for both the award of the degree of B.E.(Telecommunications) and the degree of B.Ma.&Comp.Sc. with a Mathematics Major, students are required to complete satisfactorily:

Level I

COMP SCI 1008 Computer Science IA	3
COMP SCI 1009 Computer Science IB	3
ELEC ENG 1009 Electrical & Electronic Engineering IA	3
ELEC ENG 1010 Electrical & Electronic Engineering IB	3
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
MATHS 1013 Mathematics IMA*	3
PHYSICS 1100 Physics IA.....	3
PHYSICS 1200 Physics IB.....	3

* See Clause 6.2 regarding Level I Mathematics requirements.

Level II

COMP SCI 2000 Computer Systems	3
COMP SCI 2004 Data Structures & Algorithms	3
MATHS 2201 Engineering Mathematics I.....	3
MATHS 2202 Engineering Mathematics II.....	3
ELEC ENG 2007 Signals & Systems II.....	3
ELEC ENG 2008 Electronics II.....	3
ELEC ENG 2009 Engineering Electromagnetics...	3
ELEC ENG 2011 Circuit Analysis	3

Level III

COMP SCI 3001 Computer Networks & Applications	3
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COMP SCI 3006 Software Engineering & Project	3
ELEC ENG 3018 RF Engineering III	3
ELEC ENG 3024 Project Management for Electrical Engineering	3
ELEC ENG 3027 Control III	3
ELEC ENG 3028 Digital Systems	3
ELEC ENG 3033 Signal Processing III	3
ELEC ENG 3034 Telecommunications III	3

Level IV

Mathematics/Computer Science courses*

*24 units of additional Mathematics/Computer Science courses of which 18 units must be at Level III.

Level V

Note: Level V is indicative only—for enrolment information continuing students should visit www.ecms.adelaide.edu.au/enrol/guides/

COMP SCI 3001 Computer Networks & Applications	3
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Electrical & Electronic Engineering courses:

Communications IV	3
Digital Systems	3
Financial Management for Engineers	3
Management & Professional Practice for Engineers	3
Signal Processing	3
Telecommunications III	3
ELEC ENG 4036A/B Design Project ^	6

or

ELEC ENG 4039A/B Honours Project ^	6
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^ Students accepted into the Honours stream will take ELEC ENG 4039A/B Honours Project and other students will take ELEC ENG 4036A/B Design Project

6.6 Unacceptable combinations of courses

No student will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

6.7 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award.

7 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

Graduate Attributes

Bachelor of Engineering in Aerospace Engineering

Bachelor of Engineering in Mechanical & Automotive Engineering

Bachelor of Engineering in Mechatronic Engineering

The objectives of the undergraduate programs in Aerospace, Automotive, Mechanical and Mechatronic Engineering are to support the mission of the University of Adelaide to provide an inclusive curriculum that allows all students to learn and progress unhindered through the program, and to produce graduates who:

- Have advanced and internationally recognised skills, understanding and knowledge (scientific knowledge, problem solving skills, IT skills, analytical skills, in-depth technical competence, communication skills and flexibility) necessary for a successful career in Aerospace, Automotive, Mechanical or Mechatronic Engineering
- Have the ability to locate, analyse, evaluate and synthesise information from a wide variety of sources in a planned and timely manner
- Can contribute as effective members of multidisciplinary and multicultural teams with the capacity to be a leader or manager as well as an effective team member with skills of a high order in interpersonal understanding, teamwork and communication
- Have a commitment to continuous learning and the capacity to maintain intellectual curiosity throughout life and are able, by self directed study, to remain up to date with developments in their profession
- Have an ability to apply effective, creative and innovative solutions, both independently and cooperatively, to current and future problems and are able to guide developments in the profession
- Understand the context in which they work (economics, finance, teamwork, competition) while remaining committed to the highest standard of professional endeavour, not losing sight of the need for technical excellence and environmental responsibility
- Can communicate with government and the community on engineering issues
- Are educated in a broad sense, are socially, environmentally, ethically and professionally responsible, understand the need for and the principles of sustainable development, are well informed and have an ability to take a leadership role their place as leaders in the community
- Are familiar with current best practice in aerospace, mechanical or mechatronic engineering
- Are capable of synthesising fundamental engineering science and engineering practice in the creation of engineering systems and have the ability to utilise a systems approach to design and operational performance.

Included in the above attributes are those required by Engineers Australia who accredit our programs. These have been specified by Engineers Australia and require that graduates have:

- Ability to apply knowledge of basic science and engineering fundamentals
- Ability to communicate effectively, not only with engineers but also with the community at large
- In-depth technical competence in at least one engineering discipline
- Ability to undertake problem identification, formulation and solution
- Ability to utilise a systems approach to design and operational performance
- Ability to function effectively as an individual and in multidisciplinary and multicultural teams, with the capacity to be a leader or manager as well as an effective team member
- Understanding of the social, cultural, global, and environmental responsibilities of the professional engineer, and the need for sustainable development
- Understanding of the principles of sustainable development
- Understanding of professional and ethical responsibilities and commitment to them
- Expectations of the need to undertake lifelong learning, and the capacity to do so.

Graduate Attributes

Bachelor of Engineering in Architectural Engineering

Technical Knowledge and Application of Knowledge Skills

- Competence in architectural engineering fundamentals
- Competence in architectural Engineering and at least two of the following areas:
 - structural engineering
 - architectural Design
 - mechanical engineering within buildings
 - geotechnical engineering
- Competence in using computers and information technology effectively
- Ability to apply an integrative or systems approach to solving engineering problems
- Ability to prepare and interpret architectural and engineering sketches and drawings
- Awareness of uncertainty and recognising limitations of architectural and engineering approaches and systems
- Awareness for the need for sustainable systems and principles of sustainable design
- Awareness of the assessment and the management of risk.

Thinking Skills

- Competence in problem identification, formulation and solution
- Competence in critical and independent thinking
- Competence in creative and innovative thinking
- Ability to effectively synthesise information and ideas
- Ability to conduct investigations and research into architectural engineering problems.

Technical Professional Skills

- Familiarity with project management skills
- Awareness of business and financial management
- Awareness of human resources management issues
- Awareness of legal issues in relation to Architectural Engineering.

Personal Skills and Attitudes

- Competence to adapt to a changing society (lifelong learning skills)
- Ability to act in a professional manner
- Ability to communicate effectively with others in the architectural and engineering professions and the community - written, oral and listening skills
- Ability to take on a leadership role
- Ability to work effectively as a member of a team
- Ability to manage effectively the allocation of time in performing tasks
- Ability to work comfortably with other disciplines
- Awareness of architectural and engineering ethics
- Awareness of the social, cultural, political, international and structural context of professional architectural and engineering practices.

Graduate Attributes

Bachelor of Engineering in Avionics and Electrical Systems Engineering

- An advanced level of knowledge and understanding of the theory and practice of avionics and electronic systems engineering and the fundamentals of science and mathematics that underpin these disciplines
- A commitment to maintain an advanced level of knowledge throughout a lifetime of engineering practice and the skills to do so
- The ability to apply knowledge in a systematic and creative fashion to the solution of practical problems
- A commitment to the ethical practice of engineering and the ability to practice in a responsible manner that is sensitive to social, cultural, global, legal, professional and environmental issues
- Interpersonal and communication skills for effective interaction with colleagues and the wider community
- An ability to work effectively both independently and cooperatively as a leader, manager or team member with multidisciplinary or multicultural teams
- An ability to identify, formalise, model and analyse problems
- The capacity to design, optimise, implement, test and evaluate solutions
- An ability to plan, manage and implement solutions that balance considerations of economy, quality, timeliness and reliability as well as social, legal and environmental issues
- Personal attributes including: perseverance in the face of difficulties; initiative in identifying problems or opportunities; resourcefulness in seeking solutions; and a capacity for critical thought
- Skills in the use of advanced technology, including an ability to build software to study and solve a range of problems
- A commitment to the highest standards of professional endeavour and the ability to take a leadership role in the community
- An ability to utilise a systems approach to design and operational performance
- Understanding of the principles of sustainable design and development.

Graduate Attributes

Bachelor of Engineering in Chemical Engineering

- The ability to apply knowledge of basic science and engineering fundamentals
- Ability to communicate effectively, not only with engineers but also with the community at large
- In-depth technical competence in at least one engineering discipline
- Ability to utilise a systems approach to design and operational performance
- Ability to function effectively as an individual and in multidisciplinary and multicultural teams, with the capacity to be a leader or manager as well as an effective team manager
- Understanding the social, cultural, global and environmental responsibilities of the professional engineer, and the need for sustainable development
- Understanding of professional and ethical responsibilities and commitment to them, and expectation of the need to undertake lifelong learning, and capacity to do so
- Ability to focus on the integration of process safety considerations with environmental concerns, waste minimisation, and control system specifications
- Confidence to tackle real-world problems and issues central to engineering and to work as individuals and cooperatively in multidisciplinary and multicultural teams
- Enthusiasm and interest for undertaking life-long learning and the continual updating of their engineering skills.

Graduate Attributes

Bachelor of Engineering in Civil & Environmental Engineering

Technical Knowledge and Application of Knowledge Skills

- Competence in engineering fundamentals
- Competence in environmental engineering plus at least one other of the following areas of civil Engineering:
 - water engineering *or*
 - geotechnical engineering
- Competence in using computers and information technology effectively
- Ability to apply an integrative or systems approach to solving engineering problems
- Ability to prepare and interpret engineering sketches and drawings
- Awareness of uncertainty and recognising limitations of engineering approaches and systems
- Awareness for the need for sustainable systems and principles of sustainable design
- Awareness of the assessment and the management of risk.

Thinking Skills

- Competence in problem identification, formulation and solution
- Competence in critical and independent thinking
- Competence in creative and innovative thinking
- Ability to effectively synthesise information and ideas
- Ability to conduct investigations and research into Civil and Environmental Engineering problems.

Technical Professional Skills

- Familiarity with project management skills
- Awareness of business and financial management
- Awareness of human resources management issues
- Awareness of legal issues in relation to Civil and Environmental Engineering.

Personal Skills and Attitudes

- Competence to adapt to a changing society (lifelong learning skills)
- Ability to act in a professional manner
- Ability to communicate effectively with others in the engineering profession and the community - written, oral and listening skills
- Ability to take on a leadership role
- Ability to work effectively as a member of a team
- Ability to manage effectively the allocation of time in performing tasks
- Ability to work comfortably with other disciplines
- Awareness of engineering ethics
- Awareness of the social, cultural, political, international and environmental context of professional engineering practice.

Graduate Attributes

Bachelor of Engineering in Civil & Structural Engineering

Technical Knowledge and Application of Knowledge Skills

- Competence in engineering fundamentals
- Competence in structural engineering plus at least one other of the following areas of civil engineering:
 - water engineering *or*
 - geotechnical engineering
- Competence in using computers and information technology effectively
- Ability to apply an integrative or systems approach to solving engineering problems
- Ability to prepare and interpret engineering sketches and drawings
- Awareness of uncertainty and recognising limitations of engineering approaches and systems
- Awareness for the need for sustainable systems and principles of sustainable design
- Awareness of the assessment and the management of risk.

Thinking Skills

- Competence in problem identification, formulation and solution
- Competence in critical and independent thinking
- Competence in creative and innovative thinking
- Ability to effectively synthesise information and ideas
- Ability to conduct investigations and research into Civil and Structural Engineering problems.

Technical Professional Skills

- Familiarity with project management skills
- Awareness of business and financial management
- Awareness of human resources management issues
- Awareness of legal issues in relation to Civil and Structural Engineering.

Personal Skills and Attitudes

- Competence to adapt to a changing society (lifelong learning skills)
- Ability to act in a professional manner
- Ability to communicate effectively with others in the engineering profession and the community - written, oral and listening skills
- Ability to take on a leadership role
- Ability to work effectively as a member of a team
- Ability to manage effectively the allocation of time in performing tasks
- Ability to work comfortably with other disciplines
- Awareness of engineering ethics
- Awareness of the social, cultural, political, international and environmental context of professional engineering practice.

Graduate Attributes

Bachelor of Engineering in Computational Engineering

- Knowledge and understanding in computational engineering, especially those areas where engineering interfaces with mathematical sciences, and the skills and commitment to maintain this through a lifetime of engineering practice
- Knowledge, content and techniques of computational engineering in an international context
- Apply basic knowledge of the fundamentals of science, engineering and mathematics
- Model real-world engineering problems and to provide identifiable options, solutions and viabilities
- Capabilities in effective communication, both verbally and in writing, and to also operate in individual and team environments
- Apply high-level skills in the use of advanced technologies so as to produce practical solutions to real-world problems
- Capacity to operate as a professional engineer who takes responsibility for engineering projects including the reliable functioning of materials and technologies in an integrated, complete and consistent system, and the interactions between the technical system and the environment in which it operates
- Ability to take a leadership role in the engineering profession as well as the wider community
- Have a high level of understanding of the interfaces of ethical, social and cultural aspects of humanity.

Graduate Attributes

Bachelor of Engineering in Computer Systems Engineering

Bachelor of Engineering in Electrical & Electronic Engineering

Bachelor of Engineering in Software Engineering

Bachelor of Engineering in Telecommunications Engineering

- An advanced level of knowledge and understanding of the theory and practice of electrical and electronic, computer systems, software or telecommunications engineering and the fundamentals of science and mathematics that underpin these disciplines
- A commitment to maintain an advanced level of knowledge throughout a lifetime of engineering practice and the skills to do so
- The ability to apply knowledge in a systematic and creative fashion to the solution of practical problems
- A commitment to the ethical practice of engineering and the ability to practice in a responsible manner that is sensitive to social, cultural, global, legal, professional and environmental issues
- Interpersonal and communication skills for effective interaction with colleagues and the wider community
- An ability to work effectively both independently and cooperatively as a leader, manager or team member with multidisciplinary or multicultural teams
- An ability to identify, formalise, model and analyse problems
- The capacity to design, optimise, implement, test and evaluate solutions
- An ability to plan, manage and implement solutions that balance considerations of economy, quality, timeliness and reliability as well as social, legal and environmental issues
- Personal attributes including: perseverance in the face of difficulties; initiative in identifying problems or opportunities; resourcefulness in seeking solutions; and a capacity for critical thought
- Skills in the use of advanced technology, including an ability to build software to study and solve a range of problems
- A commitment to the highest standards of professional endeavour and the ability to take a leadership role in the community
- An ability to utilise a systems approach to design and operational performance
- Understanding of the principles of sustainable design and development

These programs also foster the graduate attributes of the University of Adelaide and the Institution of Engineers Australia. These should be read in conjunction with the list above.

Graduate Attributes

Bachelor of Engineering in Mining Engineering

Technical knowledge and application of knowledge skills

- Competence in engineering fundamentals
- Competence in mining engineering
- Competence in using computers and information technology effectively
- Ability to apply an integrative or systems approach to solving engineering problems
- Ability to prepare and interpret engineering sketches and drawings
- Awareness of uncertainty and recognising limitations of engineering approaches and systems
- Awareness for the need for sustainable systems and principles of sustainable design
- Awareness of the assessment and the management of risk.

Thinking skills

- Competence in problem identification, formulation and solution
- Competence in critical and independent thinking
- Competence in creative and innovative thinking
- Ability to effectively synthesise information and ideas
- Ability to conduct investigations and research into Mining Engineering problems.

Technical Professional skills

- Familiarity with project management skills
- Awareness of business and financial management
- Awareness of human resources management issues
- Awareness of legal issues in relation to Mining Engineering.

Personal skills and attitudes

- Competence to adapt to a changing society (lifelong learning skills)
- Ability to act in a professional manner
- Ability to communicate effectively with others in the engineering profession and the community - written, oral and listening skills
- Ability to take on a leadership role
- Ability to work effectively as a member of a team
- Ability to manage effectively the allocation of time in performing tasks
- Ability to work comfortably with other disciplines
- Awareness of engineering ethics
- Awareness of the social, cultural, political, international and environmental context of professional engineering practice.

Graduate Attributes

Bachelor of Engineering in Petroleum Engineering

Educational Goals

- Be practical, employable and qualified petroleum engineers that can successfully pursue careers in the oil and gas production and services industries or other similar pursuits
- Understand the fundamental principles of science and engineering behind the technology of petroleum engineering, in order to keep their education from becoming outdated and to give them the capability of self-instruction
- Serve society by encouraging the ideals of ethical behaviour, professionalism, and environmentally responsible use of natural resources.

Graduates of the program should demonstrate:

- The ability to apply the knowledge of mathematics, chemistry, physics, geology, economics, computing, and engineering to solve petroleum engineering problems
- The ability to formulate and solve petroleum engineering problems using modern techniques, tools and experimental procedures
- The ability to apply the knowledge of modern valuation and decision-making methods to optimise the use of corporate and personal resources
- The ability to design processes or systems to solve petroleum engineering problems.
- The ability to communicate effectively in written and oral form
- The ability to work in teams and interact with colleagues and the public in an ethical, professional and safe manner
- An appreciation of and an ability to continue to engage in lifelong learning.

Graduate Attributes

Bachelor of Engineering in Petroleum Engineering/Mining Engineering

Technical knowledge and application of knowledge skills

- Competence in engineering fundamentals
- Competence in petroleum engineering
- Competence in mining engineering
- Ability to apply an integrative or systems approach to solving engineering problems
- Competence in using computers and information technology effectively
- Awareness of uncertainty and recognising limitations of engineering approaches and systems
- Ability to design processes or systems to solve petroleum engineering problems
- Ability to apply the knowledge of modern valuation and decision-making methods to optimise the use of corporate and personal resources
- Awareness for the need for sustainable systems and principles of sustainable design
- Awareness of the assessment and the management of risk.

Thinking skills

- Competence in problem identification, formulation and solution
- Competence in critical and independent thinking
- Competence in creative and innovative thinking
- Ability to effectively synthesise information and ideas
- Ability to conduct investigations and research into mining and petroleum engineering problems.

Technical professional skills

- Familiarity with project management skills
- Awareness of business and financial management
- Awareness of human resources management issues
- Awareness of legal issues in relation to mining and petroleum engineering.

Personal skills and attitudes

- Ability to work in teams and interact with colleagues and the public in an ethical, professional and safe manner
- Competence to adapt to a changing society and an appreciation of and an ability to engage in lifelong learning
- Ability to communicate effectively with others in the engineering profession and the community - written, oral and listening skills
- Ability to take on a leadership role
- Ability to manage effectively the allocation of time in performing tasks
- Ability to work comfortably with other disciplines
- Awareness of engineering ethics
- Awareness of the social, cultural, political, international and environmental context of professional engineering practice.

Graduate Attributes

Bachelor of Engineering in Sports Engineering

The Bachelor of Engineering in Sports Engineering program is similar in structure to other named Engineering programs hosted by the School of Mechanical Engineering. These programs are specifically designed to address the University's stated Graduate Attributes listed below:

- Knowledge and expertise in sports engineering, especially those areas which interface with mechanical engineering, and the skills and commitment to maintain that through a lifetime of engineering practice
- Apply knowledge of engineering and science fundamentals
- Knowledge, content and techniques of sports engineering in an international context
- A high level of ability in problem identification, formulation and solution together with a systems approach to operational performance
- Capabilities in effective communication, both verbally and in writing, and also to operate in individual and team environments
- Apply high level skills in the use of advanced technologies, computer and software facilities and associated capabilities
- Capacity to operate as a professional engineer who takes responsibility for engineering projects including the reliable functioning of materials and technologies in an integrated, complete and consistent system, and the interactions between the technical system and the environment in which it operates
- Ability to take a leadership role in the engineering profession as well as the wider community.
- Have a high level of understanding of the interfaces with ethical, social and cultural aspects of humanity.

Graduate Attributes

Bachelor of Engineering in Sustainable Energy Engineering

The Bachelor of Engineering in Sustainable Energy program is similar in structure to the existing Engineering programs in Chemical, Electrical and Electronic, and Mechanical Engineering. These programs are specifically designed to address The University's stated Graduate Attributes listed below:

- Knowledge and expertise in sustainable energy engineering, especially those areas which interface with mechanical, chemical and electrical engineering, and the skills and commitment to maintain this through a lifetime of engineering practice
- Apply knowledge of engineering and science fundamentals
- Knowledge, content and techniques of sustainable energy engineering in an international context
- A high level of ability in problem identification, formulation and solution together with a systems approach to operational performance
- Capabilities in effective communication, both verbally and in writing, and also to operate in individual and team environments
- Apply high level skills in the use of advanced technologies, computer and software facilities and associated capabilities
- Capacity to operate as a professional engineer who takes responsibility for engineering projects including the reliable functioning of materials and technologies in an integrated, complete and consistent system, and the interactions between the technical system and the environment in which it operates
- Ability to take a leadership role in the engineering profession as well as the wider community.
- Have a high level of understanding of the interfaces with ethical, social and cultural aspects of humanity.



Bachelor of Mathematical Sciences

1 General

There shall be a degree of Bachelor of Mathematical Sciences and an Honours degree of Bachelor of Mathematical Sciences. A candidate may obtain either degree or both.

2 Duration of program

The program of study for the Bachelor degree shall extend over three years of full-time study or the equivalent part-time study.

3 Assessment and examinations

3.1 A candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.

3.2 In determining a candidate's final result in a course (or part of a course) the examiners may take into account oral, written, practical and other work, provided that the candidate has been given adequate notice at the commencement of the teaching of the course of the way in which such work will be taken into account and of its relative importance in the final result.

3.3 There shall be four classifications of pass in the final assessment of any course for the Bachelor degree, as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, Pass.

There shall also be a classification of Conceded Pass. A candidate may present for the Bachelor degree only a limited number of courses for which a Conceded Pass has been obtained, as specified in the relevant Rule made under these Academic Program Rules.

3.4 A candidate who fails a course for the Bachelor degree or obtains a Conceded Pass result and who desires to take that course again shall, unless exempted wholly or partially therefrom by the Head of the School concerned, again complete the required work in that course to the satisfaction of the teaching staff concerned.

3.5 A candidate who has twice failed any course for the Bachelor degree may not enrol for that course again or for any other course which in the opinion of the Faculty contains a substantial amount of the same material, except by permission of the Faculty and then only under such conditions as the Faculty may prescribe.

4 Qualification requirements

4.1 General: Bachelor of Mathematical Sciences

4.1.1 To qualify for the Bachelor degree a candidate shall, subject to the conditions and modifications specified under 3.3 above, pass courses from 4.2 below to the value of at least 72 units which satisfy the following requirements:

- a A candidate shall pass Level I courses to the value of at least 18 units including:
- COMP SCI 1012 Scientific Computing3
 - MATHS 1008 Mathematics for Information Technology I.....3
 - MATHS 1011 Mathematics IA.....3
 - MATHS 1012 Mathematics IB.....3
 - STATS 1000 Statistical Practice I.....3

- b A candidate shall pass Level II courses to the value of at least 21 units including:
- MATHS 2100 Real Analysis.....3
 - MATHS 2101 Multivariable & Complex Calculus3
 - MATHS 2102 Differential Equations3
 - MATHS 2103 I Probability and Statistics.....3

Electives may be chosen from courses offered by Mathematical Sciences, Computer Science, Humanities and Social Sciences (these will be Advanced level courses), Economics, Commerce and Sciences

- c A candidate shall pass Level III courses to the value of at least 24 units including:
- i at least 18 units of study chosen from Applied Mathematics, and/or Pure Mathematics, and/or Statistics 18
 - ii Communication Skills III.....3
- Other courses may also be chosen from 4.2.3.3, 4.2.3.4, 4.2.3.5, 4.2.3.6 below.

4.1.2 A candidate may present for the degree courses with the result of Conceded Pass within the following limits: courses with an aggregate units value of not more than 6, provided that no course thus presented has a units value of more than 3.

4.1.3 A graduate who wishes to qualify for the degree of Bachelor of Mathematical Sciences and to count towards that degree courses which have already been presented for another degree may do so providing such a candidate presents a range of courses which fulfils the requirements of 4.1.1 above, and undertakes Level II and III courses to the value of at least 24 units from 4.2.2 and 4.2.3 below that have not been presented for any other degree. Of these 24 units, 21 must comprise Level III courses and at most may comprise Level II courses.

- 4.1.4 No candidate will be permitted to count for the degree any course together with any other course which, in the opinion of the Faculty, contains a substantial amount of the same material; and no course may be counted twice towards the degree. No candidate may present the same section of a course in more than one course for the degree.
- 4.1.5 Except with permission of the Faculty, students who have completed at another institution part of the equivalent of the requirements for the Adelaide degree of Bachelor of Mathematical Sciences will be required as a minimum to complete Level III courses from 4.2.3 with an aggregate units value of 24.
- 4.1.6 With special permission of the Faculty a student who has completed most of the courses for the degree of Bachelor of Mathematical Sciences at the University of Adelaide including Level III courses with an aggregate units value of 12 may be permitted to complete the requirements for the degree at another institution. All applications must be made in writing to the Faculty.
- 4.1.7 To complete a major in a Mathematical Sciences discipline, a candidate shall satisfy the criteria specified below and present passes (not Conceded Passes) in the required courses.

Applied Mathematics

Level III courses offered in Applied Mathematics to the value of at least 12 units.

Mathematical Sciences

Candidates who do not otherwise qualify for a major in Applied Mathematics, Pure Mathematics or Statistics and who have successfully completed Level III courses offered in the School of Mathematical Sciences to the value of at least 12 units will qualify for the award of a major in Mathematical Sciences.

Pure Mathematics

Level III courses offered in Pure Mathematics to the value of at least 12 units.

Statistics

Level III courses in Statistics to the value of at least 12 units, including STATS 3001 Statistical Modelling III, and STATS 3006 Mathematical Statistics III, and at least 3 units chosen from:

- APP MTH 3001 Applied Probability III*
- APP MTH 3003 Life Contingencies III*
- APP MTH 3016 Telecommunications Systems Modelling III*
- STATS 3000 Industrial Statistics III
- STATS 3003 Sampling Theory and Practice III
- STATS 3005 Time Series III
- STATS 3008 Biostatistics III
- STATS 3011 Bioinformatics III
- STATS 3012 Elements of Time Series III.

* These courses may be presented towards a major in Statistics or a major in Applied Mathematics but not both.

4.2 Program of study for the degree of Bachelor of Mathematical Sciences

Notwithstanding the Academic Program Rules and syllabuses published in this volume, a number of the courses listed in the program leading to the degree of Bachelor of Mathematical Sciences may not be offered within a given calendar year.

4.2.1 Level I courses

4.2.1.1 Mathematical Sciences courses

COMP SCI 1012 Scientific Computing.....	3
MATHS 1008 Mathematics for Information Technology I.....	3
MATHS 1011 Mathematics IA.....	3
MATHS 1012 Mathematics IB.....	3
STATS 1000 Statistical Practice I.....	3

4.2.1.2 Computer Science courses

COMP SCI 1003 Internet Computing.....	3
COMP SCI 1008 Computer Science IA.....	3
COMP SCI 1009 Computer Science IB.....	3

4.2.1.3 Humanities and Social Sciences courses

Level I courses listed for the degree of B.A. and approved by the Faculty Program Adviser.

4.2.1.4 Economics and Commerce courses

Courses listed for the degree of B.Ec. and approved by the Faculty Program Adviser.

4.2.1.5 Science courses

Level I Science courses listed for the degree of B.Sc. in the Faculty of Sciences.

4.2.1.6 Design Studies courses

Level I Design Studies courses listed for the degree of Bachelor of Design Studies.

4.2.2 Level II courses

4.2.2.1 Mathematical Sciences courses

Applied Mathematics

APP MTH 2105 Optimisation and Operations Research.....	3
MATHS 2104 Numerical Methods.....	3

Mathematical Physics

PHYSICS 2532 Classical Physics II.....	3
PHYSICS 2534 Electromagnetism II.....	3

Mathematics

MATHS 2100 Real Analysis.....	3
MATHS 2101 Multivariable & Complex Calculus...3	
MATHS 2102 Differential Equations.....	3
MATHS 2103 Probability and Statistics.....	3

Pure Mathematics

PURE MTH 2106 Algebra.....	3
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<i>Statistics</i>	
STATS 2107 Statistical Modelling & Inference	3
4.2.2.2 Computer Science	
COMP SCI 2000 Computer Systems	3
COMP SCI 2002 Database & Information Systems	3
COMP SCI 2004 Data Structures & Algorithms	3
COMP SCI 2005 Systems Programming C and C++	3
COMP SCI 2006 Introduction to Software Engineering	3
4.2.2.3 Humanities and Social Sciences courses	
Advanced level courses or Level II language courses listed for the degree of B.A. and approved by the Faculty Program Adviser.	
4.2.2.4 Economics and Commerce courses	
Courses listed for the degree of B.Ec. and approved by the Faculty Program Adviser.	
4.2.2.5 Science courses	
Level II Science courses listed for the degree of B.Sc. in the Faculty of Sciences	
4.2.3 Level III courses	
4.2.3.1 Mathematical Sciences courses	
<i>Applied Mathematics</i>	
APP MTH 3000 Computational Mathematics III	3
APP MTH 3001 Applied Probability III	3
APP MTH 3002 Fluid Mechanics III	3
APP MTH 3003 Life Contingencies III	3
APP MTH 3004 Mathematical Biology III	3
APP MTH 3005 Mathematical Programming III	3
APP MTH 3006 Industrial Mathematics III	3
APP MTH 3010 Variational Methods & Optimal Control III	3
APP MTH 3012 Financial Modelling III	3
APP MTH 3013 Differential Equations III	3
APP MTH 3014 Optimisation III	3
APP MTH 3016 Telecommunication Systems Modelling III	3
APP MTH 3017 Waves III	3
APP MTH 3018 Mathematics of Finance III	3
<i>Mathematical Physics</i>	
PHYSICS 3004 Quantum Mechanics IIIA	3
PHYSICS 3006 Advanced Dynamics and Relativity III	3
PHYSICS 3542 Physics III	6
<i>Pure Mathematics</i>	
PURE MTH 3002 Topology and Analysis III	3
PURE MTH 3003 Number Theory III	3
PURE MTH 3007 Groups and Rings III	3

PURE MTH 3009 Integration and Analysis III	3
PURE MTH 3012 Fields and Geometry III	3
PURE MTH 3018 Coding and Cryptology III	3
PURE MTH 3019 Complex Analysis III	3
PURE MTH 3020 Methods of Modern Mathematics III	3
PURE MTH 3021 Logic and Computability	3

<i>Statistics</i>	
STATS 3001 Statistical Modelling III	3
STATS 3003 Sampling Theory and Practice III	3
STATS 3005 Time Series III	3
STATS 3006 Mathematical Statistics III	3
STATS 3008 Biostatistics III	3
STATS 3011 Bioinformatics III	3
STATS 3012 Elements of Time Series III	3

4.2.3.2 Miscellaneous (non Maths & Comp Sc courses)	
MATHS 3015 Communication Skills III	3
MATHS 4003 Industry Practicum (Maths. & Comp. Sc.)	3

4.2.3.3 Computer Science	
COMP SCI 3001 Computer Networks & Applications	3
COMP SCI 3002 Programming Techniques	3
COMP SCI 3004 Operating Systems	3
COMP SCI 3005 Computer Architecture	3
COMP SCI 3006 Software Engineering & Project...3	
COMP SCI 3007 Artificial Intelligence	3
COMP SCI 3009 Advanced Programming Paradigms	3
COMP SCI 3012 Distributed Systems	3
COMP SCI 3013 Event Driven Computing	3
COMP SCI 3014 Computer Graphics	3

4.2.3.4 Humanities and Social Sciences courses	
Advanced Level or Level III Language courses listed for the degree of B.A. and approved by the Faculty Program Adviser.	

4.2.3.5 Economics and Commerce courses	
Courses listed for the degree of B.Ec. and approved by the Faculty Program Adviser.	

4.2.3.6 Science courses	
Level III Science courses listed for the degree of B.Sc. in the Faculty of Sciences.	

4.3 Honours program

To be eligible to be admitted to an Honours degree program, a candidate shall complete the requirements for a Bachelor degree or equivalent to a standard which is acceptable to the Faculty for the purpose of admission to the Honours degree.

A candidate who satisfies the requirements for Honours shall be awarded the Honours degree,

but the Faculty shall decide within which of the following classes and divisions the degree shall be awarded:

- 1 First Class
- 2A Second Class div A
- 2B Second Class div B
- 3 Third Class
- NAH Not awarded.

4.3.1 The Honours degree of Bachelor of Mathematical Sciences

- 4.3.1.1 A candidate may, subject to the approval of the Head of the Discipline concerned, proceed to the Honours degree in one of the following courses, each with the value of twenty-four units:
- APP MTH 4015 A/B Honours Applied Mathematics
 - APP MTH 4017 A/B Honours Applied Mathematics and Statistics
 - MATHS 4000 A/B Honours Mathematical Sciences
 - PHYSICS 4001 A/B Honours Mathematical Physics
 - PURE MTH 4001 A/B Honours Pure Mathematics and Statistics
 - PURE MTH 4002 A/B Honours Mathematical Physics and Pure Mathematics
 - PURE MTH 4003 A/B Honours Pure and Applied Mathematics
 - PURE MTH 4005 A/B Honours Pure Mathematics
 - STATS 4000 A/B Honours Statistics
- 4.3.1.2 A candidate may, subject to the approval of the Faculty in each case, proceed to the Honours degree in a program taught in a school in another faculty. Such candidates must consult the Head of the School concerned and apply in writing to the Faculty for admission to the Honours program.
- 4.3.1.3 The work of the Honours program must be completed in one year of full-time study, save that on the recommendation of the Head of the School concerned, the Faculty may permit a candidate to spread the work over two years, but no more, under such conditions as it may determine.
- 4.3.1.4 A candidate may not enrol a second time for the Honours program in the same course if he/she:
- a has already qualified for Honours in that course *or*
 - b has presented himself/herself for examination in that course but has failed to obtain Honours *or*
 - c has withdrawn from the program unless the Faculty under 4.3.1.5 permits re-enrolment.
- 4.3.1.5 If a candidate is unable to complete the program for the Honours degree within the time allowed, or if a candidate's work is unsatisfactory at any stage of the program, or if a candidate withdraws from the program, such fact shall be reported to Faculty. The Faculty may permit the candidate to re-enrol for an Honours degree under such conditions (if any) as it may determine.

4.4 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award.

5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.



Bachelor of Mathematical and Computer Sciences

1 General

There shall be a degree of Bachelor of Mathematical and Computer Sciences and an Honours degree of Bachelor of Mathematical and Computer Sciences. A candidate may obtain either degree or both.

2 Duration of program

The program of study for the Bachelor degree shall extend over three years of full-time study or the equivalent part-time study.

3 Assessment and examinations

3.1 A candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.

3.2 In determining a candidate's final result in a course (or part of a course) the examiners may take into account oral, written, practical and other work, provided that the candidate has been given adequate notice at the commencement of the teaching of the course of the way in which such work will be taken into account and of its relative importance in the final result.

3.3 There shall be four classifications of pass in the final assessment of any course for the Bachelor degree, as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, Pass. There shall also be a classification of Conceded Pass. A candidate may present for the Bachelor degree only a limited number of courses for which a Conceded Pass has been obtained, as specified in the relevant Rule made under these Academic Program Rules.

3.4 A candidate who fails a course for the Bachelor degree or obtains a Conceded Pass result and who desires to take that course again shall, unless exempted wholly or partially there from by the Head of the School concerned, again complete the required work in that course to the satisfaction of the teaching staff concerned.

3.5 A candidate who has twice failed any course for the Bachelor degree may not enrol for that course again or for any other course which in the opinion of the Faculty contains a substantial amount of the same material, except by permission of the Faculty and then only under such conditions as the Faculty may prescribe.

4 Qualification requirements

4.1 General: Bachelor of Mathematical and Computer Sciences

4.1.1 To qualify for the Bachelor degree a candidate shall, subject to the conditions and modifications specified under 3.3 above, pass courses from 4.2 below to the value of at least 72 units which satisfy the following requirements:

a A candidate shall pass in Mathematical and Computer Sciences courses to the value of at least 36 units, of which courses to the value of at least 12 units shall be Level III Mathematical and Computer Sciences courses.

b A candidate shall present *either*

MATHS 1011 Mathematics IA *and*

MATHS 1012 Mathematics IB

or

MATHS 1013 Mathematics IMA *and*

MATHS 1011 Mathematics IA *and*

MATHS 2105 Mathematics IIM

for the degree, obtaining a Pass standard or higher for each course presented.

c A candidate shall pass Level I courses to the value of at least 18 units

d A candidate shall pass Level II courses to the value of at least 21 units

e A candidate shall pass Level II and Level III courses to a minimum value of 45 units, with at least 21 units being Level III courses, including MATHS 3015 Communication Skills III.

4.1.2 A candidate may present for the degree courses with the result of Conceded Pass within the following limits: courses with an aggregate units value of not more than 6, provided that no course thus presented has a units value of more than 3.

4.1.3 Subject to 4.1.2, a candidate who has been previously enrolled in an Engineering degree and who has presented the following courses toward a Bachelor of Engineering degree may present them as Mathematical and Computer Sciences courses:

APP MTH 2004 Numerical Methods in Engineering (Chemical).....2

APP MTH 2009 Numerical Analysis & Probability & Statistics2

APP MTH 2010 Differential Equations and Statistical Methods (Civil)3

CHEM ENG 1002 Engineering Computing.....3

CHEM ENG 1008 Engineering Computing.....3

STATS 2004 Laplace Transforms & Probability & Statistical Methods.....2

Mathematics courses:

MATHS 2201 Engineering Mathematics I.....3

MATHS 2202 Engineering Mathematics II.....3

In addition, such a candidate may present Level I and II Engineering courses that are not listed under 4.2.1 and 4.2.2 of these Academic Program Rules. These courses do not count as Mathematical and Computer Sciences courses.

Note (not forming part of the Academic Program Rules)

This clause enables Engineering students to complete the first three years of their program and to qualify for the B.Ma.&Comp. Sc. within four years, by fulfilling the requirements of 4.1.7. Students wishing to qualify for the B.Ma.&Comp.Sc. in this way must apply for admission to the B.Ma.&Comp.Sc. program.

- 4.1.4 Except with the permission of the Faculty, a candidate may not enrol in courses to the value of more than 18 units taught by disciplines other than Applied Mathematics, Pure Mathematics, Statistics and Computer Science before obtaining at least a Pass in MATHS 1011 Mathematics IA with MATHS 1013 Mathematics IMA or MATHS 1012 Mathematics IB with MATHS 1011 Mathematics IA. These courses to the value of not more than 18 units shall not include courses in which a candidate has failed or from which a candidate has withdrawn.
- 4.1.5 A candidate may enrol in no more than 12 Level II units in total offered by the Schools of Economics and Commerce. These courses to the value of not more than 12 units shall not include courses in which a candidate has failed or from which a candidate has withdrawn.
- 4.1.6 Except with the permission of the Faculty, a candidate may not enrol in courses to the value of more than 51 units taught by disciplines other than Applied Mathematics, Pure Mathematics, Statistics and Computer Science. These courses shall not include courses in which a candidate has failed or from which a candidate has withdrawn.
- 4.1.7 A graduate who wishes to qualify for the degree of Bachelor of Mathematical and Computer Sciences and to count towards that degree courses which have already been presented for another degree may do so providing such a candidate presents a range of courses which fulfils the requirements of 4.1.2 above, including Level II and Level III courses from 4.2.2 and 4.2.3 below to the value of at least 24 units, which comprise Level III courses to the value of at least 18 units and Level II courses to the value of at most 6 units which have not been presented for any other degree. This must include Level III Mathematical and Computer Sciences courses to the value of at least 12 units.
- 4.1.8 No candidate will be permitted to count for the degree any course together with any other course which, in the opinion of the Faculty, contains a substantial amount of the same material; and no course may be counted twice towards the degree. No candidate may present the same section of a course in more than one course for the degree.

- 4.1.9 Students who commenced their program of study for the degree prior to 1989 may qualify for the degree by fulfilling the requirements of the regulations and schedules in force prior to 1989, with such modifications as the Faculty may deem necessary to take account of changes to courses from 1989 onwards. Alternatively, students may complete their programs of study under present Academic Program Rules, with such modifications as the Faculty may deem necessary to ensure that courses validly passed under previous regulations and schedules may be counted under the present Rules. For the purposes of this clause the following equivalences will be used:

First year course 6 units at Level I

Second year course 12 units at Level II

Third year course 18 units at Level III.

- 4.1.10 Except with permission of the Faculty, students who have completed at another institution part of the equivalent of the requirements for the Adelaide degree of Bachelor of Mathematical and Computer Sciences will be required as a minimum to complete Level III courses from 4.2.3 with an aggregate units value of 24 including Mathematical and Computer Sciences courses with an aggregate units value of 12.
- 4.1.11 With special permission of the Faculty a student who has completed most of the courses for the degree of Bachelor of Mathematical and Computer Sciences at the University of Adelaide including Level III courses with an aggregate units value of 12 may be permitted to complete the requirements for the degree at another institution. All applications must be made in writing to the Faculty.
- 4.1.12 To complete a major in a Mathematical and Computer Sciences discipline, a candidate shall satisfy the criteria specified below and present passes (not Conceded Passes) in the required courses

Applied Mathematics

Level III courses offered in Applied Mathematics to the value of at least 12 units.

Computer Science

Level II courses offered by the School of Computer Science to the value of 9 units. In addition, students must present Level III Computer Science courses to the value of at least 12 units, including COMP SCI 3006 Software Engineering and Project.

Mathematical Sciences

Students who do not otherwise qualify for a major in Applied Mathematics, Pure Mathematics or Statistics and who have successfully completed Level III courses offered in the School of Mathematical Sciences to the value of at least 12 units will qualify for the award of a major in Mathematical Sciences.

Pure Mathematics

Level III courses offered in Pure Mathematics to the value of at least 12 units.

Statistics

Level III courses in Statistics to the value of at least 12 units, including STATS 3001 Statistical Modelling III, and STATS 3006 Mathematical Statistics III, and at least 6 units chosen from:

- APP MTH 3001 Applied Probability III*
- APP MTH 3003 Life Contingencies III*
- APP MTH 3016 Telecommunications Systems Modelling III*
- STATS 3000 Industrial Statistics III
- STATS 3003 Sampling Theory and Practice III
- STATS 3005 Time Series III
- STATS 3008 Biostatistics III
- STATS 3011 Bioinformatics III
- STATS 3012 Elements of Time Series III

* *These courses may be presented towards a major in Statistics or a major in Applied Mathematics but not both.*

4.2 Program of study for the degree of Bachelor of Mathematical and Computer Sciences

Students are advised that some courses cannot be counted with others towards the degree of Bachelor of Mathematical and Computer Sciences.

Notwithstanding the Academic Program Rules and syllabuses published in this volume, a number of the courses listed in the program leading to the degree of Bachelor of Mathematical and Computer Sciences may not be offered in every calendar year.

4.2.1 Level I courses

4.2.1.1 Mathematical & Computer Sciences courses

COMP SCI 1012 Scientific Computing	3
COMP SCI 1003 Internet Computing	3
COMP SCI 1008 Computer Science IA	3
COMP SCI 1009 Computer Science IB	3
COMP SCI 1010 Puzzle Based Learning	3
MATHS 1008 Mathematics for Information Technology I	3
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
MATHS 1013 Mathematics IMA	3
STATS 1000 Statistical Practice I	3

4.2.1.2 Humanities and Social Sciences courses

Level I courses listed for the degree of B.A. and approved by the Faculty Program Adviser.

4.2.1.3 Economics and Commerce courses

Courses listed for the degree of B.Ec. and approved by the Faculty Program Adviser.

4.2.1.4 Law courses*

LAW 1501 Foundations of Law	3
LAW 1502 Law of Torts I	3
LAW 1504 Principles of Public Law	3
LAW 1505 Law of Torts II	3

* *Available only to students who have been accepted for candidature to the LL.B.*

4.2.1.5 Engineering courses*

Courses listed at Level I of the Bachelor of Engineering and approved by the Faculty Program Adviser.

* *Candidates who have been previously enrolled in an Engineering degree at the University of Adelaide are also directed to Academic Program Rule 4.1.4.*

4.2.1.6 Science courses

Level I Science courses listed for the degree of B.Sc. in the Faculty of Sciences.

4.2.1.7 Design Studies courses

Level I Design Studies courses listed for the degree of Bachelor of Design Studies

4.2.2 Level II courses

4.2.2.1 Mathematical and Computer Sciences courses

Applied Mathematics

APP MTH 2105 Optimisation and Operations Research	3
MATHS 2104 Numerical Methods	3

Computer Science

COMP SCI 2000 Computer Systems	3
COMP SCI 2002 Database & Information Systems	3
COMP SCI 2004 Data Structures & Algorithms	3
COMP SCI 2005 Systems Programming C and C++	3
COMP SCI 2006 Introduction to Software Engineering	3

Mathematical Physics

PHYSICS 2532 Classical Physics II	3
PHYSICS 2534 Electromagnetism II	3

Mathematics

MATHS 2100 Real Analysis	3
MATHS 2101 Multivariable & Complex Calculus	3
MATHS 2102 Differential Equations	3
MATHS 2103 Probability and Statistics	3

Pure Mathematics

PURE MTH 2106 Algebra	3
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Statistics

STATS 2107 Statistical Modelling & Inference	3
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4.2.2.2 Humanities and Social Sciences courses

Advanced Level or Level II Language courses listed for the degree of B.A. and approved by the Faculty Program Adviser.

4.2.2.3 Economics and Commerce courses

Courses listed for the degree of B.Ec; Level II courses listed for the degree of B.Com; Courses for the degree of B.Fin. All Economics and Commerce courses require the approval of the Faculty Program Adviser.

4.2.2.4 Engineering Courses

Candidates who have been previously enrolled in an Engineering degree at the University of Adelaide are directed to Academic Program Rule 4.1.4.

4.2.2.5 Law courses*

LAW 1503 Contracts3

LAW 1506 Property Law3

* Available only to students who have been accepted for candidature to the LL.B.

4.2.2.6 Science courses

Level II Science courses listed for the degree of B.Sc. in the Faculty of Sciences.

4.2.3 Level III courses

4.2.3.1 Mathematical and Computer Sciences courses

Applied Mathematics

APP MTH 3000 Computational Mathematics III.....3

APP MTH 3001 Applied Probability III.....3

APP MTH 3002 Fluid Mechanics III3

APP MTH 3003 Life Contingencies III.....3

APP MTH 3004 Mathematical Biology III.....3

APP MTH 3005 Mathematical Programming III..... 3

APP MTH 3006 Industrial Mathematics III.....3

APP MTH 3010 Variational Methods & Optimal Control III.....3

APP MTH 3012 Financial Modelling III.....3

APP MTH 3013 Differential Equations III.....3

APP MTH 3014 Optimisation III3

APP MTH 3016 Telecommunication Systems Modelling III3

APP MTH 3017 Waves III3

APP MTH 3018 Mathematics of Finance III.....3

Computer Science

COMP SCI 3001 Computer Networks and Applications3

COMP SCI 3002 Programming Techniques3

COMP SCI 3004 Operating Systems3

COMP SCI 3005 Computer Architecture 3

COMP SCI 3006 Software Engineering and Project.....3

COMP SCI 3007 Artificial Intelligence..... 3

COMP SCI 3009 Advanced Programming

Paradigms3

COMP SCI 3012 Distributed Systems.....3

COMP SCI 3013 Event Driven Computing..... 3

COMP SCI 3014 Computer Graphics.....3

Mathematical Physics

PHYSICS 3004 Quantum Mechanics III3

PHYSICS 3006 Advanced Dynamics and Relativity III.....3

PHYSICS 3542 Physics III6

Pure Mathematics

PURE MTH 3002 Topology and Analysis III3

PURE MTH 3003 Number Theory III3

PURE MTH 3007 Groups and Rings III3

PURE MTH 3009 Integration and Analysis III.....3

PURE MTH 3012 Fields and Geometry III.....3

PURE MTH 3018 Coding and Cryptology III3

PURE MTH 3019 Complex Analysis III.....3

PURE MTH 3020 Methods of Modern Mathematics III.....3

PURE MTH 3021 Logic and Computability3

Statistics

STATS 3001 Statistical Modelling III3

STATS 3003 Sampling Theory and Practice III3

STATS 3005 Time Series III3

STATS 3006 Mathematical Statistics III3

STATS 3008 Biostatistics III3

STATS 3011 Bioinformatics III3

STATS 3012 Elements of Time Series III3

4.2.3.2 Miscellaneous

(non Maths & Comp Sc courses)

MATHS 3015 Communication Skills III.....3

MATHS 4003 Industry Practicum (Maths. & Comp. Sc.).....3

4.2.3.3 Humanities and Social Sciences courses

Advanced Level or Level III Language courses listed for the degree of B.A. and approved by the Faculty Program Adviser.

4.2.3.4 Economics and Commerce courses

Courses listed for the degree of B.Ec; Level III courses listed for the degree of B.Com; courses listed for the degree of B.Fin. All Economics and Commerce courses require the approval of the Faculty Program Adviser.

4.2.3.5 Law courses*

LAW 2501 Australian Constitutional Law

LAW 2502 Equity

LAW 2505 Corporate Law

* Available only to students who have been accepted for candidature to the LL.B.

4.2.3.6 Science courses

Level III Science courses listed for the degree of B.Sc. in the Faculty of Sciences.

4.3 Honours programs

To be eligible to be admitted to an Honours degree program, a candidate shall complete the requirements for a Bachelor degree or equivalent to a standard which is acceptable to the Faculty for the purpose of admission to the Honours degree.

A candidate who satisfies the requirements for Honours shall be awarded the Honours degree, but the Faculty shall decide within which of the following classes and divisions the degree shall be awarded:

- 1 First Class
- 2A Second Class div A
- 2B Second Class div B
- 3 Third Class
- NAH Not awarded.

4.3.1 The Honours degree of Bachelor of Mathematical and Computer Sciences

4.3.1.1 A candidate may, subject to the approval of the Head of School concerned, proceed to the Honours degree in one of the following courses, each with the value of twenty-four units:

APP MTH 4011 A/B Honours Applied Mathematics and Computer Science

APP MTH 4015 A/B Honours Applied Mathematics

APP MTH 4016 A/B Honours Applied Mathematics and Genetics

APP MTH 4017 A/B Honours Applied Mathematics and Statistics

APP MTH 4018 A/B Honours Applied Mathematics and Environmental Biology

COMP SCI 4999 A/B Honours Computer Science

MATHS 4000 A/B Honours Mathematical Sciences

PURE MTH 4001 A/B Honours Pure Mathematics and Statistics

PURE MTH 4003 A/B Honours Pure and Applied Mathematics

PURE MTH 4004 A/B Honours Computer Science and Pure Mathematics

PURE MTH 4005 A/B Honours Pure Mathematics

STATS 4000 A/B Honours Statistics

STATS 4003A/B Honours Statistics and Computer Science

STATS 4004A/B Honours Statistics and Genetics

4.3.1.2 A candidate may, subject to the approval of the Faculty in each case, proceed to the Honours degree in a course taught in a department in another faculty. Such candidates must consult the Head of the School concerned and apply in writing to the Faculty for admission to the Honours program.

4.3.1.3 The work of the Honours program must be completed in one year of full-time study, save that on the recommendation of the Head of the School concerned, the Faculty may permit a candidate to spread the work over two years, but no more, under such conditions as it may determine.

4.3.1.4 A candidate may not enrol a second time for the Honours program in the same course if he/she:

- a has already qualified for Honours in that course
or
- b has presented himself/herself for examination in that course but has failed to obtain Honours
or
- c has withdrawn from the program unless the Faculty under 4.3.1.5 permits re-enrolment.

4.3.1.5 If a candidate is unable to complete the program for the Honours degree within the time allowed, or if a candidate's work is unsatisfactory at any stage of the program, or if a candidate withdraws from the program, such fact shall be reported to Faculty. The Faculty may permit the candidate to re-enrol for an Honours degree under such conditions (if any) as it may determine.

4.4 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award.

5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

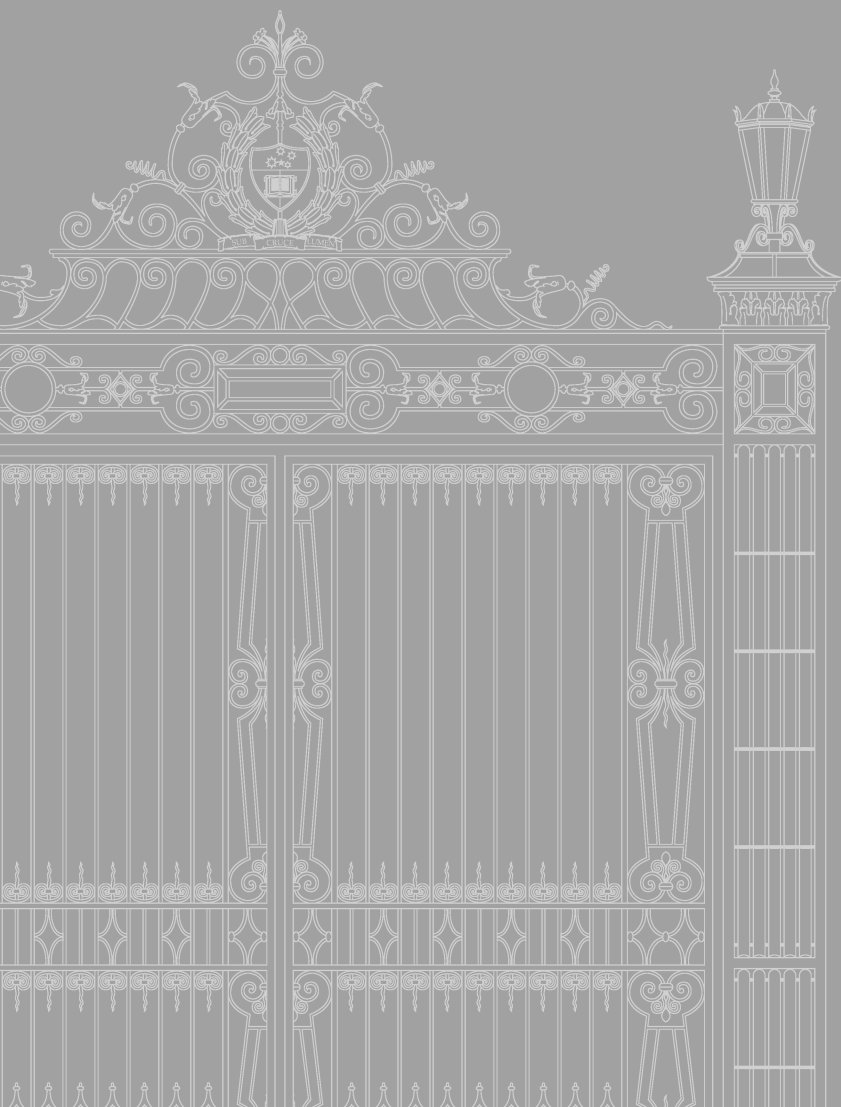
Graduate Attributes

Bachelor of Mathematical and Computer Sciences

Through the Bachelor of Mathematical & Computer Sciences, the School of Mathematical Sciences supports the mission of the University of Adelaide (to advance knowledge, understanding and culture through scholarship, research, teaching and community service of international distinction and integrity) and to provide an inclusive curriculum that allows all students to learn and progress unhindered through the program.

Graduates in the B. Ma & Comp Sci. majoring in Applied Mathematics, Pure Mathematics or Statistics, possess both an in-depth competence in their major and a general skill set making them highly desirable to potential employees. Our graduates:

- Are able to apply knowledge of basic mathematical or statistical fundamentals
- Are able to interpret data or mathematical results, and draw correct conclusions
- Are able to define, formulate and solve a mathematical/statistical problem
- Possess highly developed problem-solving skills suitable for application in a wide range of situations
- Possess the flexibility required to adapt quickly to changes in the working environment, including the emergence of new methods, technologies and theories
- Are able to communicate effectively, not only with other mathematicians and statisticians, but with the community at large on mathematical/statistical issues
- Can contribute effectively as members of multi-disciplinary and multi-cultural teams, with the capacity to be leaders or managers as well as effective team members
- Are able, by self directed study, to remain up to date with developments in their careers/ professions
- Are able to guide developments in their careers/professions.



Academic Program Rules

Faculty of Health Sciences

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Undergraduate Awards

- Degree of Bachelor of Dental Surgery
- Degree of Bachelor of Health Sciences
- Degree of Bachelor of Medicine and Bachelor of Surgery
- Degree of Bachelor of Nursing
- Degree of Bachelor of Nursing (Post Registration)
- Degree of Bachelor of Nursing (Honours)
- Degree of Bachelor of Oral Health
- Degree of Bachelor of Psychological Science
- Degree of Bachelor of Psychology (Honours)
- Honours degree of Bachelor of Health Sciences
- Honours degree of Bachelor of Medical Science
- Honours degree of Bachelor of Science in Dentistry

Notes on Delegated Authority

1. Council has delegated the power to approve minor changes to the Academic Program Rules to the Executive Deans of Faculties.
2. Council has delegated the power to specify syllabuses to the Head of each department or centre concerned, such syllabuses to be subject to approval by the Faculty or by the Executive Dean on behalf of the Faculty.



Bachelor of Dental Surgery

1 General

There shall be a degree of Bachelor of Dental Surgery.

2 Duration of program

The program of study for the degree of Bachelor of Dental Surgery, unless otherwise approved by the Council on the recommendation of the School, shall extend over five years of full-time study.

A candidate may interrupt his or her studies:

- a for the purpose of proceeding to the Honours degree of Bachelor of Science in Dentistry *or*
- b for such period and on such conditions as may in each case be determined by the School.

Students wishing to interrupt their studies must apply for permission and obtain beforehand the approval of the Dean on behalf of the School for leave of absence for a defined period.

A student who leaves the program without approval or who extends leave of absence beyond the time period approved by the Dean shall be deemed to have withdrawn his or her candidature for the degree but shall be permitted to reapply for admission to the program in accordance with the procedures in operation at the time.

Students who have interrupted their studies in the prescribed courses may be required to resume at such a point in the program and/or to undertake such additional or special program of study as the Dean of the School deems appropriate.

3 Enrolment

3.1 Approval of enrolment

The following students must have their programs approved by the Dean or nominee at the time of enrolment in the year concerned:

- a students who have been granted or are seeking status or exemption from these Rules
- b students who are repeating a stream or streams; such students may be required to resume at a point in the program and/or undertake such additional or special program of study as the Dean of the School deems appropriate
- c students who have obtained permission from the School to intermit their program, either to proceed to the Honours degree of Bachelor of Science in Dentistry, or for other reasons approved in each case.

3.2 Prescribed communicable infections policy

The University promotes a pro-active public health approach to prescribed communicable

infections (PCI) such as HIV/AIDS, Hepatitis B and Hepatitis C, and seeks to minimise the impact of these infections on students' academic progress. It offers understanding and practical support to students with such infections, and aims to provide a work and study environment free from discrimination, challenging views that result in discriminatory attitudes toward people with PCIs.

The University also has a legal and ethical obligation to take all reasonable measures to prevent the transmission of prescribed communicable infections among students, staff members and visitors, and recognises that some students with such infections will not be permitted to complete the Bachelor of Medicine and Bachelor of Surgery, the Bachelor of Dental Surgery or other clinical programs offered by the Faculty of Health Sciences.

All prospective medical and dental school students are strongly advised to consult the University's Students With Prescribed Communicable Infections Policy - available through the University's website at www.adelaide.edu.au/policies/591/ - which makes reference to the relevant legislation, elaborates on the reasons for the adoption of this policy, and outlines procedures for implementing the policy.

4 Assessment and examinations

4.1 A candidate may not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the academic staff concerned.

4.2 In determining a candidate's final result in a stream (or part of a stream) the examiners may take into account oral, written, clinical, practical and examination work, provided that the candidate has been given adequate notice at the commencement of the teaching of the stream of the way in which work will be taken into account and of its relative importance in the final result.

4.3 There shall be four classifications of pass in the final assessment of any stream for the Bachelor degree, as follows: High Distinction, Distinction, Credit, Pass (it is intended that the school will apply criterion-referenced rather than norm-referenced standards in determining these grades). It is a requirement that summative stream assessments are completed at a Pass level or better in order to progress to the following year and to meet the academic requirements of the program.

4.4 A candidate who fails any part of the end-of-year stream assessment shall again enrol in and complete the study, clinical practice and assessment requirements for all aspects of the

- revised curriculum stream to the satisfaction of the teaching staff concerned. Such a candidate may be required to attend concurrently such ILAs, class meetings, clinical practice, laboratory and other practical work as the School may prescribe.
- 4.5 A candidate who has twice failed to obtain a Pass or higher in the stream assessment for the Bachelor degree may not enrol for that stream again except by special permission of the School and then only under such conditions as School may prescribe.

5 Qualification requirements

- 5.1 The program for the degree of Bachelor of Dental Surgery shall extend over five years.
- 5.1.1 To qualify for the degree a candidate shall regularly attend ILAs, class meetings, tutorials and clinical practice, do written and laboratory or other practical work, including playing the role of the patient and chairside assistant, to the satisfaction of the academic staff concerned, and pass the prescribed examinations. Students shall attend clinics of the South Australian Dental Service, other teaching hospitals, and health centres, and accredited dental practices in South Australia and interstate, as required for their clinical instruction.
- 5.2 **Rules for the admission of dental students to the practice of the South Australian Dental Service and other teaching hospitals and health centres:**
- 5.2.1 Students must register with the Dental Board of South Australia.
- 5.2.2 Each dental student of the University of Adelaide shall attend clinics of the South Australian Dental Service, other teaching hospitals or health centres and accredited dental practices, as directed by the Dean of the Dental School; and each student shall be admitted to the practice of the South Australian Dental Service or other teaching hospitals or health centres under the disciplinary control of the Chief Executive Officer, in the case of the former, or the Medical Superintendent or Director, in the case of the latter. Students working in accredited dental practices will be under the supervision of a practitioner nominated by the University.
- 5.2.3 No student may introduce visitors into any of the said clinics, hospitals or health centres, or dental practices without permission of the above designated officers.
- 5.2.4 Students shall conduct themselves with propriety and discharge the duties assigned, and pay for or replace any article damaged, lost or destroyed by them together, and make good any loss sustained by their negligence.

- 5.2.5 Each student shall at all times be under the direction and supervision of a duly appointed member of the teaching staff of the University of Adelaide, or a person who has been granted appropriate University status, and shall carry out such work as shall be allotted.
- 5.2.6 No student shall administer treatment to any patient without the approval of an appointed academic staff member or sessional dental educator.
- 5.2.7 Except in the performance of the associated clinical duties, no student may disclose any information whatsoever concerning a patient without the permission of both the patient and the Senior Dental or Medical Officer in charge.
- 5.2.8 No student shall publish a report on any case without the written permission of the Chief Executive Officer in the case of the South Australian Dental Service, or the Medical Superintendent or Director in the case of teaching hospitals or health centres or the supervisor in accredited dental practices, and the Senior Dental or Medical Officer under whose care the patient is or has been.
- 5.2.9 No student shall communicate directly to the press, radio or television any matter concerning the clinical practice of the institution or accredited dental practices to which that student is attached.
- 5.2.10 Students shall pay such fees as are laid down by the South Australian Dental Service in consultation with the Dean of the School of Dentistry; no student shall be admitted to clinics or practices until such fees are paid.
- 5.2.11 Misconduct or infringement of any of these rules, may lead to temporary suspension by the Chief Executive Officer, South Australian Dental Service, or the Medical Superintendent or Director, other teaching hospitals or health centres or by the supervisor in an accredited dental practice. In the case of such temporary suspension, written notice shall immediately be given to the Dean of the School of Dentistry.

5.3 Academic program

5.3.1 Curriculum

- 5.3.1.1 At the First Annual Examination the candidate shall satisfy the examiners in the following stream:
- DENT 1005A/BHO Dental Science and Practice 1
Part 1 & 2.....24
- 5.3.1.2 At the Second Annual Examination the candidate shall satisfy the examiners in each of the following streams:
- DENT Dental Science and Practice 2
Part 1 & 2.....24
- 5.3.1.3 At the Third Annual Examination the candidate shall satisfy the examiners in the following stream:
- DENT Dental Science and Practice 3
Part 1 & 224

- 5.3.1.4 At the Fourth Annual Examination the candidate shall satisfy the examiners in the following stream:
 DENT Dental Science and Practice 4
 Part 1 & 224
- 5.3.1.5 At the Fifth Annual Examination the candidate shall satisfy the examiners in the following stream:
 DENT Dental Science and Practice 5
 Part 1 & 224

5.4 General

A candidate shall complete each annual examination before entering upon the work of the following year's program of study provided that:

- a A candidate may begin the first semester's work in the following year's program of study pending the result of any supplementary examination for which the candidate has been permitted to present.
 - b A supplementary examination shall not be awarded on academic grounds where the student obtained an aggregate score of 5% or more below the passing score.
 - c The annual examination at the end of the fifth year shall be known as the Final Examination. In exceptional circumstances a candidate's results in the Final Examination may be withheld if the candidate's performance in the required clinical work is considered unsatisfactory by the Board of Examiners. In such a case, the candidate will be required to complete satisfactorily such additional work as the Dean of the School may recommend to the Board of Examiners.
- 5.5 No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the School concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

5.6 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award.

6 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

Graduate Attributes

Bachelor of Dental Surgery

Philosophy of Dental Education and expected outcome objectives:

Good oral health is an integral part of good general health. The aim of this program is to enable graduates to register as dentists to practice in Australia. Graduates are encouraged to strive through their advocacy and clinical practice to empower patients and communities to maintain optimal oral health throughout their lives.

University graduate attributes

- Has a knowledge and understanding of the content and techniques of dentistry at levels that are internationally recognised
- Demonstrates the ability to locate, analyse, evaluate and synthesise information from a wide variety of sources in a planned and timely manner
- Able to apply effective, creative, and innovative solutions, both independently and co-operatively, to current and future problems
- Has skills of a high order in interpersonal understanding, team-working and communication
- Is proficient in the appropriate use of contemporary technologies
- Has a commitment to continuous learning and the capacity to maintain intellectual curiosity throughout life
- Is committed to the highest standards of professional endeavour and the ability to take a leadership role in the community
- Has an awareness of ethical, social and cultural issues and their importance in the exercise of professional skills and responsibilities
- Is an effective teacher/mentor.

Clinical competencies

Clinical examination, diagnostic and management skills

- Gathers relevant information on presenting problems from a patient or third party
- Obtains relevant psychosocial and general medical history
- Obtains comprehensive history of patient's oral and dental state
- Performs a comprehensive oral and dental examination and relevant extra oral examination
- Makes an accurate assessment of patient's problems and formulates a differential diagnosis
- Selects and requests appropriate investigations
- Interprets and evaluates data from history, physical examination and other investigations to formulate diagnosis
- Develops and implements comprehensive management plan and monitors its effectiveness
- Participates in health promotion and in prevention of oral disease within and outside traditional practice settings.

Interpersonal skills

- Communicates effectively with patients, their family/friends/carers, irrespective of their age, gender, background or culture
- Communicates and works effectively as a member of a multidisciplinary health team
- Able to educate patients, their family/friends/carers and other members of the health care team
- Identifies potential danger for self and others and takes appropriate action to limit impact
- Able to manage pain, stress and other health issues in self, patients and members of the health care team.

Professional behaviours

- Adopts a questioning and evidence-based approach to own work and that of others
- Works within limits of competence and refers patients appropriately
- Maintains patient confidentiality

Bachelor of Dental Surgery (cont'd)

- Responds appropriately to changes in health care, policy and to advances in scientific knowledge and technology
- Maintains an ethical approach
- Complies with legal and regulatory requirements
- Demonstrates respect for the role and function of all involved in patient care
- Demonstrates a patient-centred approach
- Ensures a safe working environment
- Takes advantage of opportunities to teach
- Fulfils professional obligations at work and in contexts outside work
- Recognises patient neglect or abuse and knows how to report it to relevant authorities.

Practical/Technical Skills

- Ensures optimal patient comfort and privacy
- Prepares patient for, and explains, technical and practical procedures
- Ensures informed consent is obtained for all investigations and treatments
- Undertakes appropriate tests and imaging investigations
- Produces and maintains an accurate, complete and confidential record of patient's care
- Performs preventive, diagnostic, restorative and surgical oral procedures
- Manages complications of oral health procedures
- Implements appropriate health and safety procedures including infection control
- Applies effective practice management skills
- Recognises and manages dental and systemic life threatening emergencies
- Writes appropriate prescriptions and referrals to other health professionals and dental technicians
- Safely administers anaesthesia and sedation.

Dental Sciences

The Dental Sciences provide the underpinning theoretical knowledge required to understand the clinical presentations and the medical and health-related problems that the graduating dentist will have to deal with in a professional context. Students will learn and be assessed on this knowledge in an integrated fashion. The specific outcome objectives in each of the following areas are defined in the core curriculum database, which is available online at www.ngutto.adelaide.edu.au

Biodental Sciences

- Understands and applies knowledge of the relevant aspects of the basic sciences that have a direct impact on present and future dental practice. This includes input from disciplines such as anatomy, physiology, genetics, cellular and molecular biology, biochemistry and embryology. It also includes developments in biotechnology, pharmacology, dental materials and genomics.

Clinical Sciences

- Understands and applies knowledge of the relevant aspects of a wide range of clinical laboratory sciences and dental health sciences within the context of present and future dental practice. This includes input from disciplines such as clinical chemistry, histology, microbiology, immunology, anaesthetics, dental hygiene, clinical pathology, dental surgery and its subspecialties, radiology, therapeutics, and relevant aspects of general internal medicine.

Behavioural Sciences

- Understands and applies knowledge of the determinants of communication, behaviour, attitudes and beliefs in social and cultural contexts. This includes input from disciplines and areas such as psychology, sociology, anthropology, psychobiology, ethics and the law.

Population Health Sciences

- Understands and applies knowledge of the determinants of dental and general health in individuals and human populations (including Indigenous groups) across the life span, and the range of interventions leading to improvements in health care. This includes input from disciplines and areas such as epidemiology, social sciences, public health, biostatistics and health services research.



1 General

There shall be a degree and an Honours degree of Bachelor of Health Sciences. A candidate may obtain either degree or both.

2 Duration of program

The program of study for the Bachelor degree shall extend over three years of full-time study or its part-time equivalent, and that for the Honours degree over one additional year of full-time study, or, subject to approval by the School or Discipline, over two years of part-time study.

Note: Students may commence study in February (Semester 1) or July (Semester 2). However, some elective courses offered in Semester 2 require prerequisite courses offered in Semester 1.

3 Admission

3.1 Status, exemption and credit transfer

3.1.1 Candidates are permitted to count towards the degree courses which have been passed in another degree program, up to a maximum value of 48 units, but will be required to present Level III courses to the value of 24 units which have not been presented for another degree, and in addition satisfy the requirements under Rule 5.1.3.

3.1.2 A student who has withdrawn his or her candidature for the degrees of BDS or MBBS after successfully completing at least three program years may be granted status in this degree for up to 72 units and be deemed to have satisfied the requirements of Rule 5.

3.1.3 A student who has withdrawn his or her candidature for the degrees of BDS or MBBS after completing less than three program years may be granted credit of not more than 36 units towards the program.

3.2 Candidates wishing to interrupt their studies must obtain beforehand the approval of the Bachelor of Health Sciences Program Manager on behalf of the Faculty for leave of absence for a defined period.

4 Assessment and examinations

4.1 A candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned. A candidate who is not eligible to attend for examination shall be deemed to have failed the examination.

4.2 In determining the final result in a course (or part of a course) the examiners may take into account a candidate's oral, written, practical

and examination work, provided that the candidate has been given adequate notice at the commencement of the teaching of the course of the way in which work will be taken into account and of its relative importance in the final result.

4.3 a There shall be four classifications of pass in each course for the Bachelor degree, as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, Pass.

In addition there shall be a classification of Conceded Pass for courses up to a maximum of 6 units for the single degree program, or to a maximum of 3 units for the Health Sciences component of the degree of Bachelor of Health Sciences/Bachelor of Laws. A Conceded Pass may not be presented for a course that is a compulsory component of the program or that forms part of a major in any discipline, nor as a prerequisite.

b A candidate who fails a course or who obtains a Conceded Pass and who desires to take that course again shall, unless exempted wholly or partially there from by the Head of the Discipline concerned, again complete the required work in that course to the satisfaction of the teaching staff concerned.

c A candidate who has twice failed to obtain a pass or higher in the examination in any course for the Bachelor degree may not enrol for that course again or for any other course which in the opinion of the Faculty contains a substantial amount of the same material, except by permission of the Faculty and under such conditions as Faculty may prescribe.

4.4 There shall be three classifications of Pass in the final assessment of any course for the Honours degree as follows: First Class, Second Class, Third Class. The Second Class classification shall be divided into two divisions as follows: Division A and Division B.

5 Qualification requirements

5.1 Academic program for the Bachelor degree

To qualify for the Bachelor degree a candidate shall present passes in courses to the value of 72 units, which satisfy the following:

5.1.1 Level I

a	ANAT SC 1102 Human Biology IA	3
	ANAT SC 1103 Human Biology IB	3
	PUB HLTH 1001 Public Health IA	3
	PUB HLTH 1002 Public Health IB	3

- b Level I courses to the value of 12 units chosen from the Health Sciences courses listed below, or from Level I courses offered by the Faculty of Humanities and Social Sciences, School of Economics, Business School, School of Mathematical and Computer Sciences or Faculty of Sciences that are available to them.
 - PSYCHOL 1000 Psychology IA3
 - PSYCHOL 1001 Psychology IB3
 - PSYCHOL 1002 Exploring Psychology A3
 - PSYCHOL 1003 Exploring Psychology B3

5.1.2 Level II

- a PHARM 2100 Drugs, Chemicals & Health3
- PATHOL 2200 Biology of Disease II3
- b Level II Health Sciences courses to the value of at least 6 units chosen from the following:
 - ANAT SC 2109 Cells, Tissues & Development II3
 - ANAT SC 2200 Functional Human Anatomy II3
 - GEN PRAC 2000HO Indigenous Health II3
 - PHARM 2200 Drugs, Chemicals & the Environment3
 - PSYCHIAT 2200 Emotion, Culture & Medicine II3
 - PHYSIOL 2510 Human Physiology IIA: Heart, Lungs & Neuromuscular3
 - PHYSIOL 2520 Human Physiology IIB: Systems & Homeostasis3
 - PSYCHOL 2004 Doing Research in Psychology3
 - PSYCHOL 2005 Foundations Health & Lifespan Development3
 - PSYCHOL 2006 Foundations of Perception & Cognition3
 - PSYCHOL 2007 Psychology in Society3
 - PUB HLTH 2000 Public Health Inquiry II3
 - PUB HLTH 2001 Public Health Sciences II3
- c Level II courses to the value of 12 units from Health Sciences courses listed in 5.1.2(b) above, or from Level II courses offered by the Faculty of Humanities and Sciences, Business School, School of Economics, School of Mathematical and Computer Sciences or Faculty of Sciences available to them⁺ 12

⁺ A listing of acceptable courses is available from: www.health.adelaide.edu.au/enrol/bhsguide/pdf

5.1.3 Level III

- a Level III courses to the value of not less than 24 units, of which at least 12 units must include Health Sciences courses listed following:

Health Sciences

Anatomical Sciences

ANAT SC 3101 Anthropological and Forensic Anatomy	3
ANAT SC 3102 Comparative Reproductive Biology of Mammals	3
ANAT SC 3103 Integrative and Comparative Neuroanatomy	3
ANAT SC 3104 Structural Cell Biology	3
ANAT SC 3500 Ethics, Science & Society	3

Pathology

PATHOL 3003 General Pathology	6
PATHOL 3100 Topics in Forensic Science	3
PATHOL 3200 Neurological Diseases	3

Pharmacology

PHARM 3010 Pharmacology A III	6
PHARM 3011 Pharmacology B III	6

Physiology

PHYSIOL 3000 Advanced Systems Physiology III	6
PHYSIOL 3001 Neurobiology III	6

Psychology

PSYCHOL 3020 Doing Research in Psychology: Advanced	3
PSYCHOL 3021 Health & Lifespan Development Psychology	3
PSYCHOL 3022 Individual Differences, Personality & Assessment	3
PSYCHOL 3023 Perception & Cognition	3
PSYCHOL 3024 Psychology in Society: Advanced	3
PSYCHOL 3025 Psychology, Ideas & Action ...	3

Public Health

PUB HLTH 3119HO Public Health Internship III	6
PUB HLTH 3122 International Health III	3
PUB HLTH 3500EX Rural Public Health III	3
PUB HLTH 3501 Epidemiology in Action III	3
PUB HLTH 3503 Public Health Theory & Practice III	3
PUB HLTH 3504 Protecting and Promoting Health III	3

Other Health Sciences

OB&GYNAE 3000 Human Reproductive Health III	6
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- b The completion of a major in an area of study offered by either the Faculty of Health Sciences or the School of Molecular and Biomedical Sciences.

A major is defined as the completion, at Pass level or above, of at least 9 units at Level III of courses from within a single discipline or from a recognised interdisciplinary stream.

A major in Public Health consists of 9 units from Level III courses in public health, with the additional proviso that at least one course is from the 'policy-oriented' group and at least one is from the 'epidemiology-oriented' group.

- c An interdisciplinary stream is an area of study concentration across more than one discipline that is recognised by the Faculty of Health Sciences as sharing a common theme. The following are examples of approved interdisciplinary streams:

Neuroscience

ANAT SC 3103 Integrative & Comparative Neuroanatomy	3
PATHOL 3200 Neurological Diseases	3
PHYSIOL 3001 Neurobiology III	6

Reproductive Health

ANAT SC 3102 Comparative Reproductive Biology of Mammals	3
OB&GYN&A 3000 Human Reproductive Health III.....	6

- d Candidates are able to present no more than 12 units of courses at Level III offered outside of the Faculty of Health Sciences by the Business School, School of Economics, School of Law*, School of Mathematical and Computer Sciences, the Faculty of Sciences, or Advanced Level courses from the Faculty of Humanities and Social Sciences[†].

* Candidates for the Bachelor of Health Sciences may only undertake Law courses if they are also candidates for the Bachelor of Laws.

† A listing or acceptable courses is available from: http://health.adelaide.edu.au/school_medsci/bhs/plans/

- 5.1.4 a A candidate may substitute appropriate courses chosen from Level II to fulfil the non-core (ie. elective) course requirements at Level I, or from Level III to fulfil the non-core course requirements at Level I or II.
- b No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

5.2 Cross-institutional study

With prior approval of the Faculty, students may study courses offered at Bachelor degree level or higher by other universities as cross-institutional students, subject to the following provisions:

- 5.2.1 Students must complete all core courses as specified in 5.1 at the University of Adelaide.
- 5.2.2 The following limits shall apply:

Level I: 12 units of cross-institutional studies in any discipline.

Level II or III: 12 units of cross-institutional studies in any discipline.

- 5.2.3 Students undertaking cross-institutional studies must abide by any rules and regulations the host institution shall prescribe.
- 5.2.4 On completion of any cross-institutional course, the student shall be responsible for ensuring that an official transcript or result notice is forwarded to the Faculty.

5.3 Academic program for the Honours degree

To be eligible to be admitted to an Honours degree program, a candidate shall complete the requirements for a Bachelor degree or equivalent to a standard that is acceptable to the Faculty for the purpose of admission to the Honours degree.

A candidate who satisfies the requirements for Honours shall be awarded the Honours degree, but the Faculty shall decide within which of the following classes and divisions the degree shall be awarded:

1	First Class
2A	Second Class div A
2B	Second Class div B
3	Third Class
NAH	Not awarded

- 5.3.1 A candidate may, subject to approval by the Head of the discipline concerned, proceed to the Honours degree in one of the following courses:

ANAES&IC 4000AHO/BHO Honours Anaesthesia & Intensive Care
ANAT SC 4000 A/B Honours Anatomical Sciences
BIOCHEM 400 0A/B Honours Biochemistry
DENT 4100 AHO/BHO Honours Dentistry
GENETICS 4005 A/B Honours Genetics
MEDICINE 4000 AHO/BHO Honours Medicine
MICRO 4000 A/B Honours Microbiology & Immunology
OB&GYN&A 4000 AHO/BHO Honours Obstetrics & Gynaecology
ORT&TRAU 4000 AHO/BHO Honours Orthopaedics & Trauma
PAEDIAT 4000 AHO/BHO Honours Paediatrics
PATHOL 4000 A/B Honours Pathology
PHARM 4000 A/B Honours Pharmacology
PHYSIOL 4000 A/B Honours Physiology
PSYCHIAT 4000 AHO/BHO Honours Psychiatry
PSYCHOL 4000 A/B Honours Psychology
PUB HLTH 4000 AHO/BHO Honours Public Health
SURGERY 4000 AHO/BHO Honours Surgery.

- 5.3.1.1 The program comprises three equally important aspects undertaken concurrently:
- Program of reading in selected fields, and the submission of a series of essays associated therewith
 - Experimental or scholarly work covering a wide range of techniques
 - The undertaking of a research project which will be assigned early in the program and on which a thesis must be submitted.

5.3.1.2 The examination for the degree will consist of a written paper or papers, the essays submitted during the year, the thesis on the research project, an oral examination, and a practical examination if required by the examiners.

5.3.1.3 A candidate may, subject to the approval of the Faculty in each case, proceed to the Honours degree in a discipline in another faculty.

Candidates must consult the Head of the discipline concerned and apply, in writing, to the Faculty before 30 November in the preceding year for admission to the Honours program.

6 Double degree programs

6.1 Status granted in double degree programs

6.1.1 Bachelor of Health Sciences/Bachelor of Laws

A candidate who gained entry to Law studies at the University of Adelaide prior to 2003 and who undertakes Law Studies concurrently with Health Sciences may present 8 units at Level II and 12 units at Level III of Law courses in lieu of electives for the Bachelor of Health Sciences. A candidate who gains entry to Law between 2003 and 2008 may present 3 units of Law courses at Level I, 8 units at Level II and 12 units at Level III in lieu of electives for the Bachelor of Health Sciences. A candidate who gains entry to Law from 2009 onwards may present 12 units of Law courses at Level I, and 12 units of Law courses at Level II in lieu of electives for the Bachelor of Health Sciences.

6.1.2 Bachelor of Health Sciences/ Bachelor of Social Sciences

The Bachelor of Health Sciences may be undertaken with the Bachelor of Social Sciences in a double degree program that is designed to be completed in four years of full-time study (96 units).

Students are required to complete core courses in Social Sciences and a major in Health Sciences. Students who complete the requirements for both degrees are awarded two degrees and two parchments.

6.1.2.1 Academic program

To qualify for the double degree of Bachelor of Social Sciences/Health Sciences, a student shall

present passes in courses to the value of 96 units, which satisfy the following requirements:

Level I

- ANAT SC 1102 Human Biology IA.....3
ANAT SC 1103 Human Biology IB.....3
GEST 1001 Globalisation, Justice and a Crowded Planet.....3
GWSI 1001 Social Sciences in Australia.....3
POLI 1101 Introduction to Australian Politics.....3
PUB HLTH 1001 Public Health IA.....3
PUB HLTH 1002 Public Health IB.....3
- Level I Social Science courses to the value of 3 units chosen from those listed in 5.12.1 of the Academic Program Rules for the Bachelor of Arts.

Level II

- GEST 2032 Social Science Techniques.....3
GWSI 2020 Social Theory in Action3
GWSI 2103 Social Policy and Citizenship3
GWSI 2110 Social Research.....3
PATHOL 2200 Biology of Disease II3
PHARM 2100 Drugs, Chemicals & Health3
- Level II courses to the value of 6 units chosen from those listed in 5.1.2 (b) for the Bachelor of Health Sciences.

Level III

24 units for each award separately as follows:

Bachelor of Social Sciences

- Core courses to the value of 12 units:
GWSI 3017 Social Research Advanced*.....3
Social Science Techniques Advanced*.....3
Social Sciences Internship*6
or
Professional Applications of Applied Methods*.....6
*Courses not offered in 2010

- Advanced Level or Level III courses to the value of 12 units chosen from those listed in 5.12.3 or 5.12.4 for the Bachelor of Arts or other courses offered by the University at Advanced Level or Level III that are available to the candidate..... 12

Bachelor of Health Sciences

- Level III courses to the value of at least 12 units chosen from a single area of study listed in 5.1.3(a) for the Bachelor of Health Sciences, being the Level III component of a major as defined in 5.1.3 (b) or that constitute an interdisciplinary stream as defined in 5.1.3 (c).
- Candidates are able to present no more than 12 units of courses from the Health Sciences Courses at Level III listed in 5.1.3(a), or from Level III courses offered by the Business

School, the School of Economics, the School of Mathematical and Computer Sciences, the Faculty of Sciences, or Advanced Level courses offered by the Faculty of Humanities and Social Sciences.

6.1.3 Bachelor of Health Sciences/Bachelor of Mathematical & Computer Sciences

The Bachelor of Health Sciences may be taken concurrently with the Bachelor of Mathematical and Computer Sciences in a double degree program designed to be completed in four years of study (96 units).

Students who complete the requirements for both degrees are awarded two degrees and two parchments.

This double program has two pathways dependent on the student's level of achievement in SACE Stage 2 Mathematical Studies and Specialist Mathematics.

Students who have successfully completed SACE Stage 2 Mathematical Studies and Specialist Mathematics or equivalent will follow the Maths IA pathway. Students without SACE Stage 2 Specialist Mathematics or equivalent are required to follow the Maths IMA pathway.

In both pathways, the Health Sciences courses remain the same.

6.1.3.1 Academic program

To qualify for the double degree of Bachelor of Health Sciences/Bachelor of Mathematical and Computer Sciences following the Maths IA pathway, a student shall present passes in courses to the equivalent of 96 units that satisfy the following requirements:

Level I

- a ANAT SC 1102 Human Biology IA..... 3
- ANAT SC 1103 Human Biology IB..... 3
- COMP SCI 1012 Scientific Computing 3
- MATHS 1011 Mathematics IA..... 3
- MATHS 1012 Mathematics IB..... 3
- PUB HLTH 1001 Public Health IA..... 3
- PUB HLTH 1002 Public Health IB..... 3
- And one of the following courses:
- STATS 1000 Statistical Practice I..... 3
- STATS 1004 Statistical Practice (Life Sciences) 3

Level II

- b APP MATHS 2105 Optimisation & Operations Research..... 3
- MATHS 2101 Multivariable & Complex Calculus 3
- MATHS 2103 Probability & Statistics..... 3
- PATHOL 2200 Biology of Disease II..... 3
- PHARM 2100 Drugs, Chemicals & Health 3
- STATS 2107 Statistical Modelling & Inference..... 3

- c Level II courses to the total value of 6 units from Health Sciences courses listed in 5.1.2.(b) above.

Level III

24 units for each award separately as follows, to be completed over two years:

Bachelor of Mathematical and Computer Sciences

- d APP MATHS 3001 Applied Probability III 3
- MATHS 2102 Differential Equations 3
- MATHS 3105 Communication Skills III 3
- STATS 3001 Statistical Modelling III..... 3
- STATS 3006 Mathematical Statistics III..... 3
- STATS 3008 Biostatistics III..... 3
- e Level II or III courses to the total value of 6 units from Mathematical Sciences and Computer Sciences.

Bachelor of Health Sciences

- f Level III courses to the value of at least 12 units chosen from those listed in 5.1.3(a) for the Bachelor of Health Sciences.
- g Level III courses to the value of no more than 12 units from those listed in 5.1.3(a), or from Level III courses offered by the Business School, the School of Economics, the Faculty of Sciences, or Advanced Level courses offered by the Faculty of Humanities and Social Sciences.
- h The completion of a major in an area of study offered by either the Faculty of Health Sciences or School of Molecular and Biomedical Sciences, which is defined as the completion, at Pass level or above of at least 9 units of courses from within a single discipline or from a recognised interdisciplinary stream.

Maths IMA Pathway

To qualify for the Double Degree of Bachelor of Health Sciences/Bachelor of Mathematical and Computer Sciences following the Maths IMA pathway, a student shall present passes in courses to the equivalent of 96 units that satisfy the following requirements:

Level I

- a ANAT SC 1102 Human Biology IA..... 3
- ANAT SC 1103 Human Biology IB..... 3
- COMP SCI 1012 Scientific Computing 3
- MATHS 1011 Mathematics IA..... 3
- MATHS 1013 Mathematics IMA 3
- PUB HLTH 1001 Public Health IA..... 3
- PUB HLTH 1002 Public Health IB..... 3
- And one of the following courses:
- STATS 1000 Statistical Practice I..... 3
- STATS 1004 Statistical Practice (Life Sciences) 3

Level II

- b APP MATHS 2105 Optimisation & Operations Research.....3
- MATHS 2101 Multivariable & Complex Calculus3
- MATHS 2105 Mathematics IIM.....3
- PATHOL 2200 Biology of Disease II.....3
- PHARM 2100 Drugs, Chemicals & Health3

c Level II courses to the total value of 6 units from the Health Sciences courses listed in 5.1.2(a) above.

d Level II courses to the total value of 3 units from Mathematical Sciences and Computer Sciences*.

* Students will be unable to take MATHS 2101 until MATHS 2105 has been successfully completed.

Level III

24 units for each award separately as follows, to be completed over two years:

Bachelor of Mathematical and Computer Sciences

- e APP MATHS 3001 Applied Probability III3
- MATHS 2102 Differential Equations3
- MATHS 2103 Probability & Statistics.....3
- MATHS 3105 Communication Skills III3
- STATS 2107 Statistical Modelling & Inference..3
- STATS 3001 Statistical Modelling III.....3
- STATS 3006 Mathematical Statistics III.....3
- STATS 3008 Biostatistics III3

Bachelor of Health Sciences

- f Level III Health Sciences courses to the value of at least 12 units chosen from those listed in 5.1.3(a) for the Bachelor of Health Sciences.
- g Level III courses to the value of no more than 12 units of courses from those listed in 5.1.3(a), or from Level III courses offered by the Business School, School of Economics, Faculty of Sciences, or Advanced Level courses offered by the Faculty of Humanities and Social Sciences.
- h The completion of a major in an area of study offered by either the Faculty of Health Sciences or School of Molecular and Biomedical Sciences, which is defined as the completion, at Pass level or above of at least 9 units of courses from within a single discipline or from a recognised interdisciplinary stream.

6.2 No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculties concerned, contains a substantial amount of the same material, and no course or portion of a course may be counted twice towards an award.

6.3 Cross-institutional study

With prior approval of the Faculty, students may study courses offered at Bachelor degree level by other universities as cross-institutional students, subject to the following provisions:

6.3.1 Students must complete all core courses as specified above at the University of Adelaide.

6.3.2 The following limits apply:

Level I: no cross-institutional study

Levels II and III: up to a maximum of 12 units in lieu of elective courses in Health Sciences.

6.3.3 Students undertaking cross-institutional studies must abide by any rules and regulations the host institution shall prescribe.

6.3.4 On completion of any cross-institutional course, the student shall be responsible for ensuring that an official transcript or result notice is forwarded to the Faculty of Health Sciences.

6.4 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award.

7 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

Graduate Attributes

Bachelor of Health Sciences

The aim of this program is to produce graduates who are committed to advancing knowledge of health and disease and improving the health of the public. Depending on the choice of stream within the program, graduates will have the capacity to work in a variety of health settings, including government, academia, industry, business and the community, in a range of areas such as laboratory or community-based research, provision of health services, surveillance and evaluation, health promotion and policy. Graduates will possess a firm foundation for further study and be equipped for a lifetime of learning.

Knowledge

Detailed knowledge will depend on the choice of subjects undertaken, but every graduate will:

- Have a population as well as an individual view of health
- Understand the biology of the human species, the structure and function of the body and the relationship of the environment to the health of the human being
- Know the biological bases of disease at the tissue, organ and system level and relate this knowledge to the diagnosis and treatment of common diseases
- Possess a basic knowledge of the core disciplines within public health, in particular, epidemiology and social and political analysis, and understand how these disciplines can contribute to protecting the health of the public
- Be aware of contemporary issues in health, including the leading causes of morbidity and mortality and potential for prevention.

Intellectual and Social Capabilities

- An ability to read and interpret material relevant to health
- An ability to communicate in writing and orally with a range of audiences concerning health matters
- An ability to critically appraise and synthesise a body of work
- An ability to employ methods to collect, process and analyse materials and data relevant to research on health and disease
- An ability to articulate the practical implications of theory and research in health
- An ability to draw on and apply knowledge gained from historical and comparative perspectives
- An ability to work both independently and as an effective team member.

Attitudes and Values

- A sensitivity to the cultural and ethical issues that may impact on the way that knowledge acquired within health is interpreted and used
- A respect for people whatever their age, gender, abilities, social circumstances or cultural background
- Commitment to addressing social inequalities which underpin differences in health experiences
- An appreciation of the value of an inquiring mind and of the questioning of the status quo in science and society.

Graduate Attributes

Bachelor of Health Sciences/ Bachelor of Mathematical and Computer Sciences

Because students are undertaking a double degree, and completing all elements required for both programs, they would be expected to have the Graduate Attributes from both programs as listed below

Health Sciences

The aim of this program is to produce graduates who are committed to advancing knowledge of health and disease and improving the health of the public. Depending on the choice of stream within the program, graduates will have the capacity to work in a variety of health settings, including government, academia, industry, business and the community, in a range of areas such as laboratory or community-based research, provision of health services, surveillance and evaluation, health promotion and policy. Graduates will possess a firm foundation for further study and be equipped for a lifetime of learning.

Knowledge

Detailed knowledge will depend on the choice of subjects undertaken, but every graduate will:

- Have a population as well as an individual view of health
- Understand the biology of the human species, the structure and function of the body and the relationship of the environment to the health of the human being
- Know the biological bases of disease at the tissue, organ and system level and relate this knowledge to the diagnosis and treatment of common diseases
- Possess a basic knowledge of the core disciplines within public health, in particular, epidemiology and social and political analysis, and understand how these disciplines can contribute to protecting the health of the public
- Be aware of contemporary issues in health, including the leading causes of morbidity and mortality and potential for prevention.

Intellectual and Social Capabilities

- An ability to read and interpret material relevant to health
- An ability to communicate in writing and orally with a range of audiences concerning health matters
- An ability to critically appraise and synthesise a body of work
- An ability to employ methods to collect, process and analyse materials and data relevant to research on health and disease
- An ability to articulate the practical implications of theory and research in health
- An ability to draw on and apply knowledge gained from historical and comparative perspectives
- An ability to work both independently and as an effective team member.

Attitudes and Values

- A sensitivity to the cultural and ethical issues that may impact on the way that knowledge acquired within health is interpreted and used
- A respect for people whatever their age, gender, abilities, social circumstances or cultural background
- Commitment to addressing social inequalities that underpin differences in health experiences
- An appreciation of the value of an inquiring mind and of the questioning of the status quo in science and society.

Bachelor of Health Sciences/ Bachelor of Mathematical and Computer Sciences
(cont'd)

Mathematical and Computer Sciences

Mathematical and Computer Sciences graduates:

- Are able to apply knowledge of basic mathematical or statistical fundamentals
- Are able to interpret data or mathematical results, and draw correct conclusions
- Are able to define, formulate and solve mathematical/statistical problems
- Possess highly developed problem-solving skills suitable for application in a wide range of situations
- Possess the flexibility required to adapt quickly to changes in the working environment, including the emergence of new methods, technologies and theories
- Are able to communicate effectively, not only with other mathematicians and statisticians, but also with the community at large on mathematical/statistical issues
- Can contribute effectively as members of multidisciplinary and multicultural teams, with the capacity to be leaders or managers as well as effective team members
- Are able, by self directed study, to remain up to date with developments in their careers/ professions
- Are able to guide developments in their careers/professions.

1 Duration of program

- 1.1 The program of study for the degrees of Bachelor of Medicine and Bachelor of Surgery, unless otherwise approved by the Council on the recommendation of the Faculty, shall extend over six years of full-time study.
- 1.2 A candidate may interrupt the program:
 - a for the purpose of proceeding to the Honours degree of Bachelor of Medical Science *or*
 - b for such period and on such conditions as may in each case be determined by the Faculty.
- 1.3 Students wishing to interrupt their studies in accordance with 1.2(b) above must obtain beforehand the approval of the Executive Dean on behalf of the Faculty for leave of absence for a defined period.
- 1.4 A student who leaves the program without approval or who extends a leave of absence beyond the time period approved under 1.2(b) above shall be deemed to have withdrawn his or her candidature for the degrees but may reapply for admission to the program in accordance with the procedures in operation at the time.
- 1.5 Students who have interrupted their studies in the prescribed courses may be required to resume at such a point in the program and/or to undertake such additional or special program of study as the Executive Dean of the Faculty deems appropriate

2 Enrolment

2.1 Prescribed communicable infections policy

The University promotes a pro-active public health approach to prescribed communicable infections (PCI) such as HIV/AIDS, Hepatitis B and Hepatitis C, and seeks to minimise the impact of these infections on students' academic progress. It offers understanding and practical support to students with such infections, and aims to provide a work and study environment free from discrimination, challenging views that result in discriminatory attitudes toward people with PCIs.

The University also has a legal and ethical obligation to take all reasonable measures to prevent the transmission of prescribed communicable infections among students, staff members and visitors, and recognises that some students with such infections will not be permitted to complete the Bachelor of Medicine, Bachelor of Surgery, the Bachelor of Dental Surgery or other clinical programs offered by the Faculty of Health Sciences.

All prospective medical and dental school students are strongly advised to consult the University's Students With Prescribed Communicable Infections Policy - available through the University's website at www.adelaide.edu.au/policies/591/ - which makes reference to the relevant legislation, elaborates on the reasons for the adoption of this policy, and outlines procedures for implementing the policy.

3 Assessment and examinations

- 3.1 A candidate shall not present for the examinations unless the candidate has completed to the satisfaction of the professors and lecturers concerned, prior to the beginning of the examination, the programs of study and practice prescribed for it.
- 3.2 The examiners in any course may take into consideration written or practical work required of candidates during the program of study and practice and the results of other examinations in the courses.
- 3.3 A candidate who fails to pass in an examination shall, before presenting for the examination again, attend again such part or parts of the program of study and practice leading to that examination as the Faculty may direct.
- 3.4
 - a Candidates who pass and satisfy the assessment requirements in the whole of an examination prescribed in the Academic Program Rules shall be awarded a non-graded pass.
 - b For the elective course/s undertaken, candidates who pass will be awarded a graded or ungraded result in accordance with the grading scheme approved for the courses/s concerned.
- 3.5
 - a The Board of Examiners may grant a candidate who has been prevented by illness or other sufficient cause from sitting for the whole or part of an examination permission to sit for a special or supplementary examination, the extent of such special or supplementary examination to be determined by the Board in each case.
 - b On passing in a special or supplementary examination granted under this Academic Program Rule a candidate shall be deemed to have completed the whole of the examination; but if the candidate fails in such special or supplementary examination the candidate shall take again, and pass in, the whole of the examination before proceeding with the programs of study and practice leading to the next examination.

- c A candidate granted permission to sit for a supplementary or special examination may enter provisionally upon the programs of study and practice leading to the next examination pending publication of the result of the supplementary examination.

3.6 Attendance requirements

To qualify for the degrees a candidate must attend regularly such tutorials and seminar work, satisfactorily perform such laboratory, practical, clinical and written work, and pass such examinations as the Faculty may from time to time prescribe.

4 Qualification requirements

4.1 Program of study and examinations

4.1.1 To qualify for the degrees of Bachelor of Medicine and Bachelor of Surgery, a candidate shall complete the requirements of the six Examinations by:

- a regularly attending lectures and CBL sessions
- b satisfactorily participating in tutorial, practical and project work, clinical programs and attachments *and*
- c satisfactorily completing the range of assessment tasks, including examinations, that are prescribed in the Syllabus for each of the courses of the Examinations as set out in 4.2.

Students will be required to undertake and pass a total of 24 units of courses during each of Years 1, 2 and 3 of the MBBS program. At the time of enrolment, students will be advised how these units are to be allocated.

In addition, after the end of Year 5 and before commencing the study and practice for the final Year 6 program, a student is required to undertake an external elective approved by the Dean of Medicine.

- 4.1.2 A student entering the First Year of the program shall be required to undertake an English Language Proficiency assessment. If deficiencies in the written and/or oral use of English are identified through the initial assessment or through the assessment tasks prescribed for the courses of the First Year Examination, the School may require the student to participate in a Language Development Program in parallel with the courses of study for the degree.
- 4.1.3 A candidate shall normally pass the whole of one Examination before entering into the program of study and practice leading to the next examination. A candidate who fails an Examination will normally be required to repeat the study and clinical practice and the assessment requirements of all courses set out for the Examinations in 4.2 below.

4.2 Academic program

4.2.1 The following are the courses of study for the six years of the degrees of Bachelor of Medicine and Bachelor of Surgery:

MEDIC ST 1000 A/B First Year Examination

Core courses

MEDIC ST 1101 A/B Scientific Basis of Medicine I.....	6
MEDIC ST 1102 A/B Clinical Skills I	6
MEDIC ST 1103 A/B Medical Professional & Personal Development I	6

Students must also enrol in, and pass:

Semester 1

BIOLOGY 1101MED Molecules, Genes & Cells A.....	3
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Semester 2

BIOLOGY 1201MED Biology I: Human Perspectives.....	3
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MEDIC ST 2000 A/B Second Year Examination

Core courses

Medic St 2101 A/B Scientific Basis of Medicine II.....	6
Medic St 2102 AHO/BHO Clinical Skills II.....	6
Medic St 2103 A/B Medical Professional & Personal Development II	6

Students must also enrol in, and pass:

Semester 1

MICRO 2506 Medical Microbiology and Immunology II.....	3
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Semester 2

Students will be required to undertake and pass an additional 3 units of elective courses as advised in the MBBS enrolment instructions.

MEDIC ST 3000 A/B Third Year Examination

Core courses

MEDIC ST 3101 A/B Scientific Basis of Medicine III.....	6
MEDIC ST 3102 A/B Clinical Skills III	6
MEDIC ST3103 A/B Medical Professional & Personal Development III	6

Students will be required to undertake and pass an additional 6 units of courses as advised in the MBBS enrolment instructions.

MEDIC ST 4000 A/B Fourth Year Examination

Medic ST 4005 AHO/BHO Medical Home Unit.....	5
MEDIC ST 4006 AHO/BHO Surgical Home Unit	5
MEDIC ST 4007 AHO/BHO Psychological Health	3
MEDIC ST 4008 AHO/BHO Musculoskeletal Medicine	3

MEDIC ST 4012 AHO/BHO Common Program.....	2
MEDIC ST 4013 AHO/BHO Medical & Scientific Attachment I	3
MEDIC ST 4014 AHO/BHO Medical & Scientific Attachment II	3

MEDIC ST 5000 A/B Fifth Year Examination

MEDIC ST 5005 AHO/BHO Medical & Scientific Attachment 3	2
MEDIC ST 5006 AHO/BHO Medical & Scientific Attachment 4	2
MEDIC ST 5007 AHO/BHO Medical & Scientific Attachment 5	2
MEDIC ST 5009 AHO/BHO Geriatrics and General Practice	4
MEDIC ST 5010 AHO/BHO Paediatrics and Child Health	5
MEDIC ST 5011 AHO/BHO Human Reproductive Health	5
MEDIC ST 5012 AHO/BHO Common Program.....	2
MEDIC ST 5013 External Elective	
MEDIC ST 5014 AHO/BHO Anaesthesia, Pain Medicine & Intensive Care V	2

MEDIC ST 6000 Final Sixth Year Assessment

MEDIC ST 6009 AHO/BHO Medicine Internship & Common Program VI	4
MEDIC ST 6010 AHO/BHO Surgery Internship VI & Specials Week VI	4
MEDIC ST 6011 AHO/BHO Emergency Department Internship VI	4
MEDIC ST 6012 AHO/BHO Medicine/Surgery SCAP VI	4
MEDIC ST 6013 AHO/BHO Primary Care SCAP VI	4
MEDIC ST 6014 AHO/BHO Psychiatry SCAP VI.....	4

4.3 Honours degree of Bachelor of Medical Science

A candidate may intermit the course for the degrees of Bachelor of Medicine and Bachelor of Surgery for the purpose of proceeding to the Honours degree of Bachelor of Medical Science; or for such period and on such conditions as may in each case be determined by the School.

4.4 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the School concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

4.5 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award

of the University shall be admitted to that award.

5 Rules for the admission of medical students to the practice of the teaching hospitals, health centres and the Institute of Medical and Veterinary Science:

- 1 Medical students admitted to the practice of a Teaching Hospital or Health Centre shall be under the control of the Medical Director in relation to matters of common discipline; the University will otherwise be responsible for matters related to education.
- 2 No student shall publish the report of any case without the permission of the Hospital Board or Health Centre Management Committee and the Senior Medical Officer under whose care the patient is or has been.
- 3 Except in the performance of his clinical duties, no student may disclose any information whatsoever concerning a patient without the permission of both the patient and the Senior Medical Officer in charge.
- 4 No student may communicate directly or indirectly to the Press, radio or television any matter concerning the clinical practice of the Institution to which he or she is attached.
- 5 No student may introduce visitors into any Hospital or Health Centre to the practice of which he or she has been admitted, without the permission of the Medical Director or his deputy.
- 6 Students shall pay such fees as are laid down from time to time by the University in conjunction with the Teaching Hospitals or Health Centres. Fees are payable directly to the University; no student will be admitted to a Teaching Hospital or Health Centre until such fees are paid.
- 7 Students shall discharge the duties assigned to them, and pay for or replace any article damaged or lost or destroyed by them through negligence or misconduct.
- 8 During any period of residence the student will comply with the directions of the Medical Director of the Hospital or Health Centre in respect of discipline and general conduct.
- 9 Subject to rule 10 any student infringing any of these rules or the rules of the Hospital or Health Centre, or otherwise misconducting himself/herself may be suspended or dismissed by the Board of the Hospital or Health Centre from the practice of the Hospital or Health Centre. If he/she is so dismissed he/she shall forfeit all payments that may have been made and all rights accruing therefrom.
- 10 In all instances where a student has been either suspended or dismissed from the practice of the Hospital or Health Centre his/her case shall be investigated by an Investigation Committee on

which there shall be a representative appointed by the Hospital Board, a Senior Consultant Clinical Teacher nominated by the Head (or his/her deputy) of the appropriate Staff Committee of the Hospital or Health Centre concerned, a representative appointed by the University, and the Executive Dean of the Faculty of Health Sciences (or his/her deputy). The committee should also normally include a representative of the Adelaide Medical Students' Society (e.g. a student member of Faculty of Medicine). The Investigating Committee shall make its recommendation to the Board of the Hospital or Health Centre Management Committee concerned and to the Council of the University for confirmation or otherwise.

These rules apply equally to medical students who use the facilities of the IMVS where the Director of the Institute has the authority given in these Rules to the Medical Director of a Teaching Hospital, and where the Council of the Institute replaces the Board of the hospital.

6 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the School in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

Graduate Attributes

Bachelor of Medicine & Bachelor of Surgery

Our undergraduate program at the University of Adelaide Medical School seeks to produce an undifferentiated doctor with the abilities and skills appropriate for both the seamless transition to postgraduate training, and to continue into advanced training programs for the full spectrum of career paths.

The University of Adelaide Medical graduates will be distinguished by:

- Being thoroughly versed in the skills and application of adult learning
- Deriving enjoyment from the process of learning and the pursuit of knowledge and understanding (where knowledge is defined as information that can be used effectively in familiar and unknown situations)
- Having a superior ability to integrate knowledge across disciplines
- The ability to apply basic scientific knowledge to facilitate understanding and management in clinical practice
- A highly developed sense of their 'duty of care' for their patients.

At the end of the program of undergraduate medical education the student will have acquired through the Scientific Basis of Medicine, Medical Personal and Professional Development, and Clinical Practice streams the attitudes, knowledge and understanding, and skills essential to the practice of medicine, including:

Medical Personal and Development

- Respect for patients and colleagues that encompasses, without prejudice, diversity of background and opportunity, language, culture and way of life
- Recognition of patients' rights in all respects, and particularly in regard to privacy, confidentiality and informed consent
- Ability to cope with uncertainty and adapt to change
- Awareness of the moral and ethical responsibilities involved in individual patient care and in the provision of care to populations of patients
- Development of the capacity of self-audit and for participation in the peer-review process
- Capacity to recognise and accept limitations in one's knowledge, understanding and clinical skills
- Ability to work effectively as a member of a team
- Willingness to use his or her professional capabilities to contribute to community welfare as well as to individual patient welfare by the practice of preventive medicine and the encouragement of health promotion
- Acceptance and practice of the theories and principles that govern ethical decision making, and of the major ethical dilemmas in medicine, particularly those that arise at the beginning and end of life and those that arise from the rapid expansion of the knowledge of genetics
- Ability to retrieve (from electronic databases and other resources), manage, and utilise biomedical information for solving problems and making decisions that are relevant to the care of individuals and populations
- Acceptance of the responsibility to contribute as far as possible to the advancement of medical knowledge and research in order to benefit medical practice and further improve the quality of patient care
- Willingness to contribute to teaching and the professional development of others
- Ability to communicate effectively in writing with patients, colleagues and others in carrying out their responsibilities.

Bachelor of Medicine & Bachelor of Surgery (cont'd)

Scientific Basis of Medicine

Knowledge and understanding of:

- The normal structure and function of the body (as an intact organism) and of each of its major organ systems
- The molecular, biochemical, and cellular mechanisms that are important in maintaining the body's homeostasis
- The various causes (genetic, developmental, metabolic, toxic, microbiologic, autoimmune, neoplastic, degenerative, and traumatic) of maladies and the ways in which they operate on the body (pathogenesis)
- The altered structure and function (pathology and pathophysiology) of the body and its major organ systems that are seen in various diseases and conditions
- Problems that are presented to doctors and the range of solutions that have been developed for their recognition, investigation, prevention and treatment
- How disease presents in patients of all ages, how patients react to illness or the belief that they are ill, and how illness behaviour varies between social and cultural groups
- The environmental, social and psychological determinants of disease, the principles of disease surveillance and the means by which diseases may spread, and the analysis of the burden of disease within the community
- The principles of disease prevention and health promotion
- Various approaches to the organisation, financing, and delivery of health care
- Understanding of the power of the scientific method in establishing the causation of disease and efficacy of traditional and non-traditional therapies
- Explaining mechanisms by linking basic sciences to symptoms and signs
- Integrating knowledge from different areas and applying it to patient management
- Understanding of the physical and psychological influences operating throughout the human life cycle, including development, reproduction and senescence
- Demonstrating understanding of the factors that influence the cost-effective practice of medicine including the role of the history and examination and of appropriate investigation and management.

Clinical Practice

- Honesty and integrity in all interactions with patients' families, colleagues, and others with whom physicians must interact in their professional lives
- Understanding the importance of effective communication to the practice of "good" medicine and the avoidance of litigation
- Ability to effectively and empathetically communicate with both patients and their relatives and with other professionals, both medical and non-medical
- Knowledge and understanding of the principles of therapy, including:
 - i The management of acute illness
 - ii The actions of drugs, their prescription and their administration
 - iii The care of the chronically ill and the disabled,
 - iv Rehabilitation, institutional and community care,
 - v The amelioration of suffering and the relief of pain,
 - vi The care of the dying.
- Ability to obtain an accurate medical history that covers all essential aspects of the history, including issues related to age, gender, and socio-economic status

Bachelor of Medicine & Bachelor of Surgery (cont'd)

- Ability to perform both complete and an organ system specific examination, including a mental status examination
- Ability to perform routine technical procedures
- Ability to interpret the results of commonly used, including effective and most cost efficient, diagnostic procedures
- Application of the knowledge and understanding of the most frequent clinical, laboratory, roentgenologic, and pathologic manifestations of common maladies
- Ability to reason deductively in solving clinical problems
- Ability to construct appropriate management strategies (both diagnostic and therapeutic) for patients with common conditions, both acute and chronic, including medical, psychiatric, and surgical conditions, and those requiring short- and long-term rehabilitation
- Ability to recognise patients with immediately life threatening cardiac, pulmonary or neurological conditions regardless of etiology, and to institute appropriate initial therapy
- Ability to recognise and outline an initial course of management for patients with serious conditions requiring critical care.



Bachelor of Nursing

1 Duration of program

The program of study shall extend over three years of full-time study.

2 Admission

- 2.1 The admission requirements for the degree are subject to selection procedures currently operating in the Discipline.

International students (i.e. students not born or educated at primary or secondary school level in Australia or New Zealand) undertaking the Bachelor of Nursing program will be required to obtain an International Language Testing System (IELTS) score of 7 or greater, or an Occupational English Test (OET) for Nurses of a B pass or higher. The test must be undertaken within two years of applying to the Nurses and Midwifery Board of South Australia for registration, or enrolment.

- 2.2 Status, exemption and credit transfer

A student who leaves the program without approval shall be deemed to have withdrawn his or her candidature for the degree, but may reapply for admission to the program in accordance with the procedures in operation at the time.

Students who have interrupted their studies may be required to resume at such a point in the program and/or to undertake such additional or special program of study as the Head of Discipline deems appropriate.

- 2.3 Physical fitness

The Bachelor of Nursing has an extensive clinical component that requires students to work as members of the health care team. To satisfactorily undertake this clinical component students need to be physically fit. Students must satisfy the individual Occupational Health and Safety requirements of the institution in which they are undertaking the clinical component of the program.

- 2.4 Prescribed communicable infections policy

The University promotes a proactive public health approach to prescribed communicable infections (PCI) such as HIV/AIDS, Hepatitis B and Hepatitis C, and seeks to minimise the impact of these infections on students' academic progress. It offers understanding and practical support to students with such infections, and aims to provide a work and study environment free from discrimination, challenging views that result in discriminatory attitudes towards people with PCIs.

The University also has a legal and ethical obligation to take all reasonable measures to prevent the transmission of prescribed communicable infections among students, staff members and visitors, and recognises that some students with such infections may not be permitted to complete the Bachelor of Nursing, Bachelor Medicine and Bachelor of Surgery, Bachelor of Dental Surgery or other clinical programs offered by the Faculty of Health Sciences.

All prospective nursing students are strongly advised to consult the University's Students With Prescribed Communicable Infections Policy - available through the University's website at www.adelaide.edu.au/policies/591/ - which makes reference to the relevant legislation, elaborates on the reasons for the adoption of this policy, and outlines procedures for implementing the policy.

3 Assessment and examinations

- 3.1 A candidate shall not present for the examinations unless the candidate has completed to the satisfaction of the teaching staff concerned, prior to the beginning of the examination, the programs of study and clinical practice prescribed for it. A candidate who is not eligible to attend for examination shall be deemed to have failed the examination.
- 3.2 The examiners in any course may take into consideration written or practical work required of candidates during the program of study and practice and the results of other examinations in the courses.
- 3.3 Before presenting for the examination again, attend again the parts of study and practice leading to that examination as the Faculty may direct.
- 3.4
- There shall be four classifications of pass in each course for the Bachelor degree as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, Pass.
 - A candidate who fails a course or who obtains a conceded pass shall, unless exempted wholly or partially therefrom by the Head of Discipline concerned, again complete the required work in that course to the satisfaction of the teaching staff concerned.
- 3.5 The Discipline of Nursing may grant a candidate who has been prevented by illness or other sufficient cause from sitting for the whole or part of an examination permission to sit for a special or supplementary examination, the extent of such special or supplementary examination to be determined by the Board in each case.

- 3.6 On passing in a special or supplementary examination granted under this Academic Program Rule a candidate shall be deemed to have completed the whole of the examination; but if the candidate fails in such special or supplementary examination the candidate shall take again, and pass in, the whole of the examination before proceeding with the programs of study and practice leading to the next examination.
- 3.7 A candidate granted permission to sit for a supplementary or special examination may enter provisionally upon the programs of study and practice leading to the next examination pending publication of the result of the supplementary examination.
- 3.8 A candidate who has twice failed the examination in any course for the Bachelor degree may not enrol for that course again except by permission of the Head of Discipline and then only under such conditions as the Head of Discipline may prescribe.

3.9 Attendance requirements

To qualify for the degrees a candidate must attend regularly such lectures, tutorials and seminar work, satisfactorily perform such laboratory, practical, clinical and written work, and pass such examinations as the Discipline may from time to time prescribe. Students must complete the set time for each clinical attachment. If this is not met a supplementary placement will be negotiated. If before the census date, a student finds they are unable to complete a clinical attachment due to circumstances such as illness, they may withdraw and re-enrol in the course in the following year. If after the census date they are unable to complete the placement due to circumstances such as illness, their mark may be withheld until the required clinical time is completed.

4 Qualification requirements

4.1 Academic program

To qualify for the Bachelor degree a candidate shall:

- regularly attend lectures and PBL sessions
- satisfactorily participate in tutorial, practical and project work and clinical attachments
- present passes in the following courses to the value of 72 units.

4.1.1 Level I

Semester 1

Human Sciences IA	6
Nursing Practice IA	6

Semester 2

Human Sciences IB	6
Nursing Practice IB	6

4.1.2 Level II

Semester 1

Human Sciences IIA	6
Nursing Practice IIA	6

Semester 2

Human Sciences IIB	6
Nursing Practice IIB	6

4.1.3 Level III

Semester 1

Human Sciences IIIA	6
Nursing Practice IIIA	6

Semester 2

Human Sciences IIIB	6
Nursing Practice IIIB	6

4.2 A student:

- must pass all modules within each course to pass the course *and*
- must pass all courses in each semester before progressing to the next semester of study
- who fails one or more modules in a course must repeat all modules in that course. No consideration will be given to previously passed modules.

4.3 A candidate may begin the first semester's work in the following year's program of study pending the result of any supplementary examination for which the candidate has been permitted to present.

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

4.4 Practical experience

Significant practical experience will be required as part of the Nursing Practice courses. Clinical placements facilitating this experience will not be restricted to the university teaching semesters.

4.4.1 Uniform

During their nursing practice placements students will be required to comply with the Discipline of Nursing dress standards.

4.5 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award.

5 Rules for the admission of nursing students to the practice of the teaching hospitals, health centres

5.1 Nursing students admitted to the practice of a Teaching Hospital or Health Centre shall be under the control of the Nursing Director in relation to matters of common discipline; the University will

- otherwise be responsible for matters related to education.
- 5.2 Whilst on Clinical Placement a student must be able to produce, on demand, a copy of their National Police Clearance and their PCI Immunisation Status, to their preceptor and/or nurse in charge of the ward.
 - 5.3 No student shall publish the report of any case without the permission of the Hospital Board or Health Centre Management Committee and the Clinical Nurse Consultant under whose care the patient is or has been.
 - 5.4 Except in the performance of his/her clinical duties, no student may disclose any information whatsoever concerning a patient without the permission of both the patient and the Clinical Nurse Consultant in charge.
 - 5.5 No student may communicate directly or indirectly to the Press, radio or television any matter concerning the clinical practice of the Institution to which he or she is attached.
 - 5.6 No student may introduce visitors into any Hospital or Health Centre to the practice of which he or she has been admitted, without the permission of the Nursing Director or his/her deputy.
 - 5.7 Students shall discharge the duties assigned to them, and pay for or replace any article damaged or lost or destroyed by them through negligence or misconduct.
 - 5.8 During any period of residence the student will comply with the directions of the Nursing Director of the Hospital or Health Centre in respect of discipline and general conduct.
 - 5.9 Subject to rule 10 any student infringing any of these rules or the rules of the Hospital or Health Centre, or otherwise misconducting himself/herself may be suspended or dismissed by the Board of the Hospital or Health Centre from the practice of the Hospital or Health Centre. If he/she is so dismissed he/she shall forfeit all payments that may have been made and all rights accruing there from.
 - 5.10 In all instances where a student has been either suspended or dismissed from the practice of the Hospital or Health Centre his/her case shall be investigated by an Investigation Committee on which there shall be a representative appointed by the Hospital Board, a Clinical Nurse Consultant nominated by the Head (or his/her deputy) of the appropriate Staff Committee of the Hospital or Health Centre concerned, a representative appointed by the Department of Clinical Nursing and the Executive Dean of the Faculty of Health Sciences (or his/her deputy). The committee should also normally include a representative of the Student Union. The Investigating Committee shall make its recommendation to the Board of the Hospital or Health Centre Management Committee

concerned and to the Council of the University for confirmation or otherwise.

- 5.11 Students who demonstrate unsatisfactory professional behaviour may be referred to the Faculty 'Professional Behaviour Panel' (PBP). The PBP is empowered to refer students for compulsory counselling, to the Dean for disciplinary action or to the Director, Student and Staff Services for initiation of proceedings under the University's Rules for Student Conduct, where this is appropriate.

6 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

Graduate Attributes

Bachelor of Nursing

The Bachelor of Nursing seeks to produce a graduate who is well-prepared, both academically and clinically, to meet the ongoing changes and challenges of a 21st century healthcare system. Graduates will have the professional knowledge, skills and attitudes required to function in the role of a registered nurse, according to the Australian Nursing Council National Competency Standards for Registered Nurses and will be able to function in accordance with the professional codes of ethics and conduct as described by the Australian Nursing Council.

Nursing graduates will be particularly distinguished by the following attributes:

- The potential to work as team leaders and managers and undertake the role of case management and care coordination
- A rigorous academic knowledge of the human sciences that inform nursing practice
- The clinical and technological skills required to provide high quality effective nursing care
- The attitudes and skills to practice person-centred nursing in a culturally sensitive and ethically sound manner
- Being able to use critical thinking skills and knowledge to problem solve in their nursing practice
- Highly developed communication skills and sound interpersonal skills to work effectively as members of the multidisciplinary team and to provide quality nursing care
- Being able to critically analyse in order to evaluate the evidence and make decisions and implement nursing care based on the best available evidence
- Being committed to and having the skills to continue life long learning to advance their nursing practice and provide high quality nursing care
- Being able to work effectively both independently and as members of the nursing and multidisciplinary team in a variety of health care setting
- Being well equipped to practice as a registered nurse in a technological environment. This means being flexible, receptive and knowledgeable regarding technology, being literate in health informatics and general information technology and being able to best use this to provide quality nursing care
- Being able to effectively integrate skills and knowledge in order to facilitate quality nursing care
- Having a sound understanding of the dynamics of the health care system and the sociological, cultural and political influences that influence professional practice
- Being prepared to practise and promote safe practice in accordance with legislation and professional codes
- The knowledge, skills and attitudes to practice in a health system that has an increasing emphasis on health, health promotion and primary health care services
- The knowledge and willingness required to contribute to the professional development of other nurses.



Bachelor of Nursing (Post Registration)

1 General

There shall be a degree of Bachelor of Nursing (Post Registration).

2 Duration of program

A candidate shall satisfactorily complete a course of study comprising four semesters of part-time study completed over two years.

3 Admission

3.1 An applicant for admission to the program for the Bachelor of Nursing (Post Registration) shall:

- a have qualified for a Diploma of Nursing of a Institution accepted for the purposes by the University and
- b be practicing as a registered nurse
- c have obtained the approval of the Discipline of Nursing.
- d provide proof of current employment as a Registered Nurse thereby demonstrating compliance with individual Occupational Health and Safety requirements of the institution in which they are employed.

The Bachelor of Nursing (Post Registration) is not available to Australian citizens or permanent residents.

3.2 Subject to the approval of Council, the Faculty may in special cases and subject to such conditions (if any) as it may seem fit to impose in each case, accept as a candidate for the Bachelor of Nursing (Post Registration) a person who does not qualify for admission to the academic program under above, but has given evidence satisfactory to the Faculty of fitness to undertake work for the Bachelor of Nursing (Post Registration).

3.3 Status, exemption and credit transfer

No status will be given for previous studies.

4 Assessment and examinations

4.1 There shall be four classes of pass in each course for the Bachelor of Nursing (Post Registration): pass with High Distinction, pass with Distinction, pass with Credit and Pass.

- 4.2 a A candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
- b A candidate who is refused permission to sit for examination shall be deemed to have failed the examination.

4.3 The Discipline of Nursing may grant a candidate who has been prevented by illness or other sufficient cause from sitting for the whole or part of an examination permission to sit for a special or supplementary examination, the extent of such special or supplementary examination to be determined by the Discipline in each case.

4.4 On passing a special or supplementary examination granted under this Academic Program Rule a candidate shall be deemed to have completed the whole of the examination; but if the candidate fails in such a special or supplementary examination the candidate shall take again, and pass in, the whole of the examination before proceeding with the programs of study and practice leading to the next examination.

4.5 Attendance requirements

To qualify for the degree a candidate must attend regularly such lectures and tutorials and seminar work, satisfactorily perform such laboratory, practical, clinical and written work, and pass such examinations as the Discipline may from time to time prescribe.

5 Qualification requirements

5.1 To qualify for the Bachelor degree a candidate shall present passes in the following courses to the value of 24 units.

5.1.1. Level I

Foundations of Nursing Practice I.....	3
Complex Clinical Practice I.....	3
Foundations of Nursing Practice II.....	3
Complex Clinical Practice II.....	3

5.1.2 Level II

Knowledge Translation in Nursing I.....	3
Nursing in a Global Community.....	3
Knowledge Translation in Nursing II.....	3
Practice Innovation.....	3

5.2 No candidate will be permitted to count towards an award any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material as any other course that he or she has already presented for another award. No course or portion of a course may be counted twice towards an award.

5.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

6 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.



1 Duration of program

The program of study for the degree of Bachelor of Oral Health shall extend over three years of full-time study.

Students wishing to interrupt their studies must apply for permission and obtain beforehand the approval of the Dean on behalf of the School for leave of absence for a defined period.

A student who leaves the program without approval or who extends leave of absence beyond the time period approved by the Dean shall be deemed to have withdrawn his or her candidature for the degree but shall be permitted to reapply for admission to the program in accordance with the procedures in operation at the time.

Students who have interrupted their studies in the prescribed courses may be required to resume at such a point in the program and/or undertake such additional or special program of study as the Dean of the School deems appropriate.

2 Enrolment

2.1 Approval of enrolment

The following students must have their program of study approved by the Dean or nominee at the time of enrolment in the year concerned:

- a students who have been granted or are seeking status or exemption from these Rules
- b students who are repeating a course or courses; such students may be required to resume at a point in the program and/or undertake such additional or special program of study as the Dean of Dental School deems appropriate
- c students who have obtained permission from the School of Dentistry to intermit their program for reasons approved in each case.

2.2 Prescribed communicable infections policy

The University promotes a pro-active public health approach to prescribed communicable infections (PCI) such as HIV/AIDS, Hepatitis B and Hepatitis C, and seeks to minimise the impact of these infections on students' academic progress. It offers understanding and practical support to students with such infections, and aims to provide a work and study environment free from discrimination, challenging views that result in discriminatory attitudes toward people with PCIs.

The University also has a legal and ethical obligation to take all reasonable measures to prevent the transmission of prescribed communicable infections among students, staff

members and visitors, and recognises that some students with such infections will not be permitted to complete the Bachelor of Medicine and Bachelor of Surgery, the Bachelor of Dental Surgery or other clinical programs offered by the Faculty of Health Sciences.

All prospective medical and dental school students are strongly advised to consult the University's Students With Prescribed Communicable Infections Policy - available through the University's website at www.adelaide.edu.au/policies/591/ - which makes reference to the relevant legislation, elaborates on the reasons for the adoption of this policy, and outlines procedures for implementing the policy.

3 Assessment and examinations

3.1 There shall be four classifications of pass in the final assessment of any course for the Bachelor Degree, as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, Pass. The Pass result in the Annual Oral Health Examinations shall be Non-Graded.

In addition there shall be a classification of Conceded Pass. Courses for which a result of Conceded Pass has been obtained shall not satisfy prerequisite requirements and may not be presented as a credit towards the award of the Bachelor of Oral Health. It is a requirement that all courses are completed at a Pass level or better in order to progress to the following year and to meet the academic requirements of the program.

3.2 In determining a candidate's final result in a course (or part of a course) the examiners may take into account oral, written, clinical, practical and examination work.

3.3 A candidate may not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the academic staff concerned.

3.4 A candidate who fails a course or who obtains a Conceded Pass shall, unless exempted wholly or partially therefrom by the Dean of the School of Dentistry, again complete the required work in that course to the satisfaction of the teaching staff concerned. Such a candidate may be required to attend concurrently such lectures, clinical practice, laboratory and other practical work as the School of Dentistry may prescribe, in other course(s) of an annual examination.

3.5 A candidate who has twice failed to obtain a Pass in the examination in any course for the Degree may not enrol for that course again except by special permission of the School of Dentistry and then only under such conditions as School of Dentistry may prescribe.

- 3.6 A candidate who is exempt from more than 50% in a stream shall not be granted a classified pass in that stream.

4 Qualification requirements

- 4.1 The program for the degree of Bachelor of Oral Health shall extend over three years. To qualify for the degree a candidate shall regularly attend class meetings, tutorials and clinical practice, do written and laboratory or other practical work, including playing the role of the patient and chairside assistant, to the satisfaction of the academic staff concerned, and pass the prescribed examinations. Students shall attend clinics of the South Australian Dental Service and other teaching hospitals, and health centres, and accredited dental practices in South Australia and interstate, as required for their clinical instruction.

4.2 Academic program

To qualify for the Degree a candidate shall meet the requirements in the course outlines which may include attendance in class meetings, tutorials and clinical practice, do written and laboratory or other practical work to the satisfaction of the Dean of the Dental School and pass the prescribed examinations.

The following are the courses of study for:

ORAL HLTH 1200HO

First Annual Oral Health Examination:

ORAL HLTH 1201 AHO/BHO Dental and Health Science I OH Part 1 & 2	6
ORAL HLTH 1202 AHO/BHO Clinical Practice IOH Part 1 & 2	8
ORAL HLTH 1203 AHO/BHO Human Biology IOH Part 1 & 2	6
ORAL HLTH 1204AHO/BHO General Studies IOH Part 1 & 2	4

The following are the courses of study for:

ORAL HLTH 2200HO

Second Annual Oral Health Examination:

ORAL HLTH 2201 AHO/BHO Dental and Health Science II OH Part 1 & 2	4
ORAL HLTH 2202 AHO/BHO Clinical Practice IIOH Part 1 & 2	12
ORAL HLTH 2203 AHO/BHO Human Biology IIOH Part 1 & 2	4
ORAL HLTH 2204 AHO/BHO General Studies IIOH Part 1 & 2	4

The following are the courses of study for:

ORAL HLTH 3200HO

Third Annual Oral Health Examination:

ORAL HLTH 3201 AHO/BHO Dental and Health Science IIIIOH Part 1 & 2	8
ORAL HLTH 3202 AHO/BHO Clinical Practice IIIIOH Part 1 & 2	12

ORAL HLTH 3204 AHO/BHO Oral Health Electives IIIIOH Part 1 & 2	4
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4.3 Rules for admission of Dental School students to the practice of the South Australian Dental Service and other teaching hospitals and health centres

- 4.3.1 Each Dental School student of the University of Adelaide shall attend clinics of the South Australian Dental Service, or other teaching hospitals or health centres, as directed by the Dean of the School of Dentistry; and each student shall be admitted to the practice of the South Australian Dental Service or other teaching hospitals or health centres under the disciplinary control of the Chief Executive Officer, in the case of the former, or the Medical Superintendent or Director, in the case of the latter, whilst in attendance.
- 4.3.2 No student may introduce visitors into any of the said clinics, hospitals or health centres without permission of the above designated officers.
- 4.3.3 Students shall conduct themselves with propriety and discharge the duties assigned, and pay for or replace any article damaged, lost or destroyed by them together; and make good any loss sustained by their negligence.
- 4.3.4 Each student shall at all times be under the direction and supervision of a duly appointed member of the teaching staff of the University of Adelaide, or a person who has been granted appropriate University status, and shall carry out such work as shall be allotted.
- 4.3.5 No student shall administer treatment to any patient without the approval of an appointed teacher.
- 4.3.6 Except in the performance of the associated clinical duties, no student may disclose any information whatsoever concerning a patient without the permission of both the patient and the Senior Dental or Medical Officer in charge.
- 4.3.7 No student shall publish a report on any case without the written permission of the Chief Executive Officer in the case of the South Australian Dental Service, or the Medical Superintendent or Director in the case of teaching hospitals or health centres, and the Senior Dental or Medical Officer under whose care the patient is or has been.
- 4.3.8 No student shall communicate directly to the press, radio or television any matter concerning the clinical practice of the institution to which that student is attached.
- 4.3.9 Students shall pay such fees as are laid down by the South Australian Dental Service in consultation with the Dean of the School of Dentistry; no student shall be admitted to clinics until such fees are paid.

- 4.3.10 Misconduct or infringement of any of these rules, may lead to temporary suspension by the Chief Executive Officer, South Australian Dental Service, or the Medical Superintendent or Director, other teaching hospitals or health centres. In the case of such temporary suspension, written notice shall immediately be given to the Dean of the School of Dentistry.

4.4 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

4.5 General

A candidate shall satisfactorily complete each annual examination before entering upon the work of the following year's program of study provided that:

- a A candidate shall enrol in all clinical streams of the year undertaken and shall enrol in any other courses that the School of Dentistry mandates. Except by permission of the School of Dentistry the candidate may not enrol concurrently for any additional courses from the following year.
- b A candidate may begin the first semester's work in the following year's program of study pending the result of any supplementary examination for which the candidate has been permitted to present.
- c A supplementary examination shall not be awarded on academic grounds if the student has achieved an aggregate score of less than 45%. Students shall not be awarded more than two supplementary examinations on academic grounds per year.

4.6 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award.

5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

Graduate Attributes

Bachelor of Oral Health

On successful completion of the Bachelor of Oral Health, the graduates will have received education and training in the theory and practice of dental therapy and dental hygiene, to enable them to work in both private and government oral health services, in accordance with the legal and legislative limitations governing each Australian state.

Each graduate will have developed the skills that will enable them to:

- Work as an integral part of the dental team providing holistic oral health care on an individual and community level
- Recognise dental diseases and formulate strategies that address the treatment and preventive needs of each individual
- Promote the importance of general and oral health to individuals in a dental and community health setting
- Work effectively with other allied health professionals to foster optimum oral health practices within the community
- Communicate effectively and provide education to people within a multicultural society that will encourage patterns of behaviour which favour effective oral health
- Maintain the highest level of ethics and professionalism in the practice of dental hygiene and dental therapy
- Utilise the principles of self-evaluation that will contribute to the continuous development of skills within their field of practice
- Embrace the principles of lifelong learning that will enhance the practice of dental therapy and dental hygiene.



Bachelor of Psychological Science

1 Duration of Program

The program of study shall extend over three years of full-time study or part-time equivalent.

2 Admission Requirements

2.1 Status, exemption and credit transfer

2.1.1 In determining a candidate's eligibility for the award of the degree, the School may disallow any course passed more than 10 years previously. Credit for other courses may be allowed at the discretion of the Head of the School of Psychology.

2.1.2 Candidates may be permitted to count towards the degree courses which have been passed in another degree program, up to a maximum value of 30 units. This will include up to 18 units at Level I and 12 units at Level II. No Level III units may be presented.

2.2 Candidates wishing to interrupt their studies must obtain beforehand the approval of the Bachelor of Psychological Science Program Manager on behalf of the Faculty for leave of absence for a defined period.

3 Assessment and Examinations

3.1 A candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned. A candidate who is not eligible to attend for examination shall be deemed to have failed the examination.

3.2 In determining the final result in a course (or part of a course) the examiners may take into account the candidate's oral, written, practical and examination work, provided that the candidate has been given adequate notice at the commencement of the teaching of the course of the way in which the work will be taken into account and of its relative importance to the final result.

3.3 There shall be four classifications of pass in any courses offered by the Faculty of Health Sciences, as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, Pass. In addition there shall be a classification of Conceded Pass.

3.3.1 A candidate may only present non psychology courses for which a Conceded Pass has been obtained up to an aggregate value of 6 units.

3.3.2 A candidate who has twice failed to obtain a Pass or higher grade in any course shall not enrol or the course again except by permission of the School and under such conditions as the School may prescribe.

3.4 Candidates who have been made an offer for the Honours year and who have studied three years

of a Bachelor of Psychological Science will be permitted to enter the Bachelor of Psychology (Honours) program by internal transfer. If the candidate to the Bachelor of Psychology (Honours) has graduated from their program, they must surrender their certificate

4 Qualification requirements

4.1 To qualify for the degree a candidate shall, subject to the conditions specified below, pass courses to the value of at least 72 units, which must include the following:

- a Level I courses to the value of 24 units
- b Level II courses to the value of 24 units
- c Level III courses to the value of 24 units as stipulated in 4.4 below.

4.2 Cross-institutional study

With prior approval of the School, candidates may study courses offered at Bachelor degree level by other universities as cross-institutional students, subject to the following provisions:

4.2.1 Candidates must complete all core courses as specified in 4.4 at the University of Adelaide.

4.2.2 The following limits shall apply:

Level I: 12 units of cross-institutional studies in any discipline.

Level II: 6 units of cross-institutional studies in any discipline.

Level III: 6 units of cross-institutional studies in any discipline.

4.2.3 Candidates undertaking cross-institutional studies must abide by any rules and regulations the host institution shall prescribe.

4.2.4 On completion of any cross-institutional course, the student shall be responsible for ensuring that an official transcript or result notice is forwarded to the School.

4.3 International exchanges

4.3.1 Candidates may count studies completed while on International Exchange programs formalised through the School and the University's International Office toward the Bachelor degree to the following limits:

12 units during semester 2, Level I

24 units at Level II

12 units during semester 1, Level III.

4.3.2 Where candidates undertake any courses at a host institution not approved by the School, the School will determine what status, if any, to award for such studies.

- 4.3.3 On completion of any international exchange courses, the candidate shall be responsible for ensuring that an official transcript or result notice is forwarded to the School.

4.4 Academic Program

Level I

PSYCHOL 1000 Psychology IA.....3

PSYCHOL 1001 Psychology IB.....3

plus

courses to the value of at least 18 units selected from the following:

Commerce

Level I courses listed under Academic Program Rule 4.8 of the degree of Bachelor of Commerce.

Economics

Level I courses listed under Academic Program Rule 4.7 of the degree of Bachelor of Economics.

Health Sciences

Level I courses listed under Academic Program Rule 5.1 of the degree of Bachelor of Health Sciences.

Humanities and Social Sciences

Level I courses listed under Specific Academic Program Rule 5.1 of the degree of Bachelor of Arts and Specific Academic Program Rule 4.1 of the degree of Bachelor of Social Sciences.

Mathematical and Computer Sciences

Level I courses listed under Academic Program Rule 4.2 of the degree of Bachelor of Computer Science and Academic Program Rule 4.2 of the Bachelor of Mathematical and Computer Sciences.

Sciences

Level I Courses listed under Academic Program Rule 5.5 of the degree of Bachelor of Science.

Level II

PSYCHOL 2004 Doing Research In Psychology: Research Design, Methods & Analysis3

PSYCHOL 2005 Foundations of Health & Lifespan Developmental Psychology3

PSYCHOL 2006 Foundations of Perception & Cognition3

PSYCHOL 2007 Psychology in Society3

plus other Level II courses from the list below to the value of at least 12 units:

Commerce

Level II courses listed under Academic Program Rule 4.8 of the degree of Bachelor of Commerce.

Economics

Level II courses listed under Academic Program Rule 4.7 of the degree of Bachelor of Economics.

Health Sciences

Level II courses listed under Academic Program Rule 5.1 of the degree of Bachelor of Health Sciences.

Humanities and Social Sciences

Advanced Level or Level II Language courses listed under Specific Academic Program Rule 5.1 of the degree of Bachelor of Arts and Specific Academic Program Rule 4.1 of the degree of Bachelor of Social Sciences.

Mathematical and Computer Sciences

Level II courses listed under Academic Program Rule 4.2 of the degree of Bachelor of Computer Science and Academic Program Rule 4.2 of the Bachelor of Mathematical and Computer Sciences.

Sciences

Level II Courses listed under Academic Program Rule 5.5 of the degree of Bachelor of Science.

Level III

PSYCHOL 3020 Doing Research In Psychology: Advanced Research Design, Methods & Analysis 3

PSYCHOL 3021 Health & Lifespan Developmental Psychology3

PSYCHOL 3022 Individual Differences, Personality & Assessment3

PSYCHOL 3023 Perception & Cognition.....3

PSYCHOL 3024 Psychology in Society: Advanced3

PSYCHOL 3025 Psychology, Ideas and Action3

plus

other Level III courses from the list below to the value of at least 6 units:

Commerce

Level III courses listed under Academic Program Rule 4.8 of the degree of Bachelor of Commerce.

Economics

Level III courses listed under Academic Program Rule 4.7 of the degree of Bachelor of Economics.

Health Sciences

Level III courses listed under Academic Program Rule 5.1 of the degree of Bachelor of Health Sciences.

Humanities and Social Sciences

Advanced Level or Level III Language courses listed under Specific Academic Program Rule 5.1 of the degree of Bachelor of Arts and Specific Academic Program Rule 4.1 of the degree of Bachelor of Social Sciences.

Mathematical and Computer Sciences

Level III courses listed under Academic Program Rule 4.2 of the degree of Bachelor of Computer Science and Academic Program Rule 4.2 of the Bachelor of Mathematical and Computer Sciences.

Sciences

Level III Courses listed under Academic Program Rule 5.5 of the degree of Bachelor of Science.

4.5 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award.

5 **Special circumstances**

When in the opinion of the relevant Faculty, special circumstances exist, the Council, on the recommendation of the Council in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

Graduate Attributes

Bachelor of Psychological Science

The principal aim of this program is to provide graduates with a comprehensive tertiary-level education in Psychology and related areas of learning. The program is also designed to enable graduates to meet the prerequisites for progression to Honours and postgraduate levels of study in this discipline.

Knowledge

- All of the core topics specified by the Australian Psychology Accreditation Council for an accredited major within this discipline, specifically: biological bases of behaviour; perception; cognition, information processing and language; learning; motivation and emotion; social psychology; lifespan developmental psychology; individual differences in capacity and behaviour, testing and assessment, personality; and abnormal psychology
- The range of methodologies employed to collect and analyse data relevant to the above topics
- The historical origins of ideas within this discipline
- Some of the ways whereby contemporary psychology is being/could be applied to real-world problems and issues.

Intellectual and Social Capabilities

- An ability to communicate with audiences with differing levels of knowledge about psychological topics
- An ability to enter into rational debate on psychological topics
- An ability to critically evaluate the validity of claims relevant to or derived from the discipline of psychology
- An understanding of both qualitative and quantitative methods for the analysis of data collected for the purpose of testing the validity of psychological knowledge claims and answering specific research questions in psychology
- An ability to produce written reports on psychological issues and questions
- A basic understanding of how the knowledge and methods of contemporary psychology may be applied towards the management and/or solution of human problems.

Attitudes and Values

- A sensitivity to the cultural and ethical issues that may impact on the way that the knowledge acquired within psychology is interpreted and used
- A respect for people and their fundamental human rights, regardless of age, gender, ability, ethnic or religious background
- A respect for the scholarly heritage of psychology as an academic discipline and for the past, present and future contributions of psychology as a profession.



Bachelor of Medical Science (Honours)

1 Duration of program and qualification requirements

To qualify for the degree a candidate shall undertake a program of advanced study extending over one academic year, and shall satisfy the examiners in one of the courses prescribed in the Academic Program Rules.

2 Admission requirements

- 2.1 Before admission to a program of study for the degree a candidate shall have:
- passed the Third Year Examination for the degrees of Bachelor of Medicine and Bachelor of Surgery
 - been accepted by the Head of School and Head of Discipline concerned as a suitable candidate for advanced work in the course he/she wishes to pursue *and*
 - completed such prerequisite work as the Head of School and Head of Discipline concerned may prescribe.
- 2.2 On the recommendation of the Faculty of Health Sciences, the Council may accept as a candidate for the degree a person who in a medical program of another institution has passed examinations regarded as equivalent to that specified in 2.1(a).

3 Assessment and examinations

- 3.1 The examination for the degree will consist of a written paper or papers, the essays submitted during the year, the thesis on the research project, an oral examination, and a practical examination if required by the examiners.
- 3.2 A candidate who satisfies the requirements for Honours shall be awarded the Honours degree, but the Faculty shall decide within which of the following classes and divisions the degree shall be awarded:
- | | |
|-----|--------------------|
| 1 | First Class |
| 2A | Second Class div A |
| 2B | Second Class div B |
| 3 | Third Class |
| NAH | Not awarded. |
- 3.3 A candidate shall not be eligible to present himself/herself for examination unless he/she has regularly attended the prescribed lectures and has done written and laboratory or other practical work, where required, to the satisfaction of the professors and lecturers concerned.

4 Qualification requirements

4.1 Academic program

A program of study for the degree may be undertaken in one of the following:

ANAES&IC 4000 AHO/BHO Honours Anaesthesia & Intensive Care

ANAT SC 4000 A/B Honours Anatomical Sciences

BIOCHEM 4000 A/B Honours Biochemistry

GEN PRAC 4000 AHO/BHO Honours General Practice

MEDICINE 4000 AHO/BHO Honours Medicine

MICRO 4000 A/B Honours Microbiology and Immunology

OB&GYNAE 4000 AHO/BHO Honours Obstetrics and Gynaecology

ORT&TRAU 4000 AHO/BHO Honours Orthopaedics and Trauma

PAEDIAT 4000 AHO/BHO Honours Paediatrics

PATHOL 4000 A/B Honours Pathology

PHARM 4000 A/B Honours Pharmacology

PHYSIOL 4000 A/B Honours Physiology

PSYCHIAT 4000 AHO/BHO Honours Psychiatry

PSYCHOL 4000 A/B Honours Psychology

PUB HLTH 4000 AHO/BHO Honours Public Health

SURGERY 4000 AHO/BHO Honours Surgery

- 4.2 The program comprises three equally important aspects undertaken concurrently:

- Program of reading in selected fields, and the submission of a series of essays associated therewith.
- Experimental work covering a wide range of techniques
- The undertaking of a research project which will be assigned early in the program and on which a thesis must be submitted.

4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award.

5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.



Bachelor of Nursing (Honours)

1 Duration of Program

The program of study for the Bachelor degree shall extend over one year full-time study or two years part-time study.

2 Admissions requirements

- 2.1 An applicant for admission to the program of study for the Bachelor of Nursing (Honours) shall:
- be registered, or be eligible for registration, as a nurse in South Australia *and*
 - have qualified for a degree of Bachelor of Nursing of a university accepted for the purposes by the University *and*
 - obtained a Grade Point average of at least 5.0 (credit average) or equivalent.

Applicants will also be required to attend a meeting to discuss their application and chosen topic with the Honours Coordinator and potential supervisor.

- 2.2 The Faculty may, subject to such conditions as it sees fit to impose in each case, accept as a candidate for the Honours program a person who does not satisfy the requirements of Rule 2.1 but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the program.

3 Assessment and examinations

A candidate who satisfies the requirements for Honours shall be awarded the Honours degree, but the Faculty shall decide within which of the following classes and divisions the degree shall be awarded:

- 1 First Class
- 2A Second Class div A
- 2B Second Class div B
- 3 Third Class
- NAH Not awarded

4 Qualification requirements

4.1 Academic program

The program of study for the degree, comprising 24 units in total, will be:

NURSING 4000AHO/BHO Nursing Honours.....24

- 4.2 The program comprises of three equally important aspects undertaken concurrently:
- Program of reading in selected fields and the submission of an essay associated therewith
 - Experimental or scholarly work covering a wide range of techniques

- The undertaking of a research project which will be assigned early in the program and on which a thesis must be submitted.

4.3 Joint GNP Honours Program

Nurses who undertake their Graduate Nurse Program year with the Royal Adelaide Hospital may also apply to undertake Honours with the University of Adelaide.

4.4 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award.

5 Special circumstances

When in the opinion of the relevant Faculty, special circumstances exist, the Council, on the recommendation of the Council in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

Graduate Attributes

Bachelor of Nursing (Honours)

The Bachelor of Nursing (Honours) program seeks to produce a graduate who has well-founded, research and evidence based knowledge in a relevant nursing field of study that has provided the graduate with an opportunity to learn and use valuable research methodologies, analytic skills and evaluation techniques and have industry-based insight.

A Nursing Honours student would be particularly distinguished by the following attributes:

- In-depth knowledge of their chosen field of study
- A basic understanding of the varying approaches to research in nursing
- The ability to identify problems, create solutions, innovate and improve current practices
- The ability to collect, analyse and organise information and ideas and to convey those ideas clearly and fluently
- A clear insight into other research based programs offered by the Discipline of Nursing.

Bachelor of Psychology (Honours)

1 Duration of Program

The program of study shall extend over four years of full-time study or part-time equivalent.

2 Admission Requirements

2.1 Status, exemption and credit transfer

- 2.1.1 In determining a candidate's eligibility for the award of the degree, the School may disallow any course passed more than 10 years previously. Credit for other courses may be allowed at the discretion of the Head of the School of Psychology.
- Credit will not be allowed for the Level IV course.
- 2.1.2 Candidates may be permitted to count towards the degree courses which have been passed in another degree program, up to a maximum value of 36 units. This will include up to 18 units at Level I, 12 units at Level II and 6 units at Level III. No Level IV units may be presented.
- 2.1.3 Candidates who have been made an offer for the Honours year and studied three years of a Bachelor of Psychological Science or who have studied three years of a Psychology major under a different program and with 18 units of Psychology at Level III will be permitted to enter the Bachelor of Psychology (Honours) program by internal transfer.

If the candidate to the Bachelor of Psychology (Honours) has graduated from their respective program, they must surrender their certificate.

- 2.2 Candidates wishing to interrupt their studies must obtain beforehand the approval of the Bachelor of Psychology (Honours) Program Manager on behalf of the Faculty for leave of absence for a defined period.

3 Assessment and Examinations

- 3.1 A candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned. A candidate who is not eligible to attend for examination shall be deemed to have failed the examination.
- 3.2 In determining the final result in a course (or part of a course) the examiners may take into account the candidate's oral, written, practical and examination work, provided that the candidate has been given adequate notice at the commencement of the teaching of the course of the way in which the work will be taken into account and of its relative importance to the final result.
- 3.3 There shall be four classifications of pass in any courses offered by the Faculty of Health Sciences,

as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, Pass. In addition there shall be a classification of Conceded Pass.

- 3.3.1 A candidate may only present non psychology courses for which a Conceded Pass has been obtained up to an aggregate value of 6 units.
- 3.3.2 A candidate who has twice failed to obtain a Pass or higher grade in any course shall not enrol for the course again except by permission of the School and under such conditions as the School may prescribe.
- 3.4 A candidate who satisfies the requirements for Honours shall be awarded the Honours degree, but the Faculty shall decide within which of the following classes and divisions the degree shall be awarded:
- | | |
|-----|--------------------|
| 1 | First Class |
| 2A | Second Class div A |
| 2B | Second Class div B |
| 3 | Third Class |
| NAH | Not awarded. |
- 3.5 The examination for Level IV will consist of written papers and a thesis on the research project.

3.6 Review of academic progress

- 3.6.1 A candidate who does not maintain 70% or above in Level I, II, and III Psychology courses may not proceed in the Bachelor of Psychology (Honours) program, but may apply to transfer to the Bachelor of Psychological Science or another degree program.

4 Qualification requirements

- 4.1 To qualify for the Honours degree a candidate shall, subject to the conditions specified below, pass courses to the value of at least 96 units, which must include the following:
- Level I courses to the value of 24 units
 - Level II courses to the value of 24 units
 - Level III courses to the value of 24 units
 - Level IV courses to the value of 24 units
- All other components (a total of 72 units), as stipulated in 4.4 below, must be completed before undertaking the Fourth Year of the program.
- ### 4.2 Cross-institutional study
- With prior approval of the School, candidates may study courses offered at Bachelor degree level by other universities as cross-institutional students, subject to the following provisions:
- 4.2.1 Students must complete all core courses as specified in 4.4 at the University of Adelaide.

- 4.2.2 The following limits shall apply:
 Level I: 12 units of cross-institutional studies in any discipline.
 Level II: 6 units of cross-institutional studies in any discipline.
 Level III: 6 units of cross-institutional studies in any discipline.
- 4.2.3 Students undertaking cross-institutional studies must abide by any rules and regulations the host institution shall prescribe.
- 4.2.4 On completion of any cross-institutional course, the student shall be responsible for ensuring that an official transcript or result notice is forwarded to the School.

4.3 International exchanges

- 4.3.1 Students may count studies completed while on International Exchange programs formalised through the School and the University's International Office toward the Bachelor degree to the following limits:
 12 units during semester 2, Level I
 24 units at Level II
 12 units during semester 1, Level III.
- 4.3.2 Where students undertake any courses at a host institution not approved by the School, the School will determine what status, if any, to award for such studies.
- 4.3.3 On completion of any international exchange courses, the student shall be responsible for ensuring that an official transcript or result notice is forwarded to the School.

4.4 Academic Program

Level I

- PSYCHOL 1000 Psychology IA.....3
 PSYCHOL 1001 Psychology IB.....3
 plus courses to the value of 18 units selected from the following:

Commerce

Level I courses listed under Academic Program Rule 4.8 of the degree of Bachelor of Commerce.

Economics

Level I courses listed under Academic Program Rule 4.7 of the degree of Bachelor of Economics.

Health Sciences

Level I courses listed under Academic Program Rule 5.1 of the degree of Bachelor of Health Sciences.

Humanities and Social Sciences

Level I courses listed under Specific Academic Program Rule 5.1 of the degree of Bachelor of Arts and Specific Academic Program Rule 4.1 of the degree of Bachelor of Social Sciences.

Mathematical and Computer Sciences

Level I courses listed under Academic Program Rule 4.2 of the degree of Bachelor of Computer Science and Academic Program Rule 4.2 of the Bachelor of Mathematical and Computer Sciences.

Sciences

Level I Courses listed under Academic Program Rule 5.5 of the degree of Bachelor of Science.

Level II

- PSYCHOL 2004 Doing Research In Psychology: Research Design, Methods & Analysis3
 PSYCHOL 2005 Foundations of Health & Lifespan Developmental Psychology3
 PSYCHOL 2006 Foundations of Perception & Cognition3
 PSYCHOL 2007 Psychology in Society3
 plus other Level II courses from the list below to the value of at least 12 units:

Commerce

Level II courses listed under Academic Program Rule 4.8 of the degree of Bachelor of Commerce.

Economics

Level II courses listed under Academic Program Rule 4.7 of the degree of Bachelor of Economics.

Health Sciences

Level II courses listed under Academic Program Rule 5.1 of the degree of Bachelor of Health Sciences.

Humanities and Social Sciences

Advanced Level or Level II Language courses listed under Specific Academic Program Rule 5.1 of the degree of Bachelor of Arts and Specific Academic Program Rule 4.1 of the degree of Bachelor of Social Sciences.

Mathematical and Computer Sciences

Level II courses listed under Academic Program Rule 4.2 of the degree of Bachelor of Computer Science and Academic Program Rule 4.2 of the Bachelor of Mathematical and Computer Sciences.

Sciences

Level II Courses listed under Academic Program Rule 5.5 of the degree of Bachelor of Science.

Level III

- PSYCHOL 3020 Doing Research In Psychology: Advanced Research Design, Methods & Analysis.....3
 PSYCHOL 3021 Health & Lifespan Developmental Psychology3
 PSYCHOL 3022 Individual Differences, Personality & Assessment3
 PSYCHOL 3023 Perception & Cognition3

PSYCHOL 3024 Psychology in Society:
 Advanced 3
 PSYCHOL 3025 Psychology, Ideas & Action 3
 plus other Level III courses from the following list
 to the value of at least 6 units:

Commerce

Level III courses listed under Academic Program Rule 4.8 of the degree of Bachelor of Commerce.

Economics

Level III courses listed under Academic Program Rule 4.7 of the degree of Bachelor of Economics.

Health Sciences

Level III courses listed under Academic Program Rule 5.1 of the degree of Bachelor of Health Sciences.

Humanities and Social Sciences

Advanced Level or Level III Language courses listed under Specific Academic Program Rule 5.1 of the degree of Bachelor of Arts and Specific Academic Program Rule 4.1 of the degree of Bachelor of Social Sciences.

Mathematical and Computer Sciences

Level III courses listed under Academic Program Rule 4.2 of the degree of Bachelor of Computer Science and Academic Program Rule 4.2 of the Bachelor of Mathematical and Computer Sciences.

Sciences

Level III Courses listed under Academic Program Rule 5.5 of the degree of Bachelor of Science.

Level IV

PSYCHOL 4000A/B Honours Psychology..... 24

4.5 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award.

5 Special circumstances

When in the opinion of the relevant Faculty, special circumstances exist, the Council, on the recommendation of the Council in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

Graduate Attributes

Bachelor of Psychology (Honours)

The principal aim of this program is to provide graduates with the tertiary-level education required to be eligible for conditional registration as a Psychologist. The program is also designed to enable graduates to meet the prerequisites for progression to postgraduate study in this discipline.

Knowledge

- All of the topics specified by the Australian Psychology Accreditation Council as core areas of learning within this discipline, specifically: biological bases of behaviour; perception; cognition, information processing and language; learning; motivation and emotion; social psychology; lifespan developmental psychology; individual differences in capacity and behaviour, testing and assessment, personality; and abnormal psychology
- The range of methodologies employed to collect and analyse data relevant to the above topics.
- The historical origins of ideas within this discipline
- Some of the ways whereby contemporary psychology is being/could be applied to real-world problems and issue.

Intellectual and Social Capabilities

- An ability to communicate with audiences with differing levels of knowledge about psychological topics
- An ability to enter into rational debate on psychological topics
- An ability to critically evaluate claims relevant to or derived from the discipline of psychology and to formulate specific research questions with respect to those claims
- An ability to conduct empirical investigations appropriate for testing the validity of psychological knowledge claims and for the provision of evidence appropriate for answering specific research questions in psychology
- An ability to employ both qualitative and quantitative methods for the analysis of data collected for the purpose of testing the validity of psychological knowledge claims and answering specific research questions in psychology
- An ability to produce written reports of a professional standard on psychological issues and questions
- A basic understanding of how the knowledge and methods of contemporary psychology may be applied towards the management and/or solution of human problems.

Attitudes and Values

- A sensitivity to the cultural and ethical issues that may impact on the way that the knowledge acquired within psychology is interpreted and used
- A respect for people and their fundamental human rights, regardless of age, gender, ability, ethnic or religious background
- A respect for the scholarly heritage of psychology as an academic discipline and for the past, present and future contributions of psychology as a profession.



Bachelor of Science in Dentistry (Honours)

1 Duration of program

To qualify for the degree a candidate shall undertake advanced study extending over one academic year as a full-time candidate, or with the approval of the School of Dentistry, over a period of not more than two academic years as a half-time candidate and satisfy the examiners at the first attempt.

2 Admission

2.1 Before entering upon the program of study for the degree a candidate must:

- a have passed the Third Annual BDS examination or completed the Bachelor of Oral Health degree or an appropriate undergraduate degree or equivalent
- b have completed the prerequisite work, or work accepted by the School of Dentistry as appropriate for the proposed program of study *and*
- c be deemed by the Dean of the School concerned to be a suitable candidate for advanced work.

2.2 Prescribed communicable infections policy

The University promotes a pro-active public health approach to prescribed communicable infections (PCI) such as HIV/AIDS, Hepatitis B and Hepatitis C, and seeks to minimise the impact of these infections on students' academic progress. It offers understanding and practical support to students with such infections, and aims to provide a work and study environment free from discrimination, challenging views that result in discriminatory attitudes toward people with PCIs.

The University also has a legal and ethical obligation to take all reasonable measures to prevent the transmission of prescribed communicable infections among students, staff members and visitors, and recognises that some students with such infections will not be permitted to complete the Bachelor of Medicine, Bachelor of Surgery, the Bachelor of Dental Surgery or other clinical programs offered by the Faculty of Health Sciences.

All prospective medical and dental school students are strongly advised to consult the University's Students With Prescribed Communicable Infections Policy - available through the University's website at www.adelaide.edu.au/policies/591/ - which makes reference to the relevant legislation, elaborates on the reasons for the adoption of this policy, and outlines procedures for implementing the policy.

3 Assessment and examinations

- 3.1 A candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
- 3.2 The examination for the degree may consist of such written, oral and practical examinations as may be required. Assessments of any essays submitted by the candidate, practical work completed during the program, and the report on a research investigation may be taken into account.

4 Qualification requirements

4.1 Academic program

- 4.1.1 A program of study for the degree may be undertaken in the following discipline:
DENT 4100 AHO/BHO Honours Dentistry

4.1.2 Assumed knowledge

All programs of study assume a pass in the Third Annual BDS Examination for the degree of Bachelor of Dental Surgery; completion of the Bachelor of Oral Health degree; or a bachelor degree in another field of study that the School of Dentistry deems equivalent.

- 4.1.3 A program of study will consist of such of the following as may be required:
 - a reading in selected fields and submissions of essays
 - b attendance at lectures
 - c practical work *and*
 - d the undertaking of a research investigation on a topic assigned early in the program.

4.2 Honours grading scheme

A candidate who satisfies the requirements for Honours shall be awarded the Honours degree, but the Faculty shall decide within which of the following classes and divisions the degree shall be awarded:

- | | |
|-----|--------------------|
| 1 | First Class |
| 2A | Second Class div A |
| 2B | Second Class div B |
| 3 | Third Class |
| NAH | Not awarded. |

4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award.

5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.



Academic Program Rules

Faculty of Humanities and Social Sciences

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Undergraduate Awards

- Diploma in Languages
- Degree of Bachelor of Arts
- Degree of Bachelor of Development Studies
- Degree of Bachelor of Environmental Policy and Management
- Degree of Bachelor of International Studies
- Degree of Bachelor of Media
- Degree of Bachelor of Social Sciences
- Honours degree of Bachelor of Arts
- Honours degree of Bachelor of Development Studies
- Honours degree of Bachelor of Environmental Studies
- Honours degree of Bachelor of International Studies

- Honours degree of Bachelor of Media
- Honours degree of Bachelor of Social Sciences

Notes on Delegated Authority

1. Council has delegated the power to approve minor changes to the Academic Program Rules to the Executive Deans of Faculties.
2. Council has delegated the power to specify syllabuses to the Head of each department or centre concerned, such syllabuses to be subject to approval by the Faculty or by the Executive Dean on behalf of the Faculty.



Diploma in Languages

Note: The Faculty of Humanities and Social Sciences has developed this program to enable students enrolled in any undergraduate degree of the University to concurrently undertake a three-year language sequence and graduate with both a Bachelor's degree and the Diploma in Languages. Application for admission to this program shall be made directly to the Faculty of Humanities and Social Sciences. Entry to this program may not be deferred.

1 Duration of program

The duration of the Diploma itself shall be a minimum of three years of study, but shall be taken concurrently with full- or part-time study in another undergraduate award.

2 Admission

2.1 A student of the Diploma in Languages must be enrolled concurrently in a degree of Bachelor in the University.

2.2 Status, exemption and credit transfer

Except by special permission of the Faculty of Humanities and Social Sciences:

2.2.1 No student may gain status for any part of the language sequence of the Diploma in Languages, except where the language courses were undertaken in a University of Adelaide program and will no longer count to that program.

2.2.2 No status will be awarded in the Diploma in Languages for courses presented for another award.

3 Enrolment

3.1 Approval of program of study

Students should consult both the Faculty that administers their Bachelor degree and the Faculty of Humanities and Social Sciences for advice on an appropriate program of study.

4 Assessment and examinations

4.1 A candidate shall not be eligible to be assessed by examination or otherwise unless the prescribed work has been completed to the satisfaction of the teaching staff concerned. A candidate who is not eligible to be assessed by examination or otherwise shall be deemed to have failed the course.

4.2 A candidate who fails in a course or who obtains a Conceded Pass and who desires to take the course again shall, unless exempted wholly or partially by the Executive Dean of the Faculty concerned, again complete all the required work in that course to the satisfaction of the teaching staff concerned.

4.3 A candidate who does not complete the required assessment tasks in any course, shall be deemed to have failed the course.

4.4 There shall be four classifications of pass in any courses for the Diploma, as follows: Pass

with High Distinction, Pass with Distinction, Pass with Credit, and Pass. There shall also be a classification of Conceded Pass. A candidate may not present a Conceded Pass for the Diploma.

5 Qualification requirements

5.1 To qualify for the Diploma in Languages a student shall complete a three-year sequence (as defined in Rule 5.3 below) and satisfy the requirements of an undergraduate degree of the university.

5.2 A student may not have the Diploma in Languages conferred until he or she has satisfied the requirements for the approved undergraduate program.

5.3 Academic program

5.3.1 Language sequence

All students shall complete a three-year language sequence to a total value of 24 units. The sequence shall consist of:

6 units at Level I

9 units at Level II

9 units at Level III

in a single language

5.3.2 Language sequence variation

In certain circumstances this sequence may be varied to consist of:

9 units at Level II

9 units at Level III

6 units of advanced language studies or approved area studies *or*

5.3.3 Chinese

6 units at Level I

6 units at Level II

12 units at Level III

or

for students who have studied SACE stage 2 Chinese or equivalent:

6 units at Level II

12 units at Level III

6 units at Level IIIS

Note: all units are from language courses. Students can opt to enrol in 3 units of a China-focussed Social Science course in place of one language course or 6 units of China-focussed Social Science courses in place of 6 units from a language course

5.3.4 Japanese

6 units at Level I

6 units at Level II

9 units at Level III

plus 3-unit approved Advanced level Social Science course* *or*

6 units at Level II

9 units at Level III

6 units of advanced Japanese studies

plus 3-unit approved Level 1 Social Science course*

*Refer to list of majors published on the Faculty's website as approved electives may change from year to year.

5.3.5 Language availability

The languages available are:

Chinese

French

German

Indonesian

Italian

Japanese

Modern Greek

Spanish

- 5.3.6 With the permission of the Faculty of Humanities and Social Sciences, a student may substitute a period of study in an approved overseas tertiary institution as an exchange student in lieu of part of the requirements of the Diploma in Languages, up to a limit of 12 units.

5.4 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

5.5 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award.

6 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.



Bachelor of Arts

Note: Students who commenced their program of study towards the Bachelor of Arts under Specific Course Rules in 1995 or Regulations and Schedules in 1994 or earlier are subject to the following provisions:

- Students will normally complete their course of study under the provisions of the Specific Course Rules as published in 1995.
- Students may be permitted to complete their studies under the current Academic Program Rules for the Bachelor of Arts with such modifications as the Faculty may deem necessary.

Students who commenced their program of study towards the Bachelor of Arts prior to 2008 will normally complete their program of study under the provisions of the Specific Course Rules as published in the 2008 *Undergraduate Calendar*.

1 Duration of program

- 1.1 The program of study for the Bachelor degree will extend over three years of full-time study or the part-time equivalent.
- 1.2 Students will complete the requirements of the award within ten years. In determining a student's eligibility for the award of the degree, the Faculty will not normally count any course passed more than 10 years previously (see Rule 2.3).

2 Admission

2.1 Status, exemption and credit transfer

The following status rules apply to the Bachelor of Arts and the named degrees, Bachelor of Development Studies, Bachelor of Media, Bachelor of Social Sciences, Bachelor of Environmental Policy and Management and Bachelor of International Studies.

Students who have passed courses in Bachelor degree awards or equivalent at the University of Adelaide or another recognised institution, who wish to count such courses towards their degree, will be granted status to specified maximum limits. Students are not obliged to count the status awarded.

Where studies have been undertaken at an institution other than the University of Adelaide, a written application for status, accompanied by a transcript or statement of results, must be submitted to the Faculty Manager, Strategic and Administrative Services.

No application for status is required where the previous studies have been undertaken at the University of Adelaide. The maximum status limits are as follows:

2.1.1 Complete Bachelor degree studies in any academic discipline

- a 12 units at Level I in lieu of the requirements of 4.1.1.1 (b) (or equivalent for the named degrees) *and*
- b 12 units at Advanced Level or Level II in lieu of 4.1.1.1 (e) (or equivalent for the named degrees) i.e. not forming part of the major sequence for the BA or the compulsory courses or approved electives for the named degrees.

2.1.1.1 Where the complete degree includes Humanities and Social Sciences courses undertaken at the University of Adelaide (not more than 10 years previously), students are entitled to additional status as follows, subject to fulfilling the requirements of 4.1.1.2 the major sequence:

- a 12 units at Level I in lieu of the requirements of 4.1.1.1 (a) (or equivalent for the named degrees)
- b 12 units at Advanced Level or Level II in lieu of 4.1.1.1 (c) and (d) (or equivalent for the named degrees).

2.1.2 Incomplete Bachelor degree studies in any academic discipline (not covered by 2.1.3 or 2.2)

- a 12 units at Level I in lieu of the requirements of 4.1.1.1 (b) (or equivalent for the named degrees) *and*
- b 12 units at Advanced Level or Level II in lieu of 4.1.1.1 (e) (or equivalent for the named degrees) i.e. not forming part of the major sequence for the BA or the compulsory courses or approved electives for the named degrees.

2.1.2.1 Where the incomplete degree includes the equivalent of up to 12 units of Humanities and Social Sciences not already included under 2.1.2 (a), students are entitled to additional status at Level I as follows:

- a Bachelor of Arts - 12 units of Humanities and Social Sciences
- b Bachelor of Media - 3 units of Humanities and Social Sciences
- c Bachelor of Social Sciences - 6 units of Social Sciences
- d In special circumstances additional status may be granted for degrees completed at other Australian universities.

2.1.2.2 If students intend to study the Bachelor degree and their original degree concurrently, they should consult the Faculty that offers the original degree for advice on fulfilling its requirements.

2.1.3 Bachelor of Arts, Bachelor of Commerce, Bachelor of Computer Science, Bachelor of Development Studies, Bachelor of

Economics, Bachelor of Environmental Policy and Management, Bachelor of Finance, Bachelor of International Studies, Bachelor of Mathematical and Computer Sciences, Bachelor of Media, Bachelor of Social Sciences

A student who undertakes concurrently any two of the degrees listed above, may count 12 units at each of Level I and Advanced Level or Level II to both degrees, by undertaking courses to a minimum total of 48 units which satisfy the Level I and Advanced Level or Level II requirements of both awards.

Students must then present for each degree courses to the value of 24 units at Advanced Level or Level III (including where relevant a Capstone course) not presented for any other award, satisfying the requirements for the two degrees with a minimum total of 96 units (or 4 years) of study.

2.2 Status in formal combined degree arrangements

2.2.1 Law

Students who have passed courses in the Bachelor of Laws degree at the University of Adelaide will be granted status to the following limits:

- a 12 units at Level I in lieu of the requirements of 4.1.1.1 (b) (or equivalent for the named degrees) *and*
- b 12 units at Advanced Level or Level II in lieu of 4.1.1.1 (e) (or equivalent for the named degrees) i.e. not forming part of the major sequence for the BA or the compulsory courses or approved electives for the named degrees

2.2.2 Bachelor of Economics and Bachelor of Arts, Bachelor of Economics and Bachelor of International Studies, Bachelor of Arts and Bachelor of International Studies, Bachelor of Arts and Bachelor of Media, Bachelor of Media and Bachelor of International Studies

A student who undertakes any combination listed above, may count 12 units at each of Level I and Advanced Level or Level II towards both degrees, by undertaking courses to a minimum total of 48 units which satisfy the Level I and Advanced Level or Level II requirements of both awards.

Students must then present for each degree courses to the value of 24 units at Advanced Level or Level III (including where relevant a Capstone course) not presented for any other award, satisfying the requirements for the two degrees with a minimum total of 96 units (or 4 years) of study.

2.2.3 Bachelor of Arts/Bachelor of Science

Students may enrol in a program of study leading, after four years of full-time study (or part-time equivalent), to the award of both the Bachelor of Arts and the Bachelor of Science.

A student who undertakes these two degrees may count 12 units at each of Level I and Advanced

Level or Level II to both degrees, by undertaking courses to a minimum total of 48 units which satisfy the Level I and Advanced Level or Level II requirements of both awards.

Students must then present for each degree courses to the value of 24 units at Advanced Level or Level III (including where relevant a Capstone course) not presented for any other award, satisfying the requirements for the two degrees with a minimum total of 96 units (or 4 years) of study.

2.2.4 Bachelor of Arts/Bachelor of Music

Students who have passed courses in any one of the Bachelor of Music degrees at the University of Adelaide will be granted status to the following limits:

- a 12 units at Level I in lieu of the requirements of 4.1.1.1 (b) and
- b 12 units at Advanced Level or Level II in lieu of 4.1.1.1 (e) i.e. not forming part of the major sequence for the BA.

The Double degree program takes five years of full-time study (or part-time equivalent). For more information refer to the Notes (not forming part of the Academic Program Rules) for the Bachelor of Music.

2.3 Status on account of studies completed more than 10 years previously

Status is not normally awarded for studies completed more than 10 years previously. Where the Faculty deems status is appropriate, it will be limited as follows:

- a 12 units at Level I in lieu of the requirements of 4.1.1.1 (b) (or equivalent for the named degrees) *and*
- b 12 units at Advanced level or Level II in lieu of 4.1.1.1 (e) (or equivalent for the named degrees) i.e. not forming part of the major sequence for the BA or the compulsory courses or approved electives for the named degrees.

2.4 Status for prior Technical and Further Education (TAFE) studies

Students who hold a completed Associate Diploma/Diploma from an Institute of Technical and Further Education (TAFE) relating to a Discipline of study in the degree may be granted up to 12 units of status at Level I under the same conditions a student who holds a completed TAFE Certificate IV may be granted up to 6 units of status at Level I. Status will not normally be awarded for compulsory or Capstone courses.

2.5 Status for non-award studies

Students who have completed non-award courses from any recognised higher education institution may apply for status on account of such courses towards their degree and, if successful, will be subject to the same limits and conditions outlined in 2.1 above.

- 2.6 Minimum number of courses to be chosen from those offered by the Faculty of Humanities and Social Sciences at the University of Adelaide. Any application of the status rules above is subject to the requirement that all students must undertake a minimum of 36 units of courses chosen from 5.12.1-5.12.4 Humanities and Social Sciences.

3 Assessment and examinations

- 3.1 A candidate shall not be eligible to be assessed by examination or otherwise unless the prescribed work has been completed to the satisfaction of the teaching staff concerned. A candidate who is not eligible to be assessed by examination or otherwise shall be deemed to have failed the course.
- 3.2 A candidate who fails or obtains a Conceded Pass and who desires to take the course again shall, unless exempted wholly or partially by the Executive Dean of the Faculty concerned, again complete all the required work in that course to the satisfaction of the teaching staff concerned.
- 3.3 A candidate who does not complete the required assessment tasks in any course, shall be deemed to have failed the course.
- 3.4 There shall be four classifications of pass in any courses for the Bachelor degree, as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, and Pass. There shall also be a classification of Conceded Pass. A candidate may present for the Bachelor degree only a limited number of courses for which a Conceded Pass has been obtained, as specified in 6.5 below.

4 Qualification requirements

4.1 Academic program

4.1.1 Bachelor of Arts

- 4.1.1.1 To qualify for the degree of Bachelor of Arts a student will present passes in courses to the value of 72 units which satisfy the following requirements:

Level I

- a Level I courses to the value of 12 units chosen from those listed in 5.12.1 Humanities and Social Sciences courses, which may form part of a major sequence and a minor sequence of study (see 4.1.1.2 and 4.1.1.3) below.
- b Level I courses to the value of 12 units chosen from those listed in 5.12.1 Humanities and Social Sciences courses, or other courses offered by the University at Level I which are available to them.

Advanced Level or Level II

- c Courses to the value of 15 units chosen from those listed in 5.12.2 or 5.12.4 Humanities and Social Sciences courses, being the Level II or Advanced Level component of a major and a minor sequence of study (see 4.1.1.2 and 4.1.1.3).

- d Courses to the value of 9 units chosen from those listed in 5.12.2 or 5.12.4 Humanities and Social Sciences courses, or other courses offered by the University at Level II or Advanced Level which are available to them.

Advanced Level or Level III

- e Courses to the value of 15 units (including a Capstone course) chosen from those listed in 5.12.3 or 5.12.4 Humanities and Social Sciences courses, being the Level III or Advanced Level component of a major and a minor sequence of study (see 4.1.1.2 and 4.1.1.3).
- f Courses to the value of 9 units chosen from those listed in 5.12.3 or 5.12.4 Humanities and Social Sciences courses at Level III or Advanced Level.

4.1.1.2 Major sequence

24 units of courses must be chosen from one of the following areas of study, to form a 'major sequence' of study. A maximum of 6 units at Level I and at least 18 units of Advanced Level courses, including a Capstone course, with the exception of major sequences from the Elder Conservatorium of Music or other Faculties, or 9 units at Level II and 9 units at Level III must be presented:

Anthropology
 Asian Politics & Foreign Policy*
 Asian Studies*
 Chinese
 Classics
 Development Studies*
 Economics
 English
 European Studies
 French Studies
 Gender, Work & Social Inquiry
 Geographical & Environmental Studies
 German Studies
 History
 Indonesian
 International Studies
 Italian
 Japanese
 Linguistics
 Modern Greek
 Music Studies
 Philosophy
 Politics
 Psychology
 Spanish
 * Interdisciplinary areas of study

- a Students may choose to undertake a second major in another area of study.

- b In most areas of study, eligibility to apply for Honours is subject to completion of a major sequence to a standard acceptable to the discipline concerned. Students should contact the relevant discipline for advice on appropriate course choices for eligibility for Honours.
- c Honours in areas in other faculties, e.g. Economics and Psychology, may require more than a standard major sequence. Students should consult the relevant area for more information.

4.1.1.3 Minor sequence

18 units of courses must be chosen from one of the following areas of study, to form a 'minor sequence' of study. A maximum of 6 units at Level I and at least 12 units of Advanced Level courses or 6 units at Level II and 6 units at Level III must be presented:

Anthropology
 Art Theory*
 Asian Politics & Foreign Policy*
 Asian Studies
 Australian Studies*
 Biography/History*
 Chinese
 Classics
 Development Studies*
 Economics
 English
 European Studies
 Film*
 French Studies
 Gender, Work & Social Inquiry
 Geographical & Environmental Studies
 German Studies
 Globalisation*
 History
 Indonesian
 International Studies
 Italian
 Japanese
 Linguistics
 Medieval & Renaissance Studies*
 Modern Greek
 Music Studies
 Philosophy
 Politics
 Popular Culture*
 Psychology
 Religion & Ethics*
 Spanish
 Work Studies*
 Writing Practice

* Interdisciplinary areas of study

Students are required to undertake a minor in a different area of study to that presented for the major.

5 All Degrees

The following rules apply to the Bachelor of Arts and the named degrees, Bachelor of Development Studies, Bachelor of Environmental Policy and Management, Bachelor of International Studies, Bachelor of Media, and Bachelor of Social Sciences.

5.1 Unacceptable combinations of courses

- 5.1.1 A course cannot be presented twice for the degree.
- 5.1.2 A course cannot be presented with another course that contains a substantial amount of the same material.
- 5.1.3 A course cannot be presented in addition to any course listed as an 'incompatible' combination.

5.2 Repeating courses

- 5.2.1 A student who repeats a course they have previously failed must again attend lectures and do all assessed work in the course.
- 5.2.2 A student who wishes to repeat a course they have already passed must enrol in it on a non-award basis.
- 5.2.3 A student who has twice failed any course may not reenrol in that course again, or for any other course which in the opinion of the Faculty contains a substantial amount of the same material, except by special permission of the Faculty and then only under such conditions as the Faculty may prescribe.

5.3 Cross-institutional study

- 5.3.1 With prior approval of the Faculty, students may present courses offered by other universities, which are not offered by the Faculty of Humanities and Social Sciences, toward the Bachelor degree to the following limits:
 - a 12 units at Level I in lieu of the requirements of 4.1.1.1 (b) (or equivalent for the named degrees) *and*
 - b 12 units at Advanced Level or Level II in lieu of 4.1.1.1 (d) (or equivalent for the named degrees) i.e. not forming part of the major or minor sequence for the BA or the compulsory courses or approved electives for the named degrees to a maximum of 18 units for the degrees of Bachelor of Development Studies, Bachelor of Environmental Policy and Management, Bachelor of International Studies, and to a maximum of 24 units for the Bachelor of Arts, Bachelor of Media and Bachelor of Social Sciences.
- 5.3.2 Where students undertake any courses at another institution not approved by the Faculty, the Faculty will determine what status, if any, to award for such studies.

- 5.3.3 Flinders University Language Outreach courses are exempt from the provisions of this rule.
- 5.4 International exchanges**
- 5.4.1 Students may count studies completed while on International Exchange programs formalised through the University's International Office toward the Bachelor degree to the following limits:
24 units in total at Advanced Level or Levels II and III combined.
- 5.4.2 Where students undertake any courses at a host institution not approved by the Faculty, the Faculty will determine what status, if any, to award for such studies.
- 5.4.3 International exchanges are exempt from the provisions of 5.3.
- 5.5 Conceded Passes**
- A student may present Conceded Passes in a maximum of two 3-unit courses providing that the course is not a Capstone or compulsory course, or forming part of the major or minor.
- 5.6 Discipline limits**
- A student may not present more than 36 units of courses in a single area of study. An area of study is defined by the area that teaches it, not the majors to which it may be counted. This rule also applies where a student is undertaking an interdisciplinary major or an interdisciplinary degree.
- 5.7 Prerequisites**
- A student may only proceed to a course for which they have completed the prerequisite courses prescribed in the syllabuses.
- 5.8 Surplus to requirement**
- A student undertaking a course which is surplus to the requirements of their degree must enrol in that course on a non-award basis.
- 5.9 Counting units toward a lower level of the degree**
- A student may count any course undertaken or status awarded at Advanced Level or Level II to fulfil the requirements of Level I, or at Advanced Level or Level III to fulfil the requirements of Level I or II.
- 5.10 Review of academic progress**
- The Faculty may prescribe rules for review of academic progress. Any student who meets the requirements for review will be asked to show cause as to why they should be permitted to continue their studies. Students who cannot adequately explain poor academic performance may have their enrolment cancelled or restricted.
- 5.11 Graduation**
- Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award.

5.12 Program of study

5.12.1 Level I Humanities and Social Sciences courses

Anthropology

ANTH 1104 Culture & Society: Foundations of Anthropology	3
ANTH 1105 Anthropology of Everyday Life	3

Asian Studies

ASIA 1101 Introduction to Chinese Society and Culture	3
ASIA 1102 Introduction to Japanese Society and Culture	3
ASIA 1103 Asia and the World	3

Chinese

CHIN 1001 Chinese IA	3
CHIN 1002 Chinese IB	3
CHIN 1013 Classical Chinese Texts for Chinese Speakers	3

Classics

CLAS 1003 Games, Festivals and Leisure in Greece and Rome	3
CLAS 1004 The Ancient World in Film	3

Development Studies

DEVT 1001 Introduction to Development Studies	3
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Economics

ECON 1000 Principles of Macroeconomics I	3
ECON 1002 Australia and the Global Economy	3
ECON 1004 Principles of Microeconomics I	3
ECON 1005 Mathematics for Economists I	3
ECON 1008 Business Data Analysis I	3
ECON 1009 International Financial Institutions and Markets I	3
ECON 1010 Introductory Mathematical Econometrics	3

English

ENGL 1101 Introduction to English: Ideas of the Real	3
ENGL 1104 Professional English (ESL) I	3
ENGL 1105 Film Studies	3
ENGL 1107 Shakespeare	3

European Studies

EUST 1000 Modern Imagination in Europe	3
--	---

French Studies

FREN 1002 French IA: Beginners' French	3
FREN 1003 French IB: Beginners' French	3
FREN 1011 French ISA: Language and Culture	3
FREN 1012 French ISB: Language and Culture	3

Gender, Work and Social Inquiry	
GWSI 1001/1001EX Social Sciences in Australia ...	3
GWSI 1003/1003EX Gender, Work and Society	3
GWSI 1004/1004EX Introduction to Gender Studies	3
Geographical and Environmental Studies	
GEST 1001 Globalisation, Justice and a Crowded Planet	3
GEST 1002 Footprints on a Fragile Planet	3
GEST 1003 Economy, Environment and Place	3
GEST 1004 Population and Environment in Australia	3
German Studies	
GERM 1002 German IA: Beginners' German	3
GERM 1003 German IB: Beginners' German	3
GERM 1011 German Studies ISA.....	3
GERM 1012 German Studies ISB.....	3
History	
HIST 1105 Europe, Empire and the World: 1492-1914	3
HIST 1106 The Twentieth Century: A World In Turmoil	3
HIST 1107 Indigenous Culture & History.....	3
Indonesian	
INDO 1001 Indonesian Introductory A.....	3
INDO 1002 Indonesian Introductory B.....	3
INDO 1011 Indonesian Introductory SA.....	3
INDO 1012 Indonesian Introductory SB.....	3
Italian	
ITAL 1001 Italian IA.....	3
ITAL 1002 Italian IB	3
Japanese	
JAPN 1001 Japanese IA: Beginner I.....	3
JAPN 1002 Japanese IB: Beginner II	3
Linguistics	
LING 1101 Foundations of Linguistics	3
LING 1102 Language & Ethnography of Communication	3
Mathematics	
See syllabus entries for Mathematics, in Faculty of Engineering, Computer & Mathematical Sciences section, for available courses.	
Modern Greek	
MGRE 1001 Modern Greek IA.....	3
MGRE 1002 Modern Greek IB.....	3
Music Studies	
GENMUS 1001 From Elvis to U2 I.....	3
GENMUS 1003 Musics of the World I	3
GENMUS 1014 Sound & Media Technology I.....	3

GENMUS 1026A/B Perspectives in Music Technology I.....	6
MUSCORE 1007 Introduction to Theory & Analysis of Music I.....	3
MUSCORE 1008 Contrapuntal Analysis & Composition I	3
MUSCORE 1009 Foundations of Music History IA	3
MUSCORE 1010 Foundations of Music History IB.....	3
MUSTECH 1003A/B Music Technology I	6
Philosophy	
PHIL 1101 Argument and Critical Thinking	3
PHIL 1102 Mind and World	3
PHIL 1103 Morality, Society and the Individual ...	3
PHIL 1110 Logic I: Beginning Logic.....	3
Physics	
PHYSICS 1005 Physics, Ideas and Society I.....	3
Politics	
POLI 1101 Introduction to Australian Politics	3
POLI 1102 Introduction to International Politics ...	3
POLI 1103 Justice, Liberty, Democracy: Debates and Directions.....	3
POLI 1104 Introduction to Comparative Politics...	3
Psychology	
PSYCHOL 1000 Psychology IA.....	3
PSYCHOL 1001 Psychology IB.....	3
Spanish	
SPAN 1003 Spanish IA.....	3
SPAN 1004 Spanish IB	3
SPAN 1011 Spanish ISA	3
SPAN 1012 Spanish ISB	3

5.12.2 Level II

Humanities and Social Sciences courses

Chinese

CHIN 2201 Chinese IIA.....	3
CHIN 2202 Chinese IIB	3

Classical Languages

CLAS 2101 Beginners Latin.....	3
CLAS 2102 Advanced Latin	3

Economics

ECON 2500 International Trade & Investment Policy II.....	3
ECON 2501 Resource & Environmental Economics II	3
ECON 2502 East Asian Economies.....	3
ECON 2503 Mathematical Economics II.....	3
ECON 2504 Intermediate Econometrics II.....	3
ECON 2505 Australian Economic History II.....	3

ECON 2506 Intermediate Microeconomics II	3
ECON 2507 Intermediate Macroeconomics II	3
ECON 2508 Financial Economics II	3
ECON 2509 Applied Econometrics	3
French Studies	
FREN 2201 French IIA: Language	3
FREN 2202 French IIB: Language	3
FREN 2203 French IIA: Culture	3
FREN 2204 French IIB: Culture	3
FREN 2211 French IISA: Language	3
FREN 2212 French IISB: Language	3
FREN 2213 French IISA: Culture	3
FREN 2214 French IISB: Culture	3
German Studies	
GERM 2021 German in Germany	3
GERM 2030 German Special Topic II	3
GERM 2203 German IIA: German Language & Society	3
GERM 2204 German IIB: German Language & Society	3
GERM 2211 German IISA: German Language & Society	3
GERM 2212 German IISB: German Language & Society	3
GERM 2221 German Cultural Studies IISA	3
GERM 2222 German Cultural Studies IISB	3
GERM 2223 German Cultural Studies IIA	3
GERM 2224 German Cultural Studies IIB	3
Indonesian	
INDO 2101 Indonesian Intermediate A	3
INDO 2102 Indonesian Intermediate B	3
INDO 2103 Indonesian Intermediate C: Culture	3
INDO 2211 Indonesian Intermediate SA	3
INDO 2212 Indonesian Intermediate SB	3
INDO 2213 Indonesian Intermediate SC	3
Italian	
ITAL 2101 Italian IIA: Language	3
ITAL 2102 Italian IIB: Language	3
ITAL 2111 Italian IIA: Culture	3
ITAL 2112 Italian IIB: Culture	3
Japanese	
JAPN 2201 Japanese 2A: Lower Elementary I	3
JAPN 2202 Japanese 2B: Lower Elementary II	3
Mathematics	
See syllabus entries for Mathematics for available courses.	
Modern Greek	
MGRE 2101 Modern Greek IIA: Language	3
MGRE 2102 Modern Greek IIB: Language	3
MGRE 2111 Modern Greek IIA: Culture	3
MGRE 2112 Modern Greek IIB: Culture	3
Music Studies	
GENMUS 2005 Music Media & Contemporary Society II/III	3
GENMUS 2026A/B Perspectives in Music Technology II	6
MUSCORE 2005 Western Music in Theory & Practice IIA: 1750-1850	3
MUSCORE 2006 Western Music in Theory & Practice IIB: 1750-1850	3
MUSST 2001 Approaches to Music IIA	3
MUSST 2002 Approaches to Music IIB	3
MUSTECH 2003A/B Music Technology II	6
Psychology	
PSYCHOL 2004 Doing Research in Psychology: Research Design, Methods & Analysis	3
PSYCHOL 2005 Foundations of Health & Lifespan Developmental Psychology	3
PSYCHOL 2006 Foundations of Perception & Cognition	3
PSYCHOL 2007 Psychology in Society	3
Spanish	
SPAN 2011 Spanish IISA	3
SPAN 2012 Spanish IISB	3
SPAN 2101 Spanish IIA	3
SPAN 2102 Spanish IIB	3
SPAN 2112 Introduction to Latin American Culture	3
5.12.3 Level III	
Humanities and Social Sciences courses	
Chinese	
CHIN 3301 Chinese IIIA	3
CHIN 3302 Chinese IIIB	3
CHIN 3211 Chinese IISA	3
CHIN 3212 Chinese IISB	3
CHIN 3213 Chinese IISA: Project	3
CHIN 3221 Chinese Translation for Chinese Speakers	3
CHIN 3222 Chinese Translation for Chinese Speakers: Project	3
CHIN 3231 Issues in Chinese Culture for Chinese Speakers	3
CHIN 3232 Research Project for Chinese Speakers	3
Classical Languages	
LATN 3002 Latin IIIA	6
LATN 3003 Latin IIIB	6

Development Studies

DEVT 3002 Development Studies Professional Practicum 6

Economics

ECON 3500 Resource & Environmental Economics III 3

ECON 3501 Development Economics III 3

ECON 3502 Topics in Applied Econometrics III 3

ECON 3503 Strategic Thinking III 3

ECON 3504 Labour Economics III 3

ECON 3506 International Trade III 3

ECON 3507 Econometric Theory III 3

ECON 3508 Public Economics III 3

ECON 3509 International Economic History III 3

ECON 3510 International Finance III 3

ECON 3511 Money, Banking & Financial Markets III 3

ECON 3512 Public Finance III 3

ECON 3515 Time Series Econometrics III 3

French Studies

FREN 3201 French IIIA: Language 3

FREN 3202 French IIIB: Language 3

FREN 3203 French IIIA: Culture 3

FREN 3204 French IIIB: Culture 3

FREN 3211 French IIISA: Language 3

FREN 3212 French IIISB: Language 3

FREN 3213 French IIISA: Culture 3

FREN 3214 French IIISB: Culture 3

German Studies

GERM 3021 German in Germany 3

GERM 3030 German Special Topic Level III 3

GERM 3203 German IIIA: German Language & Society 3

GERM 3204 German IIIB: German Language & Society 3

GERM 3211 German IIISA: German Language & Society 3

GERM 3212 German IIISB: German Language & Society 3

GERM 3221 German Cultural Studies IIISA 3

GERM 3222 German Cultural Studies IIISB 3

GERM 3223 German Cultural Studies IIIA 3

GERM 3224 German Cultural Studies IIIB 3

Indonesian

INDO 3101 Indonesian Advanced A 3

INDO 3102 Indonesian Advanced B 3

INDO 3103 Indonesian Advanced C 3

INDO 3211 Indonesian Advanced SA 3

INDO 3212 Indonesian Advanced SB 3

INDO 3213 Indonesian Advanced SC: Culture 3

Italian

ITAL 3101 Italian IIIA: Language 3

ITAL 3102 Italian IIIB: Language 3

ITAL 3111 Italian IIIA: Culture 3

ITAL 3112 Italian IIIB: Culture 3

Japanese

JAPN 3201 Japanese 3A: Higher Elementary I 3

JAPN 3202 Japanese 3B: Higher Elementary II 3

JAPN 3203 Japanese 3B: Practical Japanese 3

JAPN 3211 Intermediate Japanese A 3

JAPN 3212 Intermediate Japanese B 3

Mathematics

See syllabus entries for Mathematics for available courses.

Modern Greek

MGRE 3101 Modern Greek IIIA: Language 3

MGRE 3102 Modern Greek IIIB: Language 3

MGRE 3111 Modern Greek IIIA: Culture 3

MGRE 3112 Modern Greek IIIB: Culture 3

Music Studies

GENMUS 3011 Village Voices: Greenwich in the 1960s III 3

GENMUS 3013 Music & Ideology II/III 3

GENMUS 3026A/B Perspectives in Music Technology III 6

MUSCORE 3005 Western Music in Theory & Practice IIB: 1750-1850 3

MUSST 3001 Approaches to Music III 3

MUSST 3003 Aboriginal Music In Australia II/III 3

MUSST 3005 Foundation for Honours III 3

MUSST 3012 The String Quartets of Bartok III 3

MUSST 3014 Rhythm in the 20th Century III 3

MUSTECH 3003A/B Music Technology III 6

Psychology

PSYCHOL 3020 Doing Research in Psychology: Advanced Research Design, Methods & Analysis 3

and 3 of the following (for students undertaking a major sequence in Psychology)

PSYCHOL 3021 Health & Lifespan Developmental Psychology 3

PSYCHOL 3022 Individual Differences, Personality & Assessment 3

PSYCHOL 3023 Perception and Cognition 3

PSYCHOL 3024 Psychology in Society: Advanced 3

PSYCHOL 3025 Psychology, Ideas & Action 3

Spanish	
SPAN 3006 Latin American Literature and Society	3
SPAN 3101 Spanish IIIA.....	3
SPAN 3102 Spanish IIIB.....	3
5.12.4 Advanced Level Courses	
Anthropology	
ANTH 2036 Anthropology of Conflict & Crisis	3
ANTH 2037 Anthropology of Emotion, Mind, and Person	3
ANTH 2038 Anthropology of Health & Medicine ..	3
ANTH 2040 Ethnography: Engaged Social Research	3
ANTH 2041 Popular Culture: Passion, Style, Vibe..	3
ANTH 2042 Consuming Passions: Anthropology of Food & Drink.....	3
ANTH 2044 ICT for Development.....	3
ANTH 2050 Anthropology of Globalisation	3
ANTH 2051 Culture and Human Rights	3
Asian Studies	
ASIA 2018 Australia & the Asia-Pacific	3
ASIA 2020 Cultures & Identities in Contemporary Japan	3
ASIA 2021 Cultures & Identities in Contemporary China.....	3
ASIA 2022 China Today: Politics & Governance....	3
ASIA 2023 Japan Today: Politics & Governance ...	3
ASIA 2025 Reorientating Asia: Popular Voices & Sustainability.....	3
CHIN 2006 Chinese Literature & Media for Chinese Speakers	3
Classical Studies	
CLAS 2026 Eastern Mediterranean Archaeological Field School	3
CLAS 2031 Afterlife and Underworld in Antiquity....	3
CLAS 2033 Archaeology of Rome.....	3
CLAS 2034 Alexander the Great and the Decline of Greece.....	3
CLAS 2035 The Glory of Athens and the Shadow of Sparta	3
Development Studies	
DEVT 2100 Poverty and Social Development	3
DEVT 2101 Community, Gender and Critical Development	3
English	
ENGL 2046 English for Professional Purposes	3
ENGL 2052 Modernisms	3
ENGL 2053 Writing & Reconciliation	3
ENGL 2054 A Festival of Contemporary Writing...3	
ENGL 2055 Australian Classics: Literature and Film	3
ENGL 2056 Dangerous Liaisons: Writing out of Africa	3
ENGL 2057 Hollywood or Bust!	3
ENGL 2058 Reading and Writing Poetry	3
ENGL 2060 Self Writing.....	3
ENGL 2061 Body Language	3
ENGL 2062 Creative Writing: The Essentials.....	3
ENGL 2204 Professional English (ESL) II	3
ENGL 2214 Advanced Professional English (ESL) 3	
European Studies	
EUST 2114 European Film Movements	3
Faculty Courses	
ARTS 2001 Arts Internship	6
EXCHANGE 1003 H&SS International Exchange - HUMSS	3
EXCHANGE 1006 H&SS International Exchange - HUMSS	6
EXCHANGE 1009 H&SS International Exchange - HUMSS	9
EXCHANGE 1012 H&SS International Exchange - HUMSS.....	12
French Studies	
FREN 2022 French Mentoring Program	3
Gender, Work and Social Inquiry	
GWSI 2020 Social Theory in Action	3
GWSI 2021/ 2021EX Media Images and Representation	3
GWSI 2101/ 2101EX Fashion, Work and Identity ..	3
GWSI 2103 Social Policy and Citizenship.....	3
GWSI 2110 Social Research.....	3
Geographical and Environmental Studies	
GEST 2029 Introductory Geographic Information Systems	3
GEST 2032 Social Science Techniques	3
GEST 2038 Population and Health	3
GEST 2039 Environmental Management	3
GEST 2040 Environmental Change	3
GEST 2043 Introduction to Environmental Impact Assessment	3
GEST 2044 Principles of Environmental Economics	3
GEST2045 Governance and Sustainable Development	3
GEST 2046 Geographies of Food and Agriculture...3	
GEST 2048 Living with Uncertainty: Adapting to Global Change	3
GEST 2200 Environmental Policy & Management Internship.....	6

History

HIST 2051 Australia and the World.....	3
HIST 2052 Migrants, Refugees & the Making of Modern Australia	3
HIST 2053 Medieval Europe: The Crusades to the Black Death.....	3
HIST 2054 Reel History: World War II in Film.....	3
HIST 2055 Food & Drink in World History.....	3
HIST 2062 Modern America: Civil War to Iraq.....	3
HIST 2063 Early Modern Europe.....	3
HIST 2068 Uniting the Kingdoms: Britain 1534-1707.....	3
HIST 2070 History of the Indigenous Peoples of Australia B	3
HIST 2072 Slavery and Emancipation in the Atlantic World	3
HIST 2074 Islam, Army and State: Indonesia since 1945	3
HIST 2076 Portraiture and Power	3
HIST 2077 Is America Really in Decline?.....	3
HIST 2078 Power, Passion & Greed: Georgian London 1714-1830.....	3
HIST 2079 Art Against Society: Censorship & Iconoclasm.....	3
HIST 2080 History of the Indigenous Peoples of Australia A.....	3

Linguistics

LING 2013 Language and Communication Planning	3
LING 2014 Australian Indigenous Languages.....	3
LING 2037 Language in a Global Society.....	3
LING 2040 Phonology.....	3
LING 2045 Language Learning	3
LING 2046 Morphology and Syntax	3
LING 2047 Language and Meaning	3

Philosophy

PHIL 2030 Cognitive Science: Minds, Brains & Computers	3
PHIL 2034 Existentialism	3
PHIL 2042 Moral Problems	3
PHIL 2044 Philosophy of Religion	3
PHIL 2045 Professional Ethics	3
PHIL 2048 Philosophy of Film	3
PHIL 2049 Logic, Truth and Reason.....	3
PHIL 2050 Philosophy of Science	3
PHIL 2051 But Is It Art? A Philosophical Investigation	3

Politics

POLI 2095 Critical Security Studies.....	3
POLI 2096 Human Rights & Postcolonial Issues...3	

POLI 2100 Intelligence & Security after the Cold War.....	3
POLI 2104 Incredible India: Dynamics of a Rising World Power.....	3
POLI 2105 Issues in Australian Politics.....	3
POLI 2106 Justice, Virtue & the Good.....	3
POLI 2108 Post-Cold War International Relations..3	
POLI 2110 Politics, Power and Popular Culture....3	
POLI 2112 South Australian Parliamentary Internships	6
POLI 2118 Comparative Politics of Leadership.....	3
POLI 2120 Conflict and Crisis in the Middle East.3	
POLI 2121 The Practice of Australian Politics.....	3
POLI 2122 Global Environmental Politics.....	3

5.12.5 Capstone courses

ANTH 3100 Anthropology Today: Culture, Agency, Experience	3
DEVT 3100 Aid Policy & Administration	3
INST 3100 International Studies Core Course	3

6 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

Graduate Attributes

Bachelor of Arts

The Faculty of Humanities and Social Sciences facilitates an environment in which graduates are encouraged to take personal responsibility for developing the following attributes

- Broad general knowledge
- Specialised understanding in one or two chosen disciplines
- An appreciation of their potential contribution to knowledge through engagement with the traditions and innovations in their fields of enquiry
- The skills and discipline to research, synthesise, organise and present information, using a range of technologies as appropriate
- Problem solving skills
- Analytic and critical skills
- The ability to argue from evidence
- The ability to think creatively
- The ability to communicate ideas effectively
- The ability to set appropriate goals and to work independently and/or cooperatively
- An understanding of the importance of lifelong learning
- An understanding of ethical issues in their professional and intellectual contexts
- An awareness of their potential leadership roles in the community of scholars and in the wider community
- An awareness of social justice issues.



Bachelor of Development Studies

1 Duration of program

- 1.1 The program of study for the Bachelor degree shall extend over three years of full-time study or the part-time equivalent.
- 1.2 Candidates shall complete the requirements of the award within ten years. In determining a candidate's eligibility for the award of the degree, the Faculty will not normally count any course passed more than 10 years previously.

2 Admission

2.1 Status, exemption and credit transfer

Students who have passed courses in Bachelor degree awards or equivalent at the University of Adelaide or another recognised institution, who wish to count such courses towards their degree, will be granted status to specified maximum limits. Students are not obliged to count the status awarded.

Where studies have been undertaken at an institution other than the University of Adelaide, a written application for status, accompanied by a transcript or statement of results must be submitted to the Manager, Strategic and Administrative Services. No application for status is required where the previous studies have been undertaken at the University of Adelaide.

The maximum status limits are as follows:

- a 12 units at Level I on account of studies in any academic discipline in lieu of the requirements of 4.1.1(d)
 - b 6 units at Level II or Advanced Level on account of studies in any academic discipline in lieu of the requirements of 4.1.2(h).
- 2.2 Status will not normally be awarded for any of the compulsory courses, or courses forming part of the minor.
 - 2.3 For further information on status rules, refer to 2.1 of the Academic Program Rules for the Bachelor of Arts.

3 Assessment and examinations

- 3.1 A candidate shall not be eligible to be assessed by examination or otherwise unless the prescribed work has been completed to the satisfaction of the teaching staff concerned. A candidate who is not eligible to be assessed by examination or otherwise shall be deemed to have failed the course.
- 3.2 A candidate who fails in a course or who obtains a Conceded Pass and who desires to take the course again shall, unless exempted wholly or

partially by the Executive Dean of the Faculty concerned, again complete all the required work in that course to the satisfaction of the teaching staff concerned.

- 3.3 A candidate, who does not complete the required assessment tasks in any course, shall be deemed to have failed the course.
- 3.4 There shall be four classifications of pass in any courses for the Bachelor degree, as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, and Pass. There shall also be a classification of Conceded Pass. A candidate may present for the Bachelor degree only a limited number of courses for which a Conceded Pass has been obtained, as specified in 4.6 below.

4 Qualification requirements

4.1 Academic program

To qualify for the degree of Bachelor of Development Studies a candidate shall present passes in courses to a value of 72 units that satisfy the following requirements:

4.1.1 Level I

- a DEVT 1001 Introduction to Development Studies3
- b Three nominated Development Studies Core courses at 3 units value each to the total value of 9 units:
 - ANTH 1104 Culture & Society: Foundations of Anthropology3
 - or
 - ANTH 1105 Anthropology of Everyday Life....3
 - GEST 1001 Globalisation, Justice & a Crowded Planet3
 - or
 - GEST 1002 Footprints on a Fragile Planet3
 - GEST 1003 Economy, Environment and Place3
- c Level I courses to the value of 6 units chosen from those listed in 5.12.1 for the Bachelor of Arts forming a minor sequence6
- d Level I courses to the value of 6 units chosen from those listed in 5.12.1 for the Bachelor of Arts or other courses offered by the university at Level I that are available to the candidate ... 6

4.1.2 Advanced Level or Level II

- e DEVT 2100 Poverty & Social Development.....3
- f At least three Development Studies electives to the value of 9 units9

g	Advanced Level or Level II courses up to the value of 6 units chosen from those listed in 5.12.2 for the Bachelor of Arts forming a minor sequence.....	6
h	Advanced Level or Level II courses up to the value of 6 units chosen from those listed in 5.12.2 for the Bachelor of Arts, or other courses offered by the University at Level II or Advanced Level, that are available to the candidate	6
4.1.3	Advanced Level or Level III or Capstone	
i	DEVT 3100 Aid Policy and Administration	3
j	At least three Advanced Level Development Studies electives to the value of at least 9 units.....	9
k	Advanced Level or Level III courses up to the value of 6 units chosen from those listed in 5.12.3 for the Bachelor of Arts forming a minor sequence.....	6
l	Advanced Level or Level III courses up to the value of 6 units chosen from those listed in 5.12.3 for the Bachelor of Arts or other courses offered by the University at Level III or Advanced Level that are available to the candidate.....	6
4.2	Unacceptable combination of courses	
4.3	Repeating courses	
4.4	Cross Institutional study	
4.5	International exchange	
4.6	Conceded Passes	
4.7	Discipline limits	
4.8	Prerequisites	
4.9	Surplus to requirement	
4.10	Counting units toward a lower level of the degree	
4.11	Review of academic progress	
4.12	Graduation	
	Note: For information on Rules 4.2-4.12, refer to Rule 5 of the Academic Program Rules for the Bachelor of Arts.	
4.13	Status and combined degree arrangements	
	For information on Rule 4.13, refer to Rule 2.2 of the Academic Program Rules for the Bachelor of Arts.	

5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

Graduate Attributes

Bachelor of Development Studies

The Faculty of Humanities and Social Sciences facilitates an environment in which graduates are encouraged to take personal responsibility for developing the following attributes:

- Knowledge and understanding of the content and techniques of Development Studies at advanced levels that are internationally recognised
- The ability to locate, analyse, evaluate and synthesise information from a wide variety of sources in a planned and timely manner
- An ability to apply effective, creative and innovative solutions, both independently and cooperatively, to current and future problems
- Skills of a high order in interpersonal understanding, teamwork and communication
- A proficiency in the appropriate use of contemporary technologies
- A commitment to continuous learning and the capacity to maintain intellectual curiosity throughout life.



Bachelor of Environmental Policy and Management

1 Duration of program

- 1.1 The program of study for the Bachelor degree shall extend over three years of full-time study or the part-time equivalent.
- 1.2 Candidates shall complete the requirements of the award within ten years. In determining a candidate's eligibility for the award of the degree, the Faculty will not normally count any course passed more than 10 years previously.

2 Admission

2.1 Status, exemption and credit transfer

Students who have passed courses in Bachelor degree awards or equivalent at the University of Adelaide or another recognised institution, who wish to count such courses towards their degree, will be granted status to specified maximum limits. Students are not obliged to count the status awarded.

Where studies have been undertaken at an institution other than the University of Adelaide, a written application for status, accompanied by a transcript or statement of results, must be submitted to the Manager, Strategic and Administrative Services. No application for status is required where the previous studies have been undertaken at the University of Adelaide.

The maximum status limits are as follows:

- a 12 units at Level I on account of studies in any academic discipline in lieu of the requirements of 4.1 (c)
- b 6 units at Advanced Level or Level II on account of studies in any academic discipline in lieu of the requirements of 4.1 (f).
- 2.2 Status will not normally be awarded for any of the compulsory courses, or courses forming part of the minor.
- 2.3 For further information on status rules, refer to Rule 2.1 of the Academic Program Rules for the Bachelor of Arts.

3 Assessment and examinations

- 3.1 A candidate shall not be eligible to be assessed by examination or otherwise unless the prescribed work has been completed to the satisfaction of the teaching staff concerned. A candidate who is not eligible to be assessed by examination or otherwise shall be deemed to have failed the course.
- 3.2 A candidate who fails in a course or who obtains a Conceded Pass and who desires to take the course again shall, unless exempted wholly or partially by the Executive Dean of the Faculty concerned, again

complete all the required work in that course to the satisfaction of the teaching staff concerned.

- 3.3 A candidate who does not complete the required assessment tasks in any course, shall be deemed to have failed the course.
- 3.4 There shall be four classifications of pass in any courses for the Bachelor degree, as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, and Pass. There shall also be a classification of Conceded Pass. A candidate may present for the Bachelor degree only a limited number of courses for which a Conceded Pass has been obtained, as specified in 5.6 below.

4 Qualification requirements

4.1 Academic program

To qualify for the degree of Bachelor of Environmental Policy and Management a candidate shall present passes in courses to a value of 72 units that satisfy the following requirements:

Level I

- a GEST 1001 Globalisation, Justice and a Crowded Planet3
- GEST 1002 Footprints on a Fragile Planet3
- GEST 1003 Economy, Environment and Place3
- GEST 1004 Population & Environment in Australia3
- b Level I courses up to the value of 6 units chosen from those listed in 5.12.1 for the Bachelor of Arts forming a minor sequence...6
- c Level I courses up to the value of 6 units chosen from those listed in 5.12.1 for the Bachelor of Arts or other courses offered by the University at Level I that are available to the candidate6

Advanced Level or Level II

- d Advanced Level GEST specialised courses* to the value of at least 12 units 12
- e Advanced Level or Level II courses up to the value of 6 units chosen from those listed in 5.12.2 or 5.12.4 for the Bachelor of Arts forming a minor sequence.....6
- f Advanced Level or Level II courses up to the value of 6 units chosen from those listed in 5.12.2 or 5.12.4 for the Bachelor of Arts, or other courses offered by the University at Advanced Level or Level II, that are available to the candidate6

* Chosen from a list designated by the Discipline of Geographical and Environmental Studies each year.

Advanced Level or Level III

- g Advanced Level GEST specialised courses* to the value of at least 12 units 12
- h Advanced Level or Level III courses to the value of up to 6 units chosen from those listed in 5.12.3 or 5.12.4 for the Bachelor of Arts forming a minor sequence 6
- i Advanced Level or Level III courses to the value of up to 6 units chosen from those listed in 5.12.3 or 5.12.4 for the Bachelor of Arts 6

* Chosen from a list designated by the Discipline of Geographical and Environmental Studies each year.

4.2 Unacceptable combination of courses

4.3 Repeating courses

4.4 Cross Institutional study

4.5 International exchange

4.6 Conceded Passes

4.7 Discipline limits

4.8 Prerequisites

4.9 Surplus to requirement

4.10 Counting units toward a lower level of the degree

4.11 Review of academic progress

4.12 Graduation

Note: For information on Rules 4.2-4.12, refer to Rule 5 of the Academic Program Rules for the Bachelor of Arts.

4.13 Status and combined degree arrangements

For information on Rule 4.13, refer to Rules 2.1 and 2.2 of the Academic Program Rules for the Bachelor of Arts.

5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

Graduate Attributes

Bachelor of Environmental Policy and Management

The Faculty of Humanities and Social Sciences facilitates an environment in which graduates are encouraged to take personal responsibility for developing the following attributes:

- Broad general knowledge
- Specialised knowledge of current environmental issues from a social sciences perspective
- An appreciation of the various theoretical and philosophical frameworks within which environmental issues are raised
- A trained mind with the skills and discipline to research, synthesise, organise and present information on the environment, using a range of technologies as appropriate
- Problem solving skills and the ability to argue from evidence
- The ability to think creatively and communicate ideas effectively for the purpose of developing appropriate environmental policies
- The ability to set appropriate goals and to work independently and/or cooperatively to achieve specified outcomes
- A clear understanding of ethical issues in their professional and intellectual contexts
- A commitment to researching and solving environmental problems and raising awareness of environmental issues in an intellectual and broader social context.



Bachelor of International Studies

1 Duration of program

- 1.1 The program of study for the Bachelor degree shall extend over three years of full-time study or the part-time equivalent.
- 1.2 Candidates shall complete the requirements of the award within ten years. In determining a candidate's eligibility for the award of the degree, the Faculty will not normally count any course passed more than 10 years previously.

2 Admission

2.1 Status, exemption and credit transfer

Students who have passed courses in Bachelor degree awards or equivalent at the University of Adelaide or another recognised institution, who wish to count such courses towards their degree, will be granted status to specified maximum limits. Students are not obliged to count the status awarded.

Where studies have been undertaken at an institution other than the University of Adelaide, a written application for status, accompanied by a transcript or statement of results, must be submitted to the Manager, Strategic and Administrative Services. No application for status is required where the previous studies have been undertaken at the University of Adelaide.

The maximum status limits are as follows:

- a 12 units at Level I on account of studies in any academic discipline in lieu of the requirements of 4.1 (d)
 - b 6 units at Advanced Level or Level II on account of studies in any academic discipline in lieu of the requirements of 4.1 (g).
- 2.2 Status will not normally be awarded for any of the compulsory courses, or courses forming part of the minor.
 - 2.3 For further information on status rules, refer to 2.1 of the Academic Program Rules for the Bachelor of Arts.

3 Assessment and examinations

- 3.1 A candidate shall not be eligible to be assessed by examination or otherwise unless the prescribed work has been completed to the satisfaction of the teaching staff concerned. A candidate who is not eligible to be assessed by examination or otherwise shall be deemed to have failed the course.
- 3.2 A candidate who fails in a course or who obtains a Conceded Pass and who desires to take the course again shall, unless exempted wholly or partially by the Executive Dean of the Faculty

concerned, again complete all the required work in that course to the satisfaction of the teaching staff concerned.

- 3.3 A candidate who does not complete the required assessment tasks in any course, shall be deemed to have failed the course.
- 3.4 There shall be four classifications of pass in any courses for the Bachelor degree, as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, and Pass. There shall also be a classification of Conceded Pass. A candidate may present for the Bachelor degree only a limited number of courses for which a Conceded Pass has been obtained, as specified in 5.6 below.

4 Qualification requirements

4.1 Academic program

To qualify for the degree of Bachelor of International Studies a candidate shall present passes in courses to a value of 72 units that satisfy the following requirements:

Level I

- a POLI 1102 Introduction to International Politics3
- POLI 1104 Introduction to Comparative Politics3
- b Two courses from the following:
 - ASIA 1103 Asia and the World3
 - HIST 1105 Europe Empire and the World 1492 -19143
 - HIST 1106 The Twentieth Century: A World in Turmoil3
- c Level I courses up to the value of 6 units chosen from those listed in 5.12.1 for the Bachelor of Arts forming a minor sequence ..6
- d Level I courses up to the value of 6 units chosen from those listed in 5.12.1 for the Bachelor of Arts or other courses offered by the University at Level I that are available to the candidate.....6

Advanced Level or Level II

- e Advanced Level International Studies compulsory courses to the value of 6 units:
 - POLI 2108 Post-Cold War International Relations.....3
 - POLI 2118 Comparative Politics of Leadership..3
- f Advanced Level specialised* International Studies courses to the value of at least 6 units.....6

- g Advanced Level or Level II courses to the value of 6 units chosen from those listed in 5.12.2 or 5.12.4 for the Bachelor of Arts forming a minor sequence.....6
- h Advanced Level or Level II courses to the value of 6 units chosen from those listed in 5.12.2 or 5.12.4 for the Bachelor of Arts, or other courses offered by the University at Level II, that are available to the candidate.....6

Advanced, Level III or Capstone

- i Capstone course to the value of 3 units:
INST 3100 International Studies Core Course ... 3
- j Advanced Level specialised* International Studies courses to the value of at least 9 units9
- k Advanced Level or Level III courses to the value of 6 units chosen from those listed in 5.12.3 or 5.12.4 for the Bachelor of Arts forming a minor sequence.....6
- l Advanced Level or Level III courses to the value of 6 units chosen from those listed in 5.12.3 or 5.12.4 for the Bachelor of Arts6
- m In some cases the final year of the program as specified in 4.1.(i)-(l) may be replaced by International Exchange or In-country studies to the value of 24 units, and language courses to the value of 12 units.

* To be designated by the School of History & Politics each year.

- 4.2 Unacceptable combinations of courses
- 4.3 Repeating courses
- 4.4 Cross-institutional study
- 4.5 International exchanges
- 4.6 Conceded Passes
- 4.7 Discipline limits
- 4.8 Prerequisites
- 4.9 Surplus to requirement
- 4.10 Counting units toward a lower level of the degree
- 4.11 Review of academic progress
- 4.12 Graduation
Note: For information on Rules 4.2-4.12, refer to Rule 5 of the Academic Program Rules for the Bachelor of Arts.
- 4.13 Status and double degree arrangements
For information on Rule 4.13, refer to Rule 2.2 of the Academic Program Rules for the Bachelor of Arts.

5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

Graduate Attributes

Bachelor of International Studies

The Faculty of Humanities and Social Sciences facilitates an environment in which graduates are encouraged to take personal responsibility for developing the following attributes:

- A complex understanding of key processes in international relations such as diplomacy, the world economy, security and conflict
- An understanding of the interests and interrelationships of key actors and institutions in world politics, including states, NGOs, people, and international organisations such as the UN, WTO and IMF
- A broad general knowledge, and knowledge in at least one region of the world in an international context
- An appreciation of the processes of globalisation and their impact in social, economic, political, cultural and legal contexts
- A heightened sensitivity to causal relationships between events in world politics
- A trained mind with the skills and discipline to research, synthesise, analyse and present information, using a range of technologies and resources
- A clear understanding of ethical issues in their professional and intellectual contexts, relating in particular to human rights, transparency and accountability, good governance and the public interest
- Increased critical and analytical thinking skills
- Well-developed conceptual skills
- Highly developed verbal and written skills
- An understanding of, and respect for, global cultural difference and diversity
- An enhanced capacity for democratic and global citizenship
- An increased maturity of social judgement
- An appreciation of questions of global inequality and responsibility
- An understanding of, and commitment to, the importance of lifelong learning
- A sense of their place in the community of scholars and in the wider community, including their role in contributing to the disciplines within International Studies.



1 Duration of program

- 1.1 The program of study for the Bachelor degree shall extend over three years of full-time study or the part-time equivalent.
- 1.2 Candidates shall complete the requirements of the award within ten years. In determining a candidate's eligibility for the award of the degree, the Faculty will not normally count courses passed more than 10 years previously.

2 Admission

2.1 Status, exemption and credit transfer

Students who have passed courses in Bachelor degree awards or equivalent at the University of Adelaide or another recognised institution, who wish to count such courses towards their degree, will be granted status to specified maximum limits. Students are not obliged to count the status awarded.

Where studies have been undertaken at an institution other than the University of Adelaide, a written application for status, accompanied by a transcript or statement of results, must be submitted to the Manager, Strategic and Administrative Services. No application for status is required where the previous studies have been undertaken at the University of Adelaide.

The maximum status limits are as follows:

- a 12 units at Level I on account of studies in any academic discipline in lieu of the requirements of 4.1 (c)
- b 12 units at Advanced Level or Level II on account of studies in any academic discipline in lieu of the requirements of 4.1 (e).
- 2.2 Status will not normally be awarded for any of the compulsory courses.
- 2.3 For further information on status rules, refer to 2.1 of the Academic Program Rules for the Bachelor of Arts.

3 Assessment and examinations

- 3.1 A candidate shall not be eligible to be assessed by examination or otherwise unless the prescribed work has been completed to the satisfaction of the teaching staff concerned. A candidate who is not eligible to be assessed by examination or otherwise shall be deemed to have failed the course.
- 3.2 A candidate who fails in a course or who obtains a Conceded Pass and who desires to take the course again shall, unless exempted wholly or partially by the Executive Dean of the Faculty

concerned, again complete all the required work in that course to the satisfaction of the teaching staff concerned.

- 3.3 A candidate who does not complete the required assessment tasks in any course, shall be deemed to have failed the course.
- 3.4 There shall be four classifications of pass in any courses for the Bachelor degree, as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, and Pass. There shall also be a classification of Conceded Pass. A candidate may present for the Bachelor degree only a limited number of courses for which a Conceded Pass has been obtained, as specified in 5.6 below.

4 Qualification requirements

4.1 Academic program

To qualify for the degree of Bachelor of Media a candidate shall present passes in courses to a value of 72 units that satisfy the following requirements:

Level I

- a MDIA 1002 Introduction to Media: Digital Revolutions3
- MDIA 1004 Broadcast: TV and Radio3
- MDIA 1005 Critical Histories of the Image.....3
- MDIA 1006 Story/technology: Writing Techniques.....3
- b Level I courses to the value of up to 12 units chosen from those listed in 5.12.1 for the Bachelor of Arts or other courses offered by the University at Level I that are available to the candidate..... 12

Advanced Level or Level II

- c MDIA 2301 Media Policy & Media Law.....3
- MDIA 2302 Media Research Methods3
- MDIA 2303 Global Media: Policies and Practices3
- MDIA 2306 Media Theory3
- d Advanced Level or Level II courses to the value of up to 6 units chosen from those listed in 5.12.2 and 5.12.4 for the Bachelor of Arts or Media electives at Level II not previously undertaken (see i below)..... 6
- e Advanced Level or Level II courses up to the value of 6 units chosen from those listed in 5.12.2 and 5.12.4 for the Bachelor of Arts, or other courses offered by the University at Level II, that are available to the candidate.....6

Advanced Level or Level III

- f MDIA 3204 Creative Industries, Peoples and Practices3
- MDIA 3310 Professional Practice.....3
- MDIA 3312 Media Democracies and E-Participation.....3
- MDIA 3313 Screens: Special topic.....3
- g Advanced Level or Level III courses up to the value of 6 units chosen from those listed in 5.12.3 and 5.12.4 for the Bachelor of Arts or Media electives at Level III not previously undertaken (see i below).....6
- h Advanced Level or Level III courses to the value of 6 units chosen from those listed in 5.12.3 and 5.12.4 for the Bachelor of Arts or other courses offered by the University at Advanced Level or Level III that are available to the candidate6
- i Media Electives may be chosen from:
 - MDIA 2328 Australian Stories: Fast Track Video Production3
 - MDIA 2331 Digital Games, Culture and Co-creation3
 - MDIA 2322 Radio Production A3
 - MDIA 3311 Media Industry Placement.....3
 - MDIA 3322 Radio Production B3
 - MDIA 3325 Video Production B (will not be offered beyond 2010).....3
 - MDIA 3327 Multimedia Production B (will not be offered beyond 2010).....3

4.2 Unacceptable combinations of courses

4.3 Repeating courses

4.4 Cross-institutional study

4.5 International exchanges

4.6 Conceded Passes

4.7 Discipline limits

4.8 Prerequisites

4.9 Surplus to requirement

4.10 Counting units toward a lower level of the degree

4.11 Review of academic progress

4.12 Graduation

Note: For information on Rules 4.2-4.12, refer to Rule 5 of the Academic Program Rules for the Bachelor of Arts.

4.13 Status and double degree arrangements

For information on Rule 4.13, refer to Rule 2.2 of the Academic Program Rules for the Bachelor of Arts.

5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

Graduate Attributes

Bachelor of Media

The Faculty of Humanities and Social Sciences facilitates an environment in which graduates are encouraged to take personal responsibility for developing the following attributes. Graduates will:

- Acquire highly developed theoretical, critical and practical skills necessary to function effectively in any field of the media and communication industry
- Acquire excellent research skills including analytical, conceptual and communication skills and written report skills for further study as higher degree students in the Faculty or to use in the workplace
- Acquire the cognitive and critical skills necessary to produce, evaluate and interpret media texts and audiovisual and literary materials
- Be empowered with the understanding of the role and effects of the media and new technologies in everyday life
- Be equipped with the necessary research skills to understand and analyse media cultures from a local and global perspective
- Develop an understanding of professional, ethical and cultural policy issues in relation to the media
- Develop an understanding of the impacts of changing media technologies in society
- Acquire the necessary skills required to develop positive interpersonal relationship in their place of work
- Develop skills in teamwork and the ability to work effectively on group projects.



Bachelor of Social Sciences

1 Duration of program

- 1.1 The program of study for the Bachelor degree shall extend over three years of full-time or the part-time equivalent.
- 1.2 Students shall complete the requirements of the award within ten years. In determining a student's eligibility for the award of the degree, the Faculty will not normally count any course passed more than 10 years previously.

2 Admission

2.1 Status, exemption and credit transfer

Students who have passed courses in Bachelor degree awards or equivalent at the University of Adelaide or another recognised institution, who wish to count such courses towards their degree, will be granted status to specified maximum limits. Students are not obliged to count the status awarded.

Where studies have been undertaken at an institution other than the University of Adelaide, a written application for status, accompanied by a transcript or statement of results, must be submitted to the Manager Strategic and Administrative Services. No application for status is required where the previous studies have been undertaken at the University of Adelaide.

The maximum status limits are as follows:

- a 12 units at Level I on account of studies in any academic discipline in lieu of the requirements of 4.1 (c)
- b 12 units at Advanced Level or Level II on account of studies in any academic discipline in lieu of the requirements of 4.1 (e).

- 2.2 Status will not normally be awarded for any of the compulsory courses. However, students enrolled in:
 - PSYCHOL 2004 Doing Research in Psychology3
 - PSYCHOL 2005 Foundations Health & Lifespan Development3
 - PSYCHOL 2006 Foundations of Perception & Cognition.....3
 - PSYCHOL 2007 Psychology in Society3
 may apply for exemption from the compulsory course GEST 2032 Social Science Techniques.

2.3 Status on account of studies completed more than 10 years previously

Status is not normally awarded for studies completed more than 10 years previously. Where the Faculty deems status is appropriate, it will be limited as follows:

- a 12 units at Level I in lieu of the requirements of 4.1 (c) *and*
- b 12 units at Advanced level or Level II in lieu of 4.1 (e)

2.4 Status for prior Technical and Further Education (TAFE) studies

Students who hold a completed Associate Diploma/Diploma from an Institute of Technical and Further Education (TAFE) relating to a discipline of study in the degree may be granted up to 12 units of status at Level I. Under the same conditions a student who holds a completed TAFE Certificate IV may be granted up to 6 units of status at Level I. Status will not normally be awarded for compulsory or capstone courses.

2.5 Status for non-award studies

Students who have completed non-award courses from any recognised higher education institution may apply for status on account of such courses towards their degree and, if successful, will be subject to the same limits and conditions outlined in 2.1 above.

2.6 Minimum number of courses to be chosen from those offered by the Faculty of Humanities and Social Sciences at the University of Adelaide

Any application of the status rules above is subject to the requirement that all students must undertake a minimum of 36 units of courses chosen from 5.12.1–5.12.4 Humanities and Social Sciences.

3 Assessment and examinations

- 3.1 A candidate shall not be eligible to be assessed by examination or otherwise unless the prescribed work has been completed to the satisfaction of the teaching staff concerned. A candidate who is not eligible to be assessed by examination or otherwise shall be deemed to have failed the course.
- 3.2 A candidate who fails in a course or who obtains a Conceded Pass and who desires to take the course again shall, unless exempted wholly or partially by the Executive Dean of the Faculty concerned, again complete all the required work in that course to the satisfaction of the teaching staff concerned.
- 3.3 A candidate who does not complete the required assessment tasks in any course, shall be deemed to have failed the course.
- 3.4 There shall be four classifications of pass in any courses for the Bachelor degree, as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, and Pass. There shall also be a

classification of Conceded Pass. A candidate may present for the Bachelor degree only a limited number of courses for which a Conceded Pass has been obtained, as specified in 4.6 below.

4 Qualification requirements

4.1 Academic program

To qualify for the degree of Bachelor of Social Sciences a student shall present passes in courses to the value of 72 units which satisfy the following requirements:

Level I

- a Core courses to the value of 9 units:
 - GEST 1001 Globalisation, Justice and a Crowded Planet 3
 - GWSI 1001 Social Sciences in Australia 3
 - POLI 1101 Introduction to Australian Politics 3
- b Level I Social Sciences courses to the value of 3 units chosen from those listed in 5.12.1 for the Bachelor of Arts 3
- c Level I courses to the value of 12 units chosen from those listed in 5.12.1 for the Bachelor of Arts or other courses offered by the University at Level I that are available to the candidate 12

Advanced Level or Level II

- d Core courses to the value of 12 units:
 - GEST 2032 Social Science Techniques 3
 - GWSI 2020 Social Theory in Action 3
 - GWSI 2103 Social Policy and Citizenship 3
 - GWSI 2110 Social Research 3
- e Advanced Level or Level II courses to the value of 12 units chosen from those listed in 5.12.2 or 5.12.4 for the Bachelor of Arts or other courses offered by the University at Advanced Level or Level II that are available to the candidate 12

Advanced Level, Level III or Capstone

- f Core courses to the value of 12 units:
 - GWSI 3017 Social Research Advanced 3
 - Social Science Techniques Advanced 3
 - Social Sciences Internship 6
 - or
 - Professional Applications of Applied Methods 6
- g Advanced Level or Level III courses to the value of 12 units chosen from those listed in 5.12.3 or 5.12.4 for the Bachelor of Arts or other courses offered by the University at Advanced Level or Level III that are available to the candidate 12

4.2 Unacceptable combinations of courses

- 4.2.1 A course cannot be presented twice for the degree.

- 4.2.2 A course cannot be presented with another course that contains a substantial amount of the same material.
- 4.2.3 A course cannot be presented in addition to any course listed as an 'incompatible' combination.

4.3 Repeating courses

- 4.3.1 A student who repeats a course they have previously failed must again attend lectures and do all assessed work in the course.
- 4.3.2 A student who wishes to repeat a course they have already passed must enrol in it on a non-award basis.
- 4.3.3 A student who has twice failed any course may not re-enrol in that course again, or for any other course which, in the opinion of the Faculty, contains a substantial amount of the same material, except by special permission of the Faculty and then only under such conditions as the Faculty may prescribe.

4.4 Cross-institutional study

- 4.4.1 With prior approval of the Faculty, students may present courses offered by other universities, which are not offered by the Faculty of Humanities and Social Sciences, toward the Bachelor degree to the following limits:
 - a 12 units at Level I in lieu of the requirements of 4.1 (c) *and*
 - b 12 units at Advanced Level or Level II in lieu of 4.1 (e)
- 4.4.2 Where students undertake any courses at another institution not approved by the Faculty, the Faculty will determine what status, if any, to award for such studies.
- 4.4.3 Flinders University Language Outreach courses are exempt from the provisions of this rule.

4.5 International exchanges

- 4.5.1 Students may count studies completed while on International Exchange programs formalised through the University's International Office toward the Bachelor degree to the following limits: 24 units in total at Advanced Level or Levels II and III combined.
- 4.5.2 Where students undertake any courses at a host institution not approved by the Faculty, the Faculty will determine what status, if any, to award for such studies.
- 4.5.3 International exchanges are exempt from the provisions of 4.4.

4.6 Conceded passes

A student may present Conceded Passes in a maximum of two 3-unit courses providing that the course is not a capstone or compulsory course.

4.7 Discipline limits

A student may not present more than 36 units of courses in a single area of study. An area of study is defined by the area that teaches it, not the majors to which it may be counted. This rule also applies where a student is undertaking an interdisciplinary major or an interdisciplinary degree.

4.8 Prerequisites

A student may only proceed to a course for which they have completed the prerequisite courses prescribed in the syllabuses.

4.9 Surplus to requirement

A student undertaking a course that is surplus to the requirements of their degree must enrol in that course on a non-award basis.

4.10 Counting units toward a lower level of the degree

A student may count any course undertaken or status awarded at Advanced Level or Level II to fulfil the requirements of Level I, or at Advanced Level or Level III to fulfil the requirements of Level I or II.

4.11 Review of academic progress

The Faculty may prescribe rules for review of academic progress. Any student who meets the requirements for review will be asked to show cause as to why they should be permitted to continue their studies. Students who cannot adequately explain poor academic performance may have their enrolment cancelled or restricted.

4.12 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award.

4.13 Status and double degree arrangements

For information on Rule 4.13, refer to Rule 2.2 of the Academic Program Rules for the Bachelor of Arts.

5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

Note: Further changes may be made to the Academic Program Rules for the Bachelor of Social Sciences pending finalisation of the process of review not completed at the time of publication.

Graduate Attributes

Bachelor of Social Sciences

The Faculty of Humanities and Social Sciences facilitates an environment in which graduates are encouraged to take personal responsibility for developing the following attributes. Graduates should have:

- A working knowledge of the range of social science disciplines and the research methodologies used within them
- An understanding of the principles underlying both qualitative and quantitative social research methods
- The capacity to interpret and critically evaluate social science research from a range of disciplines
- An understanding of the link between policy and research and an ability to make policy recommendations on the basis of research findings
- The capacity to frame a research problem and devise appropriate and effective ways of examining it
- Competency in applied research within at least one social science discipline (including design, analysis, conduct of research and reporting findings)
- An understanding of and ability to apply research skills in a professional setting
- Proficiency in computer based skills appropriate to research in at least one social science discipline.
- Skills to work independently as well as collaboratively as part of a research team
- An understanding of the interdependence of theoretical and research activities within the social sciences
- The capacity to transfer learning from one research context to another
- Recognition of and respect for the ethical principles which underpin socially responsible social science research and scholarship
- Commitment to and application of principles of social justice and respect for cultural diversity.

Bachelor of Arts (Honours)

1 Duration of program

- 1.1 The work of the Honours year must be completed in one full year of full-time study, or other than that, on the recommendation of the Head of the School/s concerned, or the Award Committee concerned, where the Faculty may permit a student to spread the work over two years, but not more, under such conditions as are listed under 1.2 below.
- 1.2 Honours over two years is taken to mean two consecutive years. The grounds for granting permission to do Honours over two years are limited to the following:
 - i students with care-giver responsibilities
 - ii students in greater than or equal to half time employment
 - iii students with a significant sickness or disability
 - iv students enrolled for part of the Honours program in an overseas institution
 - v compassionate reasons.

In all reasons it should be clear that the student is unable to (rather than chooses not to) complete the requirements on a full-time basis.

Application for permission to spread the work of Honours over two years should be made to the Manager, Strategic and Administrative Services, before 31 March (or 31 August for students commencing mid year) and will not normally be granted if a student has chosen to enrol in another course concurrently.

2 Admission

- 2.1 Students for the Honours degree shall not begin their Honours work until they have qualified for a Bachelor degree of the Faculty of Humanities and Social Sciences, or some other degree deemed by the Faculty to be appropriate preparation, and have completed a major sequence relevant to the appropriate Honours degree syllabus, or equivalent acceptable to the School concerned, in their undergraduate degree.
- 2.2 Students wishing to take Honours must obtain the approval of the Head of School/s.
- 2.3 A student may not enrol a second time for Honours in the same degree and School if the student
 - i has presented for examination in that School but has failed to obtain Honours *or*
 - ii withdraws from the program, unless the Faculty under Rule 3.4 permits the student to re-enrol.

- 2.4 No graduate who has obtained an Honours degree in a course or field of study in another School or equivalent may obtain the Honours degree of Bachelor of Arts in a corresponding course, field of study, or School of the Faculty of Humanities and Social Sciences.

3 Assessment and examinations

- 3.1 Except by permission of the Faculty, a student shall take the whole of the final examination (if any) for the Honours degree at the one annual examination.
- 3.2 A candidate who satisfies the requirements for Honours shall be awarded the Honours degree, but the Faculty shall decide within which of the following classes and divisions the degree shall be awarded:

1	First Class	80-100
2A	Second Class div A	70-79
2B	Second Class div B	60-69
3	Third Class	50-59
NAH	Not awarded	0-49

3.3 Attendance requirements

A candidate shall not be eligible to present for assessment, by examination, dissertation or otherwise, unless he or she has regularly attended the prescribed classes and has done written and laboratory or other practical work, where required, to the satisfaction of the School/s concerned.

A candidate is required to meet regularly with his or her supervisor during the preparation and writing of the dissertation component of the program. Pursuant to this clause, a candidate who is not eligible to present work for assessment will receive a final result of NAH (Not Awarded), unless he or she withdraws from the program before the required date.

3.4 Academic progress

A student who is unable to complete the program for the Honours degree within the time allowed, or whose work is unsatisfactory at any stage of the program, or who withdraws from the program, shall be reported to the Faculty which may permit the student to re-enrol for the Honours degree under such conditions (if any) as it may determine and to ensure that the student does not in effect spread the work of Honours over 2 years.

4 Qualification requirements

- 4.1 A student may proceed to the Honours degree in one of the courses listed in Rule 4.5 below, comprising coursework and a dissertation, or,

if being supervised by more than one School, a combination of those courses. A combination requires Faculty approval on the recommendation of the Schools concerned and shall include such work as shall be deemed by the Faculty to be equivalent to a single course of 24 units.

- 4.2 The program of study and dissertation topic for the Honours year for students must be approved by the Head of the School/s concerned before enrolment.
- 4.3 A student may not proceed to the Honours degree in a course that is not listed in Rule 4.5 below.
- 4.4 A student wishing to proceed to Honours in courses within the Faculty of Mathematical and Computer Sciences is referred to the Academic Program Rules for the Honours Degree of Bachelor of Mathematical and Computer Sciences.

4.5 Academic program

A student may proceed to the Honours degree in one of the following courses or certain approved combinations of the following courses, provided that the student has obtained, before enrolment, the approval of the Head of the School/s concerned:

ANTH 4401 A/B Honours Anthropology.....	24
ASIA 4401 A/B Honours Asian Studies	24
CHIN 4401 A/B Honours Chinese Studies	24
CLAS 4401 A/B Honours Classical Studies.....	24
DEVT 4401 A/B Honours Development Studies ..	24
ENGL 4401 A/B Honours English.....	24
ENGL 4402 A/B Honours Creative Writing.....	24
ETHNO 4004 A/B Honours Ethnomusicology (B.A.)	24
EUST 4401 A/B Honours European Studies	24
FREN 4401 A/B Honours French Studies.....	24
GERM 4401 A/B Honours German Studies	24
GEST 4401 A/B Honours Environmental Policy & Management	24
GWSI 4401A/B Honours Gender, Work and Social Inquiry	24
HIST 4401 A/B Honours History	24
INST 4401A/B Honours International Studies.....	24
JAPN 4401 A/B Honours Japanese Studies	24
LING 4401 A/B Honours Linguistics.....	24
MUSICOL 4007 A/B Honours Musicology (B.A.) ..	24
PHIL 4401 A/B Honours Philosophy.....	24
POLI 4401 A/B Honours Politics.....	24

Students who have been granted permission to study an honours program supervised by two disciplines will be advised of the appropriate course title and code at the time of enrolment.

4.6 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award.

5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

Note: To Academic Program Rule 4 (not forming part of the Rule)

The coursework and dissertation submitted to fulfil the requirements of the B.A.(Hons) is marked twice and referred to a third marker in the event of a discrepancy between the two original markers. The coursework and dissertation may not be submitted for additional remarking after the final result for Honours has been awarded.

Bachelor of Development Studies (Honours)

1 Duration of program

1.1 The work of the Honours year must be completed in one full year of full-time study, or other than that, on the recommendation of the Head of the School/s concerned, or the Award Committee concerned, where the Faculty may permit a student to spread the work over two years, but not more, under such conditions as are listed under 1.2 below.

1.2 Honours over two years is taken to mean two consecutive years. The grounds for granting permission to do Honours over two years are limited (see rule 1.2 of Bachelor of Arts Honours degree).

In all reasons it should be clear that the student is unable to (rather than chooses not to) complete the requirements on a full-time basis.

Application for permission to spread the work of Honours over two years should be made to the Manager, Strategic and Administrative Services, before 31 March (or 31 August for students commencing mid year) and will not normally be granted if the student has chosen to enrol in another course concurrently.

2 Admission

2.1 Students for the Honours degree shall not begin their Honours work until they have qualified for a Bachelor of Development Studies degree, or some other degree deemed by the Faculty to be appropriate preparation, and have completed a major sequence relevant to the appropriate Honours degree syllabus, or equivalent acceptable to the School concerned, in their undergraduate degree.

2.2 Students wishing to take Honours must obtain the approval of the Head of School/s.

2.3 A student may not enrol a second time for Honours in the same degree and School if the student

- i has presented for examination in that School but has failed to obtain Honours *or*
- ii withdraws from the program, unless the Faculty under Rule 4.4 permits the student to re-enrol.

2.4 No graduate who has obtained an Honours degree in a course or field of study in another School or equivalent may obtain the Honours degree of Bachelor of Development Studies in a corresponding course, field of study, or School of the Faculty of Humanities and Social Sciences.

3 Assessment and examinations

3.1 Except by permission of the Faculty, a student shall take the whole of the final examination (if any) for the Honours degree at the one annual examination

3.2 A candidate who satisfies the requirements for Honours shall be awarded the Honours degree, but the Faculty shall decide within which of the following classes and divisions the degree shall be awarded:

1	First Class	80-100
2A	Second Class div A	70-79
2B	Second Class div B	60-69
3	Third Class	50-59
NAH	Not awarded	0-49

3.3 Attendance requirements

A candidate shall not be eligible to present for assessment, by examination, dissertation or otherwise, unless he or she has regularly attended the prescribed classes and has done written and laboratory or other practical work, where required, to the satisfaction of the School/s concerned.

A candidate is required to meet regularly with his or her supervisor during the preparation and writing of the dissertation component of the program. Pursuant to this clause, a candidate who is not eligible to present work for assessment will receive a final result of NAH (Not Awarded), unless he or she withdraws from the program before the required date.

3.4 Academic progress

A student who is unable to complete the program for the Honours degree within the time allowed, or whose work is unsatisfactory at any stage of the program, or who withdraws from the program, shall be reported to the Faculty which may permit the student to re-enrol for the Honours degree under such conditions (if any) as it may determine and to ensure that the student does not in effect spread the work of Honours over two years.

4 Qualification requirements

4.1 A student may proceed to the Honours degree, comprising coursework and a dissertation, or, if being supervised by more than one School, a combination of those courses. A combination requires Faculty approval on the recommendation of the Schools concerned and shall include such work as shall be deemed by the Faculty to be equivalent to a single course of 24 units.

- 4.2 The Head of the School/s concerned before enrolment must approve the program of study and dissertation topic for the Honours year for students.
- 4.3 A student may proceed to the Honours degree in the following course or certain approved combinations of courses offered within the Faculty, provided that the student has obtained, before enrolment, the approval of the Head of the School/s concerned:

DEVT 4401 A/B Honours
 Development Studies 24

Students who have been granted permission to study an honours program supervised by two disciplines will be advised of the appropriate course title and code at the time of enrolment.

4.4 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award.

5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

Note: To Academic Program Rule 4 (not forming part of the Rule)

The coursework and dissertation submitted to fulfil the requirements of the B.Dev.St. (Hons) are marked twice and referred to a third marker in the event of a discrepancy between the two original markers. The coursework and dissertation may not be submitted for additional remarking after the final result for Honours has been awarded.

Bachelor of Environmental Policy and Management (Honours)

1 Duration of program

1.1 The work of the Honours year must be completed in one year of full-time study, other than that, on the recommendation of the Head of the School or Schools or Award Committee concerned, the Faculty may permit a student to spread the work over two years, but not more, under such conditions as it may determine but not more, under such conditions as are listed under 1.2 below.

1.2 Honours over two years is taken to mean two consecutive years. The grounds for granting permission to do Honours over two years are limited (see rule 1.2 of Bachelor of Arts Honours degree).

In all reasons it should be clear that the student is unable to (rather than chooses not to) complete the requirements on a full-time basis.

Application for permission to spread the work of Honours over two years should be made to the Manager, Strategic and Administrative Services, before 31 March (or 31 August for students commencing mid year) and will not normally be granted if the student has chosen to enrol in another course concurrently.

2 Admission

2.1 Students for the Honours degree shall not begin their Honours work until they have qualified for a Bachelor degree of Environmental Policy and Management or some other degree deemed by the Faculty to be appropriate preparation, and have completed a major sequence relevant to the appropriate Honours degree syllabus, or equivalent acceptable to the School concerned, in their undergraduate degree.

2.2 Students wishing to take Honours must obtain the approval of the Head of the School or School/s.

2.3 A student may not enrol a second time for Honours in the same degree and School if the student:

- i has presented for examination in that School but has failed to obtain Honours *or*
- ii withdraws from the program, unless the Faculty under Rule 3.4, below permits the student to re-enrol.

2.4 No graduate who has obtained an Honours degree in a course or field of study in another School or equivalent may obtain the Honours degree of Bachelor of Environmental Policy and Management in a corresponding course, field of study, or School of the Faculty of Humanities and Social Sciences.

3 Assessment and examinations

3.1 Except by permission of the Faculty, a student shall take the whole of the final examination (if any) for the Honours degree at the one annual examination.

3.2 A candidate who satisfies the requirements for Honours shall be awarded the Honours degree, but the Faculty shall decide within which of the following classes and divisions the degree shall be awarded:

1	First Class	80-100
2A	Second Class div A	70-79
2B	Second Class div B	60-69
3	Third Class	50-59
NAH	Not awarded	0-49

3.3 Attendance requirements

A candidate shall not be eligible to present for assessment, by examination, dissertation or otherwise, unless he or she has regularly attended the prescribed classes and has done written and laboratory or other practical work, where required, to the satisfaction of the School/s concerned.

A candidate is required to meet regularly with his or her supervisor during the preparation and writing of the dissertation component of the program. Pursuant to this clause, a candidate who is not eligible to present work for assessment will receive a final result of NAH (Not Awarded), unless he or she withdraws from the program before the required date.

3.4 Academic progress

A student who is unable to complete the program for the Honours degree within the time allowed, or whose work is unsatisfactory at any stage of the program, or who withdraws from the program, shall be reported to the Faculty which may permit the student to re-enrol for the Honours degree under such conditions (if any) as it may determine and to ensure that the student does not in effect spread the work of Honours over 2 years.

4 Qualification requirements

4.1 A student may proceed to the Honours degree, comprising coursework and a dissertation, or, if being supervised by more than one School, a combination of those courses. A combination requires Faculty approval on the recommendation of the Schools concerned and shall include such

work as shall be deemed by the Faculty to be equivalent to a single course of 24 units.

4.2 The program of study and dissertation topic for the Honours year for students must be approved by the Head of the School/s concerned before enrolment.

4.3 A student may proceed to the Honours degree in the following course or certain approved combinations of courses offered within the Faculty, provided that the student has obtained, before enrolment, the approval of the Head of the School/s concerned:

GEST 4401A/B Honours Environmental Policy & Management 24

Students who have been granted permission to study an honours program supervised by two disciplines will be advised of the appropriate course title and code at the time of enrolment.

4.4 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award.

5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

Note: To Academic Program Rule 4 (not forming part of the Rule)

The coursework and dissertation submitted to fulfil the requirements of the B.Env.Pol.& Mgt.(Hons) is marked twice and referred to a third marker in the event of a discrepancy between the two original markers. The coursework and dissertation may not be submitted for additional remarking after the final result for Honours has been awarded.

Bachelor of International Studies (Honours)

1 Duration of program

- 1.1 The work of the Honours year must be completed in one full year of full-time study, or other than that, on the recommendation of the Head of the School/s concerned, or the Award Committee concerned, where the Faculty may permit a student to spread the work over two years, but not more, under such conditions as are listed under 1.2 below.
- 1.2 Honours over two years is taken to mean two consecutive years. The grounds for granting permission to do Honours over two years are limited (see rule 1.2 of Bachelor of Arts Honours degree).

In all reasons it should be clear that the student is unable to (rather than chooses not to) complete the requirements on a full-time basis.

Application for permission to spread the work of Honours over two years should be made to the Manager, Strategic and Administrative Services, before 31 March (or 31 August for students commencing mid year) and will not normally be granted if the student has chosen to enrol in another course concurrently.

2 Admission

- 2.1 Students for the Honours degree shall not begin their Honours work until they have qualified for a degree of Bachelor of International Studies, or some other degree deemed by the Faculty to be appropriate preparation, and have completed a major sequence relevant to the appropriate Honours degree syllabus, or equivalent acceptable to the School concerned, in their undergraduate degree.
- 2.2 Students wishing to take Honours must obtain the approval of the Head of School/s.
- 2.3 A student may not enrol a second time for Honours in the same degree and School if the student
- has presented for examination in that School but has failed to obtain Honours *or*
 - withdraws from the program, unless the Faculty under Rule 3.4 permits the student to re-enrol.
- 2.4 No graduate who has obtained an Honours degree in a course or field of study in another School or equivalent may obtain the Honours degree of Bachelor of International Studies in a corresponding course, field of study, or School of the Faculty of Humanities and Social Sciences.

3 Assessment and examinations

- 3.1 Except by permission of the Faculty, a student shall take the whole of the final examination (if any) for the Honours degree at the one annual examination
- 3.2 A candidate who satisfies the requirements for Honours shall be awarded the Honours degree, but the Faculty shall decide within which of the following classes and divisions the degree shall be awarded:

1	First Class	80-100
2A	Second Class div A	70-79
2B	Second Class div B	60-69
3	Third Class	50-59
NAH	Not awarded	0-49

3.3 Attendance requirements

A candidate shall not be eligible to present for assessment, by examination, dissertation or otherwise, unless he or she has regularly attended the prescribed classes and has done written and laboratory or other practical work, where required, to the satisfaction of the School/s concerned.

A candidate is required to meet regularly with his or her supervisor during the preparation and writing of the dissertation component of the program. Pursuant to this clause, a candidate who is not eligible to present work for assessment will receive a final result of NAH (Not Awarded), unless he or she withdraws from the program before the required date.

3.4 Academic progress

A student who is unable to complete the program for the Honours degree within the time allowed, or whose work is unsatisfactory at any stage of the program, or who withdraws from the program, shall be reported to the Faculty which may permit the student to re-enrol for the Honours degree under such conditions (if any) as it may determine and to ensure that the student does not in effect spread the work of Honours over 2 years.

4 Qualification requirements

- 4.1 A student may proceed to the Honours degree, comprising coursework and a dissertation, or, if being supervised by more than one School, a combination of those courses. A combination requires Faculty approval on the recommendation of the Schools concerned and shall include such work as shall be deemed by the Faculty to be equivalent to a single course of 24 units.

4.2 The program of study and dissertation topic for the Honours year for students must be approved by the Head of the School/s concerned before enrolment.

4.3 A student may proceed to the Honours degree in the following course or certain approved combinations of courses offered within the Faculty, provided that the student has obtained, before enrolment, the approval of the Head of the School/s concerned:

INST 4401 A/B Honours International Studies24

Students who have been granted permission to study an honours program supervised by two disciplines will be advised of the appropriate course title and code at the time of enrolment.

4.4 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award.

5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

Note: To Academic Program Rule 4 (not forming part of the Rule)

The coursework and dissertation submitted to fulfil the requirements of the B.Int.St.(Hons) is marked twice and referred to a third marker in the event of a discrepancy between the two original markers. The coursework and dissertation may not be submitted for additional remarking after the final result for Honours has been awarded.

1 Duration of program

- 1.1 The work of the Honours year must be completed in one full year of full-time study, or other than that, on the recommendation of the Head of the School/s concerned, or the Award Committee concerned, where the Faculty may permit a student to spread the work over two years, but not more, under such conditions as are listed under 1.2 below:
- 1.2 Honours over two years is taken to mean two consecutive years. The grounds for granting permission to do Honours over two years are limited (see rule 1.2 of Bachelor of Arts Honours degree).

In all reasons it should be clear that the student is unable to (rather than chooses not to) complete the requirements on a full-time basis.

Application for permission to spread the work of Honours over two years should be made to the Manager, Strategic and Administrative Services, before 31 March (or 31 August for students commencing mid year) and will not normally be granted if the student has chosen to enrol in another course concurrently.

2 Admission

- 2.1 Students for the Honours degree shall not begin their Honours work until they have qualified for a degree of Bachelor of Media, or some other degree deemed by the Faculty to be appropriate preparation, and have completed a major sequence relevant to the appropriate Honours degree syllabus, or equivalent acceptable to the School concerned, in their undergraduate degree.
- 2.2 Students wishing to take Honours must obtain the approval of the Head of School/s.
- 2.3 A student may not enrol a second time for Honours in the same degree and School if the student
- has presented for examination in that School but has failed to obtain Honours *or*
 - withdraws from the program, unless the Faculty under Rule 3.4 permits the student to re-enrol.
- 2.4 No graduate who has obtained an Honours degree in a course or field of study in another School or equivalent may obtain the Honours degree of Bachelor of Media in a corresponding course, field of study, or School of the Faculty of Humanities and Social Sciences.

3 Assessment and examinations

- 3.1 Except by permission of the Faculty, a student shall take the whole of the final examination (if any) for the Honours degree at the one annual examination.
- 3.2 A candidate who satisfies the requirements for Honours shall be awarded the Honours degree, but the Faculty shall decide within which of the following classes and divisions the degree shall be awarded:

1	First Class	80-100
2A	Second Class div A	70-79
2B	Second Class div B	60-69
3	Third Class	50-59
NAH	Not awarded.	0-49

3.3 Attendance requirements

A candidate shall not be eligible to present for assessment, by examination, dissertation or otherwise, unless he or she has regularly attended the prescribed classes and has done written and laboratory or other practical work, where required, to the satisfaction of the School/s concerned.

A candidate is required to meet regularly with his or her supervisor during the preparation and writing of the dissertation or project and project exegesis component of the program. Pursuant to this clause, a candidate who is not eligible to present work for assessment will receive a final result of NAH (Not Awarded), unless he or she withdraws from the program before the required date.

3.4 Academic progress

A student who is unable to complete the program for the Honours degree within the time allowed, or whose work is unsatisfactory at any stage of the program, or who withdraws from the program, shall be reported to the Faculty which may permit the student to re-enrol for the Honours degree under such conditions (if any) as it may determine and to ensure that the student does not in effect spread the work of Honours over 2 years.

4 Qualification requirements

- 4.1 A student may proceed to the Honours degree, comprising coursework and a dissertation or project and project exegesis, or, if being supervised by more than one School, a combination of those courses. A combination requires Faculty approval on the recommendation of the Schools concerned and shall include such work as shall be deemed by the Faculty to be equivalent to a single course of 24 units.

4.2 The program of study and dissertation topic or project and project exegesis topic for the Honours year for students must be approved by the Head of the School/s concerned before enrolment.

4.3 A student may proceed to the Honours degree in the following course or certain approved combinations of courses offered within the Faculty, provided that the student has obtained, before enrolment, the approval of the Head of the School/s concerned:

MDIA 4401A/B Honours Media..... 24

Students who have been granted permission to study an honours program supervised by two disciplines will be advised of the appropriate course title and code at the time of enrolment.

4.4 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award.

5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

Note: To Academic Program Rule 4 (not forming part of the Rule)

The coursework and dissertation submitted to fulfil the requirements of the B.Media (Hons) is marked twice and referred to a third marker in the event of a discrepancy between the two original markers. The coursework and dissertation may not be submitted for additional remarking after the final result for Honours has been awarded.

Bachelor of Social Sciences (Honours)

1 Duration of program

1.1 The work of the Honours year must be completed in one full year of full-time study, or other than that, on the recommendation of the Head of the School/s concerned, or the Award Committee concerned, where the Faculty may permit a student to spread the work over two years, but not more, under such conditions as are listed under 1.2 below.

1.2 Honours over two years is taken to mean two consecutive years. The grounds for granting permission to do Honours over two years are limited (see rule 1.2 of Bachelor of Arts Honours degree).

In all reasons it should be clear that the student is unable to (rather than chooses not to) complete the requirements on a full-time basis.

Application for permission to spread the work of Honours over two years should be made to the Manager, Strategic and Administrative Services, before 31 March (or 31 August for students commencing mid year) and will not normally be granted if the students has chosen to enrol in another course concurrently.

2 Admission

2.1 Students for the Honours degree shall not begin their Honours work until they have qualified for a degree of Bachelor of Social Sciences, or some other degree deemed by the Faculty to be appropriate preparation, and have completed a major sequence relevant to the appropriate Honours degree syllabus, or equivalent acceptable to the School or Award Committee concerned, in their undergraduate degree.

2.2 Students wishing to take Honours must obtain the approval of the Head of School/s.

2.3 A student may not enrol a second time for Honours in the same degree and School if the student

- i has presented for examination in that School but has failed to obtain Honours *or*
- ii withdraws from the program, unless the Faculty under Rule 3.4 permits the student to re-enrol.

2.4 No graduate who has obtained an Honours degree in a course or field of study in another School or equivalent may obtain the Honours degree of Bachelor of Social Sciences in a corresponding course, field of study, or School of the Faculty of Humanities and Social Sciences.

3 Assessment and examinations

3.1 Except by permission of the Faculty, a student shall take the whole of the final examination (if any) for the Honours degree at the one annual examination.

3.2 A candidate who satisfies the requirements for Honours shall be awarded the Honours degree, but the Faculty shall decide within which of the following classes and divisions the degree shall be awarded:

1	First Class	80-100
2A	Second Class div A	70-79
2B	Second Class div B	60-69
3	Third Class	50-59
NAH	Not awarded	0-49

3.3 Attendance requirements

A candidate shall not be eligible to present for assessment, by examination, dissertation or otherwise, unless he or she has regularly attended the prescribed classes and has done written and laboratory or other practical work, where required, to the satisfaction of the school/s concerned. A candidate is required to meet regularly with his or her supervisor during the preparation and writing of the dissertation component of the program.

Pursuant to this clause, a candidate who is not eligible to present work for assessment will receive a final result of NAH (Not Awarded), unless he or she withdraws from the program before the required date.

3.4 Academic progress

A student who is unable to complete the program for the Honours degree within the time allowed, or whose work is unsatisfactory at any stage of the program, or who withdraws from the program, shall be reported to the Faculty which may permit the student to re-enrol for the Honours degree under such conditions (if any) as it may determine and to ensure that the student does not in effect spread the work of Honours over 2 years.

4 Qualification requirements

4.1 A student may proceed to the Honours degree in one of the courses listed in Rule 4.3, below, comprising coursework and a dissertation, or, if being supervised by more than one School, a combination of those courses. A combination requires Faculty approval on the recommendation of the Schools concerned and shall include such work as shall be deemed by the Faculty to be equivalent to a single course of a units value of 24 units.

4.2 The program of study and dissertation topic for the Honours year for students must be approved by the Head of the School/s concerned before enrolment.

4.3 A student may proceed to the Honours degree in one of the following courses or certain approved combinations of courses offered within the Faculty, provided that the student has obtained, before enrolment, the approval of the Head of the School/s concerned:

ANTH 4401 A/B Honours Anthropology.....	24
ASIA 4401 A/B Honours Asian Studies	24
DEVT 4401 A/B Honours Development Studies .	24
ECON 4003 A/B Honours Economics	24
GEST 4401A/B Honours Environmental Policy & Management	24
GWSI 4401A/B Honours Gender, Work and Social Inquiry	24
HIST 4401 A/B Honours History	24
INST 4401 A/B Honours International Studies	24
LING 4401 A/B Honours Linguistics.....	24
PHIL 4401 A/B Honours Philosophy.....	24
POLI 4401 A/B Honours Politics.....	24
PSCHOL 4000 A/B Honours Psychology.....	24

Students who have been granted permission to study an honours program supervised by two disciplines will be advised of the appropriate course title and code at the time of enrolment.

Students who complete the requirements of the double degree program of Social Sciences/Health Sciences at a sufficiently high level will be able to undertake an honours study worth 24 units comprising:

Honours Health Sciences coursework.....	6
Honours Social Sciences coursework.....	6
Thesis jointly supervised between Health Sciences and Social Sciences	12

4.4 Graduation

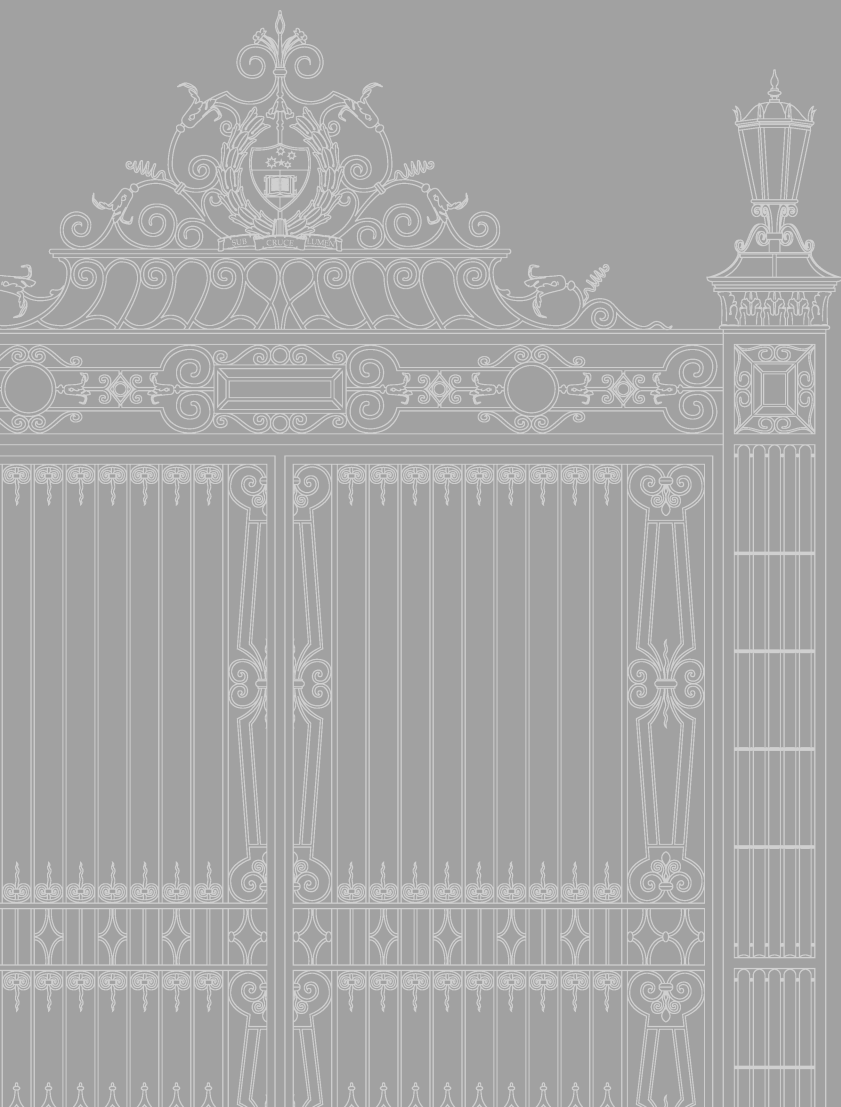
Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award.

5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

Note: To Academic Program Rule 4 (not forming part of the Rule)

The program, work and dissertation submitted to fulfil the requirements of the B.Soc.Sc.(Hons) is marked twice and referred to a third marker in the event of a discrepancy between the two original markers. The course work and dissertation may not be submitted for additional remarking after the final result for Honours has been awarded.



Academic Program Rules

Law School

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Undergraduate Awards

- Degree of Bachelor of Laws
- Degree of Bachelor of Laws with Honours
- Honours degree of Bachelor of Laws

Notes on Delegated Authority

1. Council has delegated the power to approve minor changes to the Academic Program Rules to the Executive Deans of Faculties.
2. Council has delegated the power to specify syllabuses to the Head of each department or centre concerned, such syllabuses to be subject to approval by the Faculty or by the Executive Dean on behalf of the Faculty.



Bachelor of Laws

1 General

There shall be a degree, which may be awarded with Honours, and an Honours degree of Bachelor of Laws.

2 Duration of program

The program for all double degrees shall extend over 5 years of full-time study or the part-time equivalent, except for Engineering, which shall extend over 6.5 years.

For candidates studying for the Bachelor of Laws only, full-time study shall extend over 4 years for non-graduates, 3 years for Graduate entrants and no less than 1.5 years for Later Year entrants.

3 Admission

- 3.1 Admission as a candidate for the degree is subject to quotas and selection procedures currently operating in the School. The admission requirements for this program of study are those outlined in the Rules made by Council pursuant to Chapter IX of the University Statutes - Of Admission and Enrolment.

Note Academic Program Rule 3.1 (not forming part of the Rule)

- 1 The normal admission procedure recommended for students other than graduates or later year entrants who wish to proceed to the degree of Bachelor of Laws is as follows:
- apply for entry to candidature in the School Leavers, Special Entry or Tertiary Transfer subquota
 - apply under the Bachelor of Laws (undergraduate entry) double degrees category for entry to candidature for one of the following degrees at the University of Adelaide:
 - Bachelor of Arts (B.A.)
 - Bachelor of Commerce (B.Com.)
 - Bachelor of Computer Science (B.Comp.Sc.)
 - Bachelor of Design Studies (B.Des.St.)
 - Bachelor of Development Studies (B Dev St)
 - Bachelor of Economics (B.Ec.)
 - Bachelor of Engineering (Computer Systems) (B.E.(Comp.Sys.))
 - Bachelor of Engineering (Electrical & Electronic) (B.E.(Elec.))
 - Bachelor of Engineering (Mechanical) (B.E.(Mech))
 - Bachelor of Engineering (Telecommunications) (B.E. (Telecomm.))
 - Bachelor of Environmental Policy & management (B.Env.Pol.& Mgt.)
 - Bachelor of Finance (B.Fin.)
 - Bachelor of Health Sciences (B.Health Sc.)
 - Bachelor of International Studies (B.Int.St.)
 - Bachelor of Mathematical and Computer Sciences (B.Ma.& Comp.Sc.)
 - Bachelor of Media (B.Media)

Bachelor of Science (B.Sc)

Bachelor of Social Sciences (B.Soc.Sc.)

or

applicants who have already commenced but have not completed non-Law studies, and who wish to continue studying their current program concurrently with Law, apply using the Tertiary Transfer stream code or

applicants who are not graduates and intend to study Law only apply using the Bachelor of Laws (Undergraduate Law) category.

- 3.2 Places in the courses LAW 1501 Foundations of Law, LAW 1502 Law of Torts 1, LAW 1503 Contracts and LAW 1504 Principles of Public Law are only available to students who have been accepted as a candidate for the LL.B.
- 3.3 Candidates wishing to interrupt their studies must do so in accordance with the procedures outlined in the University Leave of Absence Policy.

In determining a candidate's eligibility for the award of the degree, the School may disallow any course completed more than 10 years ago. Where a course(s) is disallowed under this rule, a student will be required to undertake such additional or special programs of study as the School deems appropriate.

3.4 Status

- In lieu of any of the courses referred to in 5.3.1.1(a) below a candidate may present a Law course or courses passed outside the University. Such courses must be approved and their units value determined by the School in each case.
- A candidate granted status must present courses taught at the University of Adelaide to the value of at least 48 units if studying the 96 unit stand-alone LLB, or 36 units if studying the 72 unit graduate entry LLB, or 36 units if studying the LLB as part of a double degree.

4 Assessment and examinations

- 4.1
- In determining a candidate's final result in a course, the assessors may take into account the assessments of the candidate's oral, written, practical or examination work in that course, provided that the candidate has been given notice at the beginning of the course of the circumstances in which the work may be taken into account and its relative importance in the final result.
 - A candidate may be required by the assessors in any course to do essays or other written work in a satisfactory manner as prerequisite to being assessed in that course, provided that candidates are given precise information about

- those requirements at the beginning of the course.
- 4.2 The School may grant to any student such exemption from 4.1 above, and under such conditions, as it shall decide.
- 4.3 There shall be five classifications of pass in any course or division of a course for the Bachelor degree as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, Pass, Conceded Pass. Courses for which a result of Conceded Pass has been obtained may not be presented towards the degree requirements for the Bachelor of Laws programs, nor to satisfy prerequisite requirements within any Law course.
- 4.4 If in the opinion of the School, a student for the degree is not making satisfactory progress the following action may be taken:
- i Where a student has failed courses they will be advised to seek course advice to assist them in their future studies
 - ii If a student has failed more than three quarters of their previous year studies they will be restricted to enrolling in no more than 12 units of study each semester for the following year
 - iii Where a student has twice failed to pass any compulsory course they will be permitted to present again for the course only if their enrolment is restricted to a total of 12 units in the semester in which the course is undertaken
 - iv Where a student has twice failed to pass any elective course they will not be permitted to enrol in the subject for a third time.
- Exemption from these restrictions may only be varied by the Dean, where exceptional circumstances exist.

5 Qualification requirements

- 5.1 To qualify for the Bachelor degree candidates admitted to the program after 1 January 2009 shall comply with the relevant provisions of the Academic Program Rules set out in Clause 5.3.
- 5.2 To qualify for the Bachelor degree with Honours a candidate shall comply with the relevant provisions of Academic Program Rule 5.3.1.2. Classes/divisions may include:
- 1 First Class
 - 2A Second Class div A
 - 2B Second Class div B
 - 3 Third Class
 - NAH Not awarded

5.3 Academic program

5.3.1 The Bachelor degree

Introductory note to Academic Program Rule 5.3.1 (not forming part of the Rule):

The standard course load for the Bachelor of Laws degree is four years of full-time study for candidates studying Law only

and three years of full-time study for graduates or candidates completing a non-Law degree also.

5.3.1.1 A candidate shall qualify for the degree if:

- a the candidate has
 - i all the following compulsory courses:
 - LAW 1501 Foundations of Law..... 3
 - LAW 1502 Law of Torts 1..... 3
 - LAW 1504 Principles of Public Law 3
 - LAW 1503 Contracts 6
 - LAW 1505 Law of Torts 2..... 3
 - LAW 1506 Property Law 6
 - LAW 2501 Australian Constitutional Law ... 3
 - LAW 2502 Equity..... 3
 - LAW 2503 Criminal Law & Procedure 6
 - LAW 2504 Administrative Law..... 3
 - LAW 2505 Corporate Law..... 6
 - LAW 3501 Dispute Resolution & Ethics 6
 - LAW 3502 Evidence and Proof In Theory and Practice..... 6
 - and*
 - ii elective courses with an aggregate units value of 15 units from the following (note 5.3.1.1(b)(iv) below):
 - LAW 2507 Australian Legal History 3
 - LAW 2508 Comparative Law..... 3
 - LAW 2509 Commercial Law and the Market 3
 - LAW 2510 Consumer Protection and Unfair Trading..... 3
 - LAW 2511 Environmental Law..... 3
 - LAW 2512 Family Law..... 3
 - LAW 2513 Human Rights: International and National Perspectives 3
 - LAW 2514 Intellectual Property Law..... 3
 - LAW 2515 Law of the Person 3
 - LAW 2516 Medical Law and Ethics 3
 - LAW 2517 Minerals and Energy Law..... 3
 - LAW 2518 Moot Court..... 3
 - LAW 2519 Native Title Internship 3
 - LAW 2520 Public International Law 3
 - LAW 2521 Property Theory 3
 - LAW 2522 Roman Law..... 3
 - LAW 2523 Succession 3
 - LAW 2524 Criminology 3
 - LAW 2525 Advanced Legal Research and Writing 3
 - LAW 2526 Legal Theory..... 3
 - LAW 3505 Aboriginal Peoples and the Law..... 3
 - LAW 3506 Adelaide Law Review A/B 3

LAW 3508 Australian Federal Criminal Law	3
LAW 3509 Anti-Discrimination Law and Equality Law	3
LAW 3510 Clinical Legal Education	3
LAW 3511 Commercial Equity	3
LAW 3512 Conflict of Laws	3
LAW 3513 Financial Transactions	3
LAW 3514 Human Rights Internship Programme	3
LAW 3515 Immigration & Refugee Law....	3
LAW 3516 Jessup Moot	3
LAW 3517 Law of Work	3
LAW 3519 Remedies.....	3
LAW 3520 Sentencing and Criminal Justice	3
LAW 3521 Taxation Law	3
LAW 3522 Disclosure Obligations of Companies	3
LAW 3523 Company Merger and Acquisition Law	3
LAW 3524 The Regulation of Securities Trading Markets.....	3
LAW 3525 Alternative Dispute Resolution.....	3
LAW 3526 Insolvency Law	3
LAW 3527 Public Law Internship Programme	3
LAW 3599 Law Research Dissertation	6

and

- b the candidate has
- i qualified for a degree in another Faculty/School of the University *or*
 - ii been awarded at another university a degree which, in the opinion of the School, is at least equivalent, for the purpose, to a degree in another Faculty/School of the University *or*
 - iii been awarded at another tertiary institution a non-Law qualification at an academic level which has been accepted by the School *or*
 - iv completed an additional 24 units of elective courses from, 5.3.1.1(a)(ii) above, or 12 units of elective courses from 5.3.1.1(a) (ii) above and 12 units of non-Law courses subject to the approval of the Faculty/School concerned.

The School may determine that any elective course/s referred to above be not offered in a particular year.

The units value of each course shall be that appearing after the name of the course.

- c The School may determine, on such conditions as it considers appropriate, that a pass in a course offered under previous schedules is to be deemed to be a pass in a course or courses referred to in 5.4.1.1(a) above.

5.3.1.2 A candidate shall be awarded the degree of Bachelor of Law with Honours provided they have achieved a Grade Point Average (GPA) of equal to or more than 5.20*. The class of Honours awarded shall be determined as follows:

First Class	6.00+
Second Class (Div 1)	5.50–5.99
Second Class (Div II)	5.20–5.49

Note: Students intending to study a Master by Research or a PhD must undertake the course 'Law Research Dissertation'.

* For further details of how the GPA is calculated, please refer to the Law School website.

5.4 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

5.5 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award.

6 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

Graduate Attributes

Bachelor of Laws

Knowledge

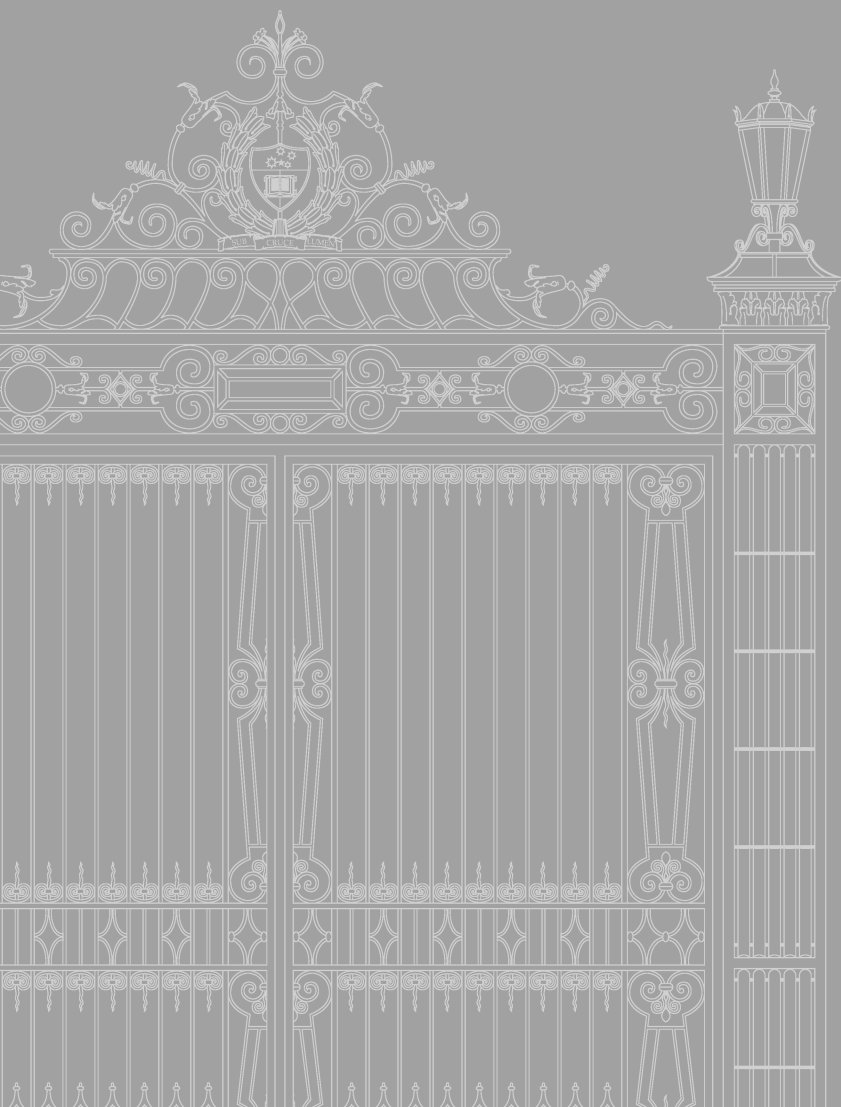
- A Law graduate from Adelaide Law School will have a clear and detailed knowledge and understanding of the basic principles of the Australian legal system, including the separation of powers, the role of courts, the legislative process, and the role and control of the executive
- The Law graduate will also have knowledge and understanding of the basic principles of the primary areas of Australian Law as required to satisfy the academic standards for admission to practice Law in an Australian jurisdiction, and knowledge and understanding of the development of Law and legal principle within both those subject areas and other areas, such as to maintain appropriate familiarity with, and a capability to access the content of, legal principle in a given area
- The Law graduate will have knowledge and understanding of the principles and standards of ethical and professional conduct of a Lawyer.

Intellectual and social capabilities

- A Law graduate will have the cognitive skills to analyse, evaluate and synthesise information from a wide variety of sources and experiences so as to identify and address as appropriate legal and related issues
- A Law graduate will have an awareness of the incompleteness of Law and the continuous state of development of legal principle in response to social and technical change, and a capacity to respond to such change and assist such development as appropriate
- A Law graduate will have critical thinking and problem solving skills
- A Law graduate will have oral and written communication skills of a high order
- A Law graduate will have skills to work both independently and cooperatively in a professional environment
- A Law graduate will have the capacity to learn and maintain intellectual curiosity, and to engage in life long personal and professional learning
- A Law graduate will be familiar with and proficient in legal research techniques, including in the appropriate use of modern research technologies
- A Law graduate will have a capacity to work in a professional and ethical relationship with both clients and colleagues
- A Law graduate will have a capacity to be informed, responsible and critically discriminating in his or her participation in the community.

Attitudes and values

- A Law graduate will have a commitment to the rule of Law and an understanding of social justice through the operation of Law
- A Law graduate will have a commitment to the highest standards of ethical and professional behaviour
- A Law graduate will have an understanding of social and cultural diversity, and sensitivity of the operation of the Law and legal structures in that context.



Academic Program Rules

Elder Conservatorium of Music

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Undergraduate Awards

- Certificate III in Music
- Certificate IV in Music (Classical)
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- Certificate IV in Music (Technology)
- Diploma in Instrumental Music
- Diploma in Music (Classical)
- Diploma in Music (Jazz)
- Diploma in Music (Sound Engineering)
- Degree of Bachelor of Music
- Degree of Bachelor of Music Education
- Degree of Bachelor of Music Studies
- Degrees of Bachelor of Arts and Bachelor of Music
- Degrees of Bachelor of Arts and Bachelor of Music Education
- Degrees of Bachelor of Arts and Bachelor of Music Studies



Certificate IV in Music (Classical)
Certificate IV in Music (Jazz)
Certificate IV in Music (Technology)
Certificate III in Music
Diploma in Music (Classical)
Diploma in Music (Jazz)
Diploma in Music (Sound Engineering)

1 Duration of programs

1.1 The program of study for the Diploma in Music (Classical) shall extend over one academic year of full-time study or equivalent.

The program of study for the Diploma in Music (Jazz) shall extend over one academic year of full-time study or equivalent.

The program of study for the Diploma in Music (Sound Engineering) shall extend over one academic year of full-time study or equivalent.

The program of study for the Certificate IV in Music (Classical) shall extend over one academic year of full-time study or equivalent.

The program of study for the Certificate IV in Music (Jazz) shall extend over one academic year of full-time study or equivalent.

The program of study for the Certificate IV in Music (Technology) shall extend over one academic year of full-time study or equivalent.

The program of study for the Certificate III in Music shall extend over one academic year of part-time study or the equivalent.

1.2 A student may interrupt the program for such periods and on such conditions as may in each case be determined by the School.

1.3 Students wishing to interrupt their studies in accordance with 1.2 above must apply for permission and obtain beforehand the approval of the Director on behalf of the School for leave of absence for a defined period.

1.4 A student who leaves the program without approval or who extends a leave of absence beyond the time period approved under 1.2 above shall be deemed to have withdrawn his or her candidate for the award but may reapply for admission to the program in accordance with the procedures in operation at that time.

1.5 Students who have interrupted their studies in prescribed courses may be required to resume at such point in the program and/or to undertake

such additional or special program of study as the Director of the School deems appropriate.

2 Admission

2.1 Diploma in Music (Classical)

Admission to the program of study for the Diploma in Music (Classical) shall be determined on the basis of academic merit and musical performance. All applicants shall be auditioned prior to admission and shall be ranked, for selection purposes, in order of their audition results and in order of the selection score from satisfactory completion of Year 12 or the equivalent.

A candidate will not be permitted to defer an offer of admission to the program.

2.2 Diploma in Music (Jazz)

Admission to the program of study for the Diploma in Music (Jazz) shall be determined on the basis of academic merit and musical performance. All applicants shall be auditioned prior to admission and shall be ranked, for selection purposes, in order of their audition results and in order of the selection score from satisfactory completion of Year 12 or the equivalent.

A candidate will not be permitted to defer an offer of admission to the program.

2.3 Diploma in Music (Sound Engineering)

Admission to the program of study for the Diploma in Music (Sound Engineering) shall be determined on the basis of academic merit and the presentation of a portfolio at interview. All applicants shall be interviewed prior to admission and shall be ranked, for selection purposes, in order of their audition results and in order of the selection score from satisfactory completion of Year 12 or equivalent.

A candidate will not be permitted to defer an offer of admission to the program.

2.4 Certificate IV in Music (Classical)

Admission to the program of study for the Certificate IV in Music (Classical) shall be determined on the basis of academic merit and musical performance. All applicants shall be auditioned prior to admission and shall be ranked, for selection purposes, in order of their audition results and in order of the selection score from satisfactory completion of Year 11 or the equivalent.

A candidate will not be permitted to defer an offer of admission to the program.

2.5 Certificate IV in Music (Jazz)

Admission to the program of study for the Certificate IV in Music (Jazz) shall be determined on the basis of academic merit and musical performance. All applicants shall be auditioned prior to admission and shall be ranked, for selection purposes, in order of their audition results and in order of the selection score from satisfactory completion of Year 11 or the equivalent.

A candidate will not be permitted to defer an offer of admission to the program.

2.6 Certificate IV in Music (Technology)

Admission to the program of study for the Certificate IV in Music (Technology) shall be determined on the basis of academic merit and the presentation of a portfolio at interview. All applicants shall be interviewed prior to admission and shall be ranked, for selection purposes, in order of their audition results and in order of the selection score from satisfactory completion of Year 11 or equivalent.

A candidate will not be permitted to defer an offer of admission to the program.

2.7 Certificate III in Music

Admission to the program of study for the Certificate III in Music shall be determined on the basis of academic merit and musical performance or the presentation of a portfolio at interview. All applicants shall be auditioned prior to admission and shall be ranked, for selection purposes, in order of their audition results.

A candidate will not be permitted to defer an offer of admission to the program.

3 Enrolment

- 3.1 Candidates must obtain the approval of the Director of the School, or the nominee of the Director, for the proposed programs of study.
- 3.2 The requirements of courses taken in one semester must be completed within the same semester and courses taken in one year must be completed in the same year.
- 3.3 The School may permit a candidate to complete the requirements of a full year course over a period of two years on such conditions as it may determine.
- 3.4 Except where otherwise determined by the

School, a candidate who is eligible in any year to enrol in Performance or Practical Study courses and who fails to do so, and who wishes to enrol in one of these courses in a subsequent year, shall be required to attend an audition and to reach a minimum standard for enrolment in the course in question before being authorised to enrol in that course.

- 3.5 A candidate must satisfy the prerequisite requirements for enrolment in semester two courses.

4 Assessment and examinations

- 4.1 A candidate shall not be eligible to present for examination unless the prescribed classes have been regularly attended, and the written, practical or other work required has been completed to the satisfaction of the teaching staff concerned.
- 4.2 A candidate who is not granted permission to sit for an examination, or who does not attend all or part of the examination after having attended substantially the full program of instruction in that course, shall be deemed to have failed the examination.
- 4.3 There are specific attendance requirements for all Music programs. In particular, students are expected to attend all classes, lectures or ensemble sessions and this requires students to provide reasonable explanations for, or proper notification of, failure to attend. Students who do not comply with these requirements may be failed in a given course. Full details on attendance requirements are available in the course outlines.
- 4.4 In determining a candidate's final result in a course the examiners may take into account oral, written, practical and examination work, provided that the candidate has been given adequate notice at the commencement of the teaching of the course, of the way in which work will be taken into account and of its relative importance in the final result.
- 4.5 There shall be four classifications of pass in the final assessment of any course for the Certificate and Diploma awards as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, and Pass.

There shall also be a classification of Conceded Pass. No more than three Conceded Pass grades will be accepted towards the completion of any award, and no course with a Conceded Pass result may be presented to satisfy prerequisite requirements.

A particular Unit of Competency shall be deemed to have been achieved when all relevant sections of courses mapped against it have been completed.
- 4.6 A candidate who fails a course, or who obtains a Conceded Pass and who desires to take that course again shall, unless exempted wholly or partially therefrom by the School, again complete the required work in that course to the satisfaction of the teaching staff concerned.

- 4.7 A candidate who has twice failed any course for the program in which the candidate is enrolled may not enrol for that course again or for any other course which in the opinion of the School contains a substantial amount of the same material, except by special permission of the School and then only under such conditions as the School may prescribe.

5 Qualification requirements

5.1 Academic program: Diploma in Music (Classical)

- 5.1.1 The program for the Diploma in Music (Classical) may be taken with a major study in Classical Performance.
- 5.1.2 To qualify for the Diploma a candidate shall satisfactorily complete the requirements for courses listed below in 5.1.2.1. Courses to a total value of 24 units must be presented. No student shall gain credit for a course more than once.

5.1.2.1 Diploma in Music (Classical)

Candidates shall satisfactorily complete the following:

VETMUS 1502 Occupational Health & Safety	1
VETMUS 1504 A/B Career Management Part 1 & 2.....	2
VETMUS 1505 Copyright Law	1
VETMUS 1614 A/B Aural Development (Diploma) Part 1 & 2.....	2
VETMUS 1755 Sound Production A.....	2
VETMUS 1756 Sound Production B.....	2
VETMUS1850 A/B Individual Tuition (Classical Diploma) Part 1 & 2.....	4
VETMUS 1851 A/B Ensemble (Classical Diploma) Part 1 & 2.....	3
VETMUS 1852 A/B Classical Diploma Forum Part 1 & 2.....	1
VETMUS 1853 A/B Music Language Studies Part 1 & 2.....	4

and

VETMUS 1855 A/B Keyboard Musicianship (Classical Diploma) Minor Part 1 & 2.....	2
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or

VETMUS 1854 A/B Keyboard Musicianship (Classical Diploma) Major Part 1 & 2	2
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- 5.1.3 No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award. A list of unacceptable course combinations is available from the Elder Conservatorium of Music.
- 5.1.4 Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award.

Notes (not forming part of the Academic Program Rules)

- 1 Work required to complete the Diploma in Music (Classical):
To qualify for the award of the Diploma in Music (Classical) a candidate granted credit or status must, except in special cases approved by the School, complete all the remaining work of the prescribed program while attending the University.

- 2 Availability of courses and options:

The School reserves the right not to offer certain courses in any particular year. Decisions on which courses are to be offered will be determined partly by the availability of relevant staff members and partly by the numbers of students who enrol in a course or option. If the numbers are insufficient then the course may not be offered.

5.2 Academic program: Diploma in Music (Jazz)

- 5.2.1 The program for the Diploma in Music (Jazz) may be taken with a major study in Jazz Performance.
- 5.2.2 To qualify for the Diploma a candidate shall satisfactorily complete the requirements for courses listed below in 5.2.2.1. Courses to a total value of 24 units must be presented. No student shall gain credit for a course more than once.

5.2.2.1 Diploma in Music (Jazz)

Candidates shall satisfactorily complete the following:

VETMUS 1502 Occupational Health & Safety	1
VETMUS 1504 A/B Career Management Part 1 & 2.....	2
VETMUS 1505 Copyright Law	1
VETMUS 1614 A/B Aural Development (Diploma) Part 1 & 2.....	2
VETMUS 1750 A/B Individual Tuition (Jazz Diploma) Part 1 & 2	4
VETMUS 1751 A/B Small Ensemble (Jazz Diploma) Part 1 & 2	3
VETMUS 1752 A/B Jazz Diploma Workshop Part 1 & 2.....	4
VETMUS 1753 A/B Jazz Diploma Forum Part 1 & 2.....	1
VETMUS 1754 A/B Jazz Accompaniment Part 1 & 2.....	2
VETMUS 1755 Sound Production A.....	2
VETMUS 1756 Sound Production B.....	2

- 5.2.3 No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award. A list of unacceptable course combinations is available from The Elder Conservatorium of Music Office.
- 5.2.4 Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award.

Notes (not forming part of the Academic Program Rules)

- 1 Work required to complete the Diploma in Music (Jazz):
To qualify for the award of the Diploma in Music (Jazz) a candidate granted credit or status must, except in special cases approved by the School, complete all the remaining work of the prescribed program while attending the University.

- 2 Availability of courses and options:
The School reserves the right not to offer certain courses in any particular year. Decisions on which courses are to be offered will be determined partly by the availability of relevant staff members and partly by the numbers of students who enrol in a course or option. If the numbers are insufficient then the course may not be offered.

**5.3 Academic program:
Diploma in Music (Sound Engineering)**

- 5.3.1 The program for the Diploma in Music (Sound Engineering) may be taken with a major study in Sound Engineering.

- 5.3.2 To qualify for the Diploma a candidate shall satisfactorily complete the requirements for courses listed in 5.3.2.1. Courses to a total value of 24 units must be presented. No student shall gain credit for a course more than once.

5.3.2.1 Diploma in Music (Sound Engineering)

Candidates shall satisfactorily complete the following courses:

VETMUS 1502 Occupational Health & Safety 1
 VETMUS 1504A/B Career Management
 Part 1 & 2 2
 VETMUS 1505 Copyright Law 1
 VETMUS 1951 A/B Concepts of Music (Diploma)
 Part 1 & 2 3
 VETMUS 1952 A/B Sound Engineering (Studio)
 Part 1 & 2 4
 VETMUS 1956 Sound Engineering (Live) 2
 VETMUS1953 A/B Audio Studies
 (Diploma) Part 1 & 2 4
 VETMUS 1954 A/B MIDI Studies
 (Diploma) Part 1 & 2 4
 VETMUS 1955 A/B Music Technology Forum
 (Diploma) 3

- 5.3.3 No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award. A list of unacceptable course combinations is available from the Elder Conservatorium of Music.

- 5.3.4 Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award.

Notes (not forming part of the Academic Program Rules)

- 1 Work required to complete the Diploma in Music (Sound Engineering):
To qualify for the award of the Diploma in Music (Sound Engineering) a candidate granted credit or status must, except

in special cases approved by the School, complete all the remaining work of the prescribed program while attending the University.

- 2 Availability of courses and options:
The School reserves the right not to offer certain courses in any particular year. Decisions on which courses are to be offered will be determined partly by the availability of relevant staff members and partly by the numbers of students who enrol in a course or option. If the numbers are insufficient then the course may not be offered.

**5.4 Academic program:
Certificate IV in Music (Classical)**

- 5.4.1 The program for the Certificate IV in Music (Classical) may be taken with a major study in Classical Performance on an instrument or voice.

- 5.4.2 To qualify for the Certificate a candidate shall satisfactorily complete the requirements for courses listed below in 5.4.2.1. Courses to a total value of 24 units must be presented. No student shall gain credit for a course more than once.

5.4.2.1 Classical Performance

Candidates shall satisfactorily complete the following:

VETMUS 1501 Music Industry & Business
 Management 1
 VETMUS 1502 Occupational Health & Safety 1
 VETMUS 1503 Assignment Writing
 & Research Skills 1
 VETMUS 1602 A/B Aural Development
 (Certificate IV) Part 1 & 2 2
 VETMUS 1605 A/B Ensemble (Certificate IV)
 Part 1 & 2 2
 VETMUS 1607 A/B History of 20th Century
 Music Part 1 & 2 2
 VETMUS 1608 A/B Theory of Music (Certificate IV)
 Part 1 & 2 2
 VETMUS 1609 A/B Individual Tuition (Certificate IV)
 Part 1 & 2 4
 VETMUS 1801 A/B Composition Class
 Part 1 & 2 2
 VETMUS 1804 A/B Performance Class
 Part 1 & 2 2
 VETMUS 1807 A/B Technique & Repertoire
 Class Part 1 & 2 3
and
 VETMUS 1802 A/B Keyboard Musicianship
 (Certificate IV) Major Part 1 & 2 2
or
 VETMUS 1808 A/B Keyboard Musicianship
 (Certificate IV) Minor Part 1 & 2 2

- 5.4.3 No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course

may be counted twice towards an award. A list of unacceptable course combinations is available from The Elder Conservatorium of Music Office.

- 5.4.4 Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award.

Notes (not forming part of the Academic Program Rules)

- 1 Work required to complete the Certificate IV in Music (Classical):
To qualify for the award of the Certificate IV in Music (Classical) a candidate granted credit or status must, except in special cases approved by the School, complete all the remaining work of the prescribed program while attending the University.
- 2 Availability of courses and options:
The School reserves the right not to offer certain courses in any particular year. Decisions on which courses are to be offered will be determined partly by the availability of relevant staff members and partly by the numbers of students who enrol in a course or option. If the numbers are insufficient then the course may not be offered.

5.5 Academic program: Certificate IV in Music (Jazz)

- 5.5.1 The program for the Certificate IV in Music (Jazz) may be taken with a major study in Jazz Performance.
- 5.5.2 To qualify for the Certificate a candidate shall satisfactorily complete the requirements for courses listed below in 5.5.2.1. Courses to a total value of 24 units must be presented. No student shall gain credit for a course more than once.

5.5.2.1 Certificate IV in Music (Jazz)

Candidates shall satisfactorily complete the following:

VETMUS 1501 Music Industry & Business Management	1
VETMUS 1502 Occupational Health & Safety	1
VETMUS 1503 Assignment Writing & Research Skills.....	1
VETMUS 1602 A/B Aural Development (Certificate IV) Part 1 & 2.....	2
VETMUS 1701 A/B Jazz Styles I Part 1 & 2	3
VETMUS 1702 A/B Jazz Theory I Part 1 & 2.....	2
VETMUS 1703 A/B Jazz Piano Class Part 1 & 2 ...	2
VETMUS 1704 A/B Jazz Performance I: VET Part 1 & 2	4
VETMUS 1705 A/B Improvisation I Part 1 & 2.....	3
VETMUS 1707 A/B Small Ensemble (Jazz Certificate IV) Part 1 & 2.....	2
VETMUS 1708 A/B Jazz Masterclass Part 1 & 2 ...	2
VETMUS 1709 A/B Jazz Forum Part 1 & 2.....	1

- 5.5.3 No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award. A list of

unacceptable course combinations is available from The Elder Conservatorium of Music Office.

- 5.5.4 Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award.

Notes (not forming part of the Academic Program Rules)

- 1 Work required to complete the Certificate IV in Music (Jazz):
To qualify for the award of the Certificate IV in Music (Jazz) a candidate granted credit or status must, except in special cases approved by the School, complete all the remaining work of the prescribed program while attending the University.
- 2 Availability of courses and options:
The School reserves the right not to offer certain courses in any particular year. Decisions on which courses are to be offered will be determined partly by the availability of relevant staff members and partly by the numbers of students who enrol in a course or option. If the numbers are insufficient then the course may not be offered.

5.6 Academic program: Certificate IV in Music (Technology)

- 5.6.1 The program for the Certificate IV in Music (Technology) may be taken with a Practical Study in Music Technology.
- 5.6.2 To qualify for the Certificate a candidate shall satisfactorily complete the requirements for courses listed below in 6.6.2.1. Courses to a total value of 24 units must be presented. No student shall gain credit for a course more than once.

5.6.2.1 Music Technology

Candidates shall satisfactorily complete the following:

VETMUS 1501 Music Industry & Business Management	1
VETMUS 1502 Occupational Health & Safety	1
VETMUS 1503 Assignment Writing & Research Skills.....	1
VETMUS 1615 A/B Concepts of Music (Certificate IV) Part 1 & 2.....	6
VETMUS 1801 A/B Composition Class Part 1 & 2	2
VETMUS 1911 A/B Audio Studies (Certificate IV) Part 1 & 2	4
VETMUS 1912 A/B Midi Studies (Certificate level) Part 1 & 2.....	4
VETMUS 1913 A/B Music Technology Forum (Certificate IV) Part 1 & 2.....	3
<i>and</i>	
VETMUS 1802 A/B Keyboard Musicianship (Certificate IV) Major Part 1 & 2	2
<i>or</i>	
VETMUS 1808 A/B Keyboard Musicianship (Certificate IV) Minor Part 1 & 2	2

- 5.6.3 No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty

concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award. A list of unacceptable course combinations is available from The Elder Conservatorium of Music Office.

- 5.6.4 Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award.

Notes (not forming part of the Academic Program Rules)

- 1 Work required to complete the Certificate IV in Music (Technology):
To qualify for the award of the Certificate IV in Music (Technology) a candidate granted credit or status must, except in special cases approved by the School, complete all the remaining work of the prescribed program while attending the University.
- 2 Availability of courses and options:
The School reserves the right not to offer certain courses in any particular year. Decisions on which courses are to be offered will be determined partly by the availability of relevant staff members and partly by the numbers of students who enrol in a course or option. If the numbers are insufficient then the course may not be offered.

5.7 Academic program: Certificate III in Music

- 5.7.1 The program for the Certificate III in Music may be taken with a major study in performance or composition.
- 5.7.2 To qualify for the Certificate a candidate shall satisfactorily complete the requirements for courses listed below in 6.7.2.1. Courses to a total value of 14 units must be presented. No student shall gain credit for a course more than once.

5.7.2.1 Certificate III in Music

Candidates shall satisfactorily complete the following:

VETMUS 1501 Music Industry & Business Management	1
VETMUS 1502 Occupational Health & Safety	1
VETMUS 1503 Assignment Writing & Research Skills.....	1
VETMUS 1601 A/B History & Literature Part 1 & 2.....	2
VETMUS 1610 A/B Individual Tuition (Certificate III) Part 1 & 2.....	3
<i>or</i>	
VETMUS 1912 A/B Midi Studies (Certificate level) Part 1 & 2.....	3
VETMUS 1611 A/B Aural Development (Certificate III) Part 1 & 2.....	2
VETMUS 1612 A/B Ensemble (Certificate III) Part 1 & 2.....	2
VETMUS 1613 A/B Theory of Music (Certificate III) Part 1 & 2.....	2

- 5.7.3 No candidate will be permitted to count towards an award any course, together with any other

course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award. A list of unacceptable course combinations is available from The Elder Conservatorium of Music Office.

- 5.7.4 Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award.

Notes (not forming part of the Academic Program Rules)

- 1 Work required to complete the Certificate III in Music:
To qualify for the award of the Certificate III in Music a candidate granted credit or status must, except in special cases approved by the School, complete all the remaining work of the prescribed program while attending the University.
- 2 Availability of courses and options:
The School reserves the right not to offer certain courses in any particular year. Decisions on which courses are to be offered will be determined partly by the availability of relevant staff members and partly by the numbers of students who enrol in a course or option. If the numbers are insufficient then the course might not be offered.

6 External Performances/ Engagements

Students are encouraged to take outside engagements, provided that:

- a a student shall not take part in any public concert or engagement that prohibits the student from attending a scheduled lesson or class except by permission of the Director.
- b the Director reserves the right to determine whether or not a student shall be required to acknowledge the name of the School or its staff, at any public concert or engagement in which the student participates.

7 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

1 Duration of program

- 1.1 The duration of the Diploma itself shall be a minimum of two years of study, but shall be taken concurrently with full- or part-time study in another undergraduate award.
- 1.2 A student who leaves the program shall be deemed to have discontinued his or her candidature for the award and may not re-enrol without re-auditioning.

2 Admission

- 2.1 Admission to the program of study for the Diploma in Instrumental Music shall be determined on the basis of academic merit and musical performance. All applicants shall be auditioned prior to admission and shall be ranked, for selection purposes, in order of their audition results and in order of the selection score from satisfactory completion of Year 12 or the equivalent.

A candidate will not be permitted to defer an offer of admission to the program.

- 2.2 A student of the Diploma in Instrumental Music must be enrolled concurrently in a degree of Bachelor of the University of Adelaide.

3 Enrolment

- 3.1 Candidates must obtain approval of the Director of the Conservatorium, or nominee for the proposed program of study and also obtain advice from the Faculty that administers their Bachelor degree on an appropriate program of study.
- 3.2 The requirements of courses taken in one semester must be completed within the same semester and courses taken in one year must be completed in the same year.
- 3.3 Except where otherwise determined by the School, a candidate who is eligible in any year to enrol in Performance courses and who fails to do so, and who wishes to enrol in one of these courses in a subsequent year, shall be required to attend an audition and to reach a minimum standard for enrolment in the course in question before being authorised to enrol in that course.

- 3.4 A candidate must satisfy the prerequisite requirements for enrolment in semester two courses.

4 Assessment and examinations

- 4.1 A candidate shall not be eligible to present for examination unless the prescribed classes have been regularly attended, and the written, practical or other work required has been completed to the satisfaction of the teaching staff concerned.

- 4.2 A candidate who is not granted permission to sit for an examination, or who does not attend all or part of the examination after having attended substantially the full program of instruction in that course, shall be deemed to have failed the examination.

- 4.3 There are specific attendance requirements for all Music programs. In particular, students are expected to attend all classes, lectures or ensemble sessions and this requires students to provide reasonable explanations for, or proper notification of, failure to attend. Students who do not comply with these requirements may be failed in a given course. Full details on attendance requirements are available from the program advisers and lecturers.

- 4.4 In determining a candidate's final result in a course the examiners may take into account oral, written, practical and examination work, provided that the candidate has been given adequate notice at the commencement of the teaching of the course, of the way in which work will be taken into account and of its relative importance in the final result.

- 4.5 There shall be four classifications of pass in the final assessment of any course for the undergraduate awards offered by the School: Pass with High Distinction, Pass with Distinction, Pass with Credit, and Pass.

There shall also be a classification of Conceded Pass. Courses for which a Conceded Pass has been obtained shall not satisfy prerequisite requirements and may not be presented as credit towards completion of this award.

- 4.6 A candidate who fails a course, and who desires to take that course again shall, unless exempted wholly or partially there from by the School, again complete the required work in that course to the satisfaction of the teaching staff concerned.

- 4.7 A candidate who has twice failed any course for the program in which the candidate is enrolled may not enrol for that course again or for any other course which in the opinion of the School contains a substantial amount of the same material, except by special permission of the School and then only under such conditions as the School may prescribe.

5 Qualification requirements

- 5.1 To qualify for the Diploma in Instrumental Music a candidate shall complete a performance sequence (as defined in rule 5.3), and satisfy the requirements of an undergraduate degree of the university.

5.2 A candidate may not have the Diploma in Instrumental Music conferred until he or she has satisfied the requirements for the approved undergraduate program in which they are currently enrolled.

5.3 Academic program

5.3.1 All candidates shall complete a performance sequence to a total value of 24 units. The sequence shall consist of:

PERF 1500A/B Classical Performance I
Part 1 & 2.....9

and one large ensemble or elective chosen from clause 5.1.2.3 of the degree of Bachelor of Music.....3

PERF 2500A/B Classical Performance II
Part 1 & 2.....9

and one large ensemble or elective chosen from clause 5.1.2.3 of the degree of Bachelor of Music.....3

5.4 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

5.5 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award.

6 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.



Bachelor of Music

Bachelor of Music Education

Bachelor of Music Studies

Bachelor of Music (Honours)

Bachelor of Music Education (Honours)

Bachelor of Music Studies (Honours)

1 Duration of programs

- 1.1 The program of study for the degree of Bachelor of Music shall extend over three academic years and that for the Honours degree over four academic years of full-time study or equivalent. Details and requirements for the Honours degree are provided in 1.4 below.
- 1.2 The program of study for the degree of Bachelor of Music Education shall extend over four academic years and that for the Honours degree over five academic years of full-time study or equivalent. Details and requirements for the Honours degree are provided in 1.4 below.
- 1.3 The program of study for the degree of Bachelor of Music Studies shall extend over three academic years and that for the Honours degree over four academic years of full-time study or equivalent. Details and requirements for the Honours degree are provided in 1.4 below.
- 1.4 The work of the Honours year shall normally be completed in one year of full-time study. The School may permit a candidate to present the work over a period of not more than two years on such conditions as it may determine.
- 1.5 A student may interrupt the program for such periods and on such conditions as may in each case be determined by the School.
- 1.6 Students wishing to interrupt their studies in accordance with 1.5 above must apply for permission and obtain, beforehand, the approval of the Director on behalf of the School for leave of absence for a defined period.
- 1.7 A student who leaves the program without approval or who extends a leave of absence beyond the time period approved under 1.5 above shall be deemed to have withdrawn his or her candidate for the award but may reapply for admission to the program in accordance with the procedures in operation at that time.
- 1.8 Students who have interrupted their studies in prescribed courses may be required to resume at such point in the program and/or to undertake such additional or special program of study as the Director of the School deems appropriate.

2 Admission

2.1 Bachelor of Music

Admission to the program of study for the degree of Bachelor of Music shall be determined on the basis of musical performance and academic merit. All applicants shall be auditioned prior to admission and shall be ranked, for selection purposes, in order of their audition results and in order of the selection score from satisfactory completion of Year 12.

A candidate will not be permitted to defer an offer of admission to the program.

2.2 Bachelor of Music Education

Admission to the program of study for the degree of Bachelor of Music Education shall be determined on the basis of academic merit and performance by audition in one of Music Performance, Music Technology or Composition. All applicants shall be auditioned prior to admission and shall be ranked, for selection purposes, in order of their audition results and in order of the selection score from satisfactory completion of Year 12.

A candidate will not be permitted to defer an offer of admission to the program.

2.3 Bachelor of Music Studies

Admission to the program of study for the degree of Bachelor of Music Studies shall be determined on the basis of academic merit and performance by audition in one of Music Performance, Music Technology or Composition. All applicants shall be auditioned prior to admission and shall be ranked, for selection purposes, in order of their audition results and in order of the selection score from satisfactory completion of Year 12.

A candidate will not be permitted to defer an offer of admission to the program.

2.4 The Honours degrees

Before enrolling in the Honours program a candidate must obtain the approval of the Director, who will take into account the candidate's academic record up to the time of application.

Normally such approval should be sought towards the end of Level III of the program for the degree of Bachelor of Music or Bachelor of Music Studies or Level IV in the case of the degree of Bachelor of Music Education. Before entering the Honours year, candidates must have qualified for the Bachelor degree, including Level III or IV courses in the field in which it is proposed to undertake Honours.

3 Enrolment

- 3.1 Candidates must obtain the approval of the Director of the School, or nominee, for the proposed programs of study.
- 3.2 The requirements of courses taken in one semester must be completed within the same semester and courses taken in one year must be completed in the same year.
- 3.3 The School may permit a candidate to complete the requirements of a full year course over a period of two years on such conditions as it may determine.
- 3.4 Except where otherwise determined by the School, a candidate who is eligible in any year to enrol in Performance or Practical Study courses and who fails to do so, and who wishes to enrol in one of these courses in a subsequent year, shall be required to attend an audition and to reach a minimum standard for enrolment in the course in question before being authorised to enrol in that course.
- 3.5 A candidate who has satisfied the prerequisite requirements for enrolment in later year courses, may so enrol before completing all the courses of the preceding level.

4 Assessment and examinations

- 4.1 A candidate shall not be eligible to present for examination unless the prescribed classes have been regularly attended, and the written, practical or other work required has been completed to the satisfaction of the teaching staff concerned.
- 4.2 A candidate who is not granted permission to sit for an examination, or who does not attend all or part of the examination after having attended substantially the full program of instruction in that course, shall be deemed to have failed the examination.
- 4.3 There are specific attendance requirements for all Music programs. In particular, students are expected to participate in all classes, lectures or ensemble sessions and this requires students to provide reasonable explanations for, or proper notification of, failure to attend. Students who do not comply with these requirements may be failed in a given course. Full details on attendance requirements are available in the course outlines.
- 4.4 In determining a candidate's final result in a course the examiners may take into account oral, written, practical and examination work, provided that the candidate has been given adequate notice at the

commencement of the teaching of the course, of the way in which work will be taken into account and of its relative importance in the final result.

- 4.5 There shall be four classifications of pass in the final assessment of any course for the Bachelor degrees, as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, and Pass. There shall also be a classification of Conceded Pass. Any course with a Conceded Pass result will not satisfy prerequisite requirements. For the Bachelor degrees, a candidate may present Conceded Passes for Music elective courses only from clause 5.1.2.3 below, provided that they do not exceed 6 units towards the total required for the degree.
- 4.6 A candidate who satisfies the requirements for Honours shall be awarded the Honours degree, but the Faculty shall decide within which of the following classes and divisions the degree shall be awarded:
 - 1 First Class
 - 2A Second Class div A
 - 2B Second Class div B
 - 3 Third Class
 - NAH Not awarded.
- 4.7 A candidate who fails a course, or who obtains a Conceded Pass, must take that course again, unless exempted wholly or partially therefrom by the School, and complete all of the required work in that course to the satisfaction of the teaching staff concerned.
- 4.8 A candidate who has twice failed the examination in any course for the program in which the candidate is enrolled may not enrol for that course again or for any other course which in the opinion of the School contains a substantial amount of the same material, except by special permission of the School and then only under such conditions as the School may prescribe.
- 4.9 Candidates may not enrol a second time for an Honours program if they have
 - a already qualified for Honours *or*
 - b presented for examination, but failed to obtain Honours *or*
 - c withdrawn from the Honours program, unless the Faculty on such conditions as it may determine permits re-enrolment.

5 Qualification requirements

5.1 Academic program: Bachelor of Music

- 5.1.1 The program for the degree of Bachelor of Music may be taken with a major study in Classical Performance on an instrument or voice, or in Jazz Performance.
- 5.1.2 To qualify for the Bachelor degree a candidate shall satisfactorily complete the requirements for

courses listed below and those courses listed in any one of 5.1.2.1 to 5.1.2.3. Courses to a total value of 72 units must be presented. At least 18 units shall comprise Level III courses. No student shall gain credit for a course more than once.

Subject to Clause 5.1.2, Conceded Passes may be presented for elective courses only, from Clause 5.1.2.3, provided that they do not exceed 6 units in total.

5.1.2.1 Classical Performance

Candidates shall satisfactorily complete the following courses:

Level I

MUSCORE 1007 Introduction to Theory & Analysis of Music I	3
MUSCORE 1008 Contrapuntal Analysis & Composition I	3
MUSCORE 1009 Foundations of Music History IA	3
MUSCORE 1010 Foundations of Music History IB	3

and

PERF 1500 A/B Classical Performance I Part 1 & 2	9
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and one of the following ensembles unless specified otherwise in the specialisation requirements:

ENS 1002 A/B Jazz Choir: Level I Part 1 & 2	3
ENS 1009 A/B Elder Conservatorium Symphony Orchestra I Part 1 & 2	3
ENS 1010 A/B Elder Conservatorium Wind Orchestra I Part 1 & 2	3
ENS 1025 A/B Elder Conservatorium Chorale I Part 1 & 2	3
ENS 1026 A/B Adelaide Voices I Part 1 & 2	3
ENS 1027 A/B Bella Voce I Part 1 & 2	3

Please note that in some instrumental/vocal specialisations there are ensembles that are required by your specialist requirements as listed below:

Brass

ENS 1009 A/B Elder Conservatorium Symphony Orchestra I Part 1 & 2	3
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or

ENS 1010 A/B Elder Conservatorium Wind Orchestra I Part 1 & 2	3
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Keyboard

PERF 1002 A/B Functional Musicianship I Part 1 & 2	3
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Percussion

ENS 1017 A/B Percussion Ensemble I Part 1 & 2	3
---	---

Strings

ENS 1009 A/B Elder Conservatorium Symphony Orchestra I Part 1 & 2	3
---	---

Voice

ENS 1025 A/B Elder Conservatorium Chorale I Part 1 & 2	3
--	---

or

ENS 1026 A/B Adelaide Voices I Part 1 & 2	3
---	---

or

ENS 1027 A/B Bella Voce I Part 1 & 2	3
--	---

Woodwind

ENS 1009 A/B Elder Conservatorium Symphony Orchestra I Part 1 & 2	3
---	---

or

ENS 1010 A/B Elder Conservatorium Wind Orchestra I Part 1 & 2	3
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Level II

MUSCORE 2005 Western Music in Theory & Practice IIA: 1750-1850	3
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MUSCORE 2006 Western Music in Theory & Practice IIB: 1850-1950	3
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and

PERF 2500 A/B Classical Performance II Part 1 & 2	9
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and one of the following ensembles:

ENS 2002 A/B Jazz Choir: Level II Part 1 & 2	3
ENS 2009 A/B Elder Conservatorium Symphony Orchestra II Part 1 & 2	3
ENS 2010 A/B Elder Conservatorium Wind Orchestra II Part 1 & 2	3
ENS 2025 A/B Elder Conservatorium Chorale II Part 1 & 2	3
ENS 2026 A/B Adelaide Voices II Part 1 & 2	3
ENS 2027 A/B Bella Voce II Part 1 & 2	3

and specialisation requirements as listed below:

Brass

ENS 2009 A/B Elder Conservatorium Symphony Orchestra II Part 1 & 2	3
--	---

or

ENS 2010 A/B Elder Conservatorium Wind Orchestra II Part 1 & 2	3
--	---

Keyboard

PERF 2001 A/B Accompanying II Part 1 & 2	3
--	---

Percussion

ENS 2017 A/B Percussion Ensemble II Part 1 & 2	3
--	---

and

ENS 2009 A/B Elder Conservatorium Symphony Orchestra II Part 1 & 2	3
--	---

or

ENS 2010 A/B Elder Conservatorium Wind Orchestra II Part 1 & 2.....	3
Strings	
ENS 2009 A/B Elder Conservatorium Symphony Orchestra II Part 1 & 2.....	3
ENS 2030 Chamber Music IIA.....	1.5
ENS 2031 Chamber Music IIB.....	1.5
Voice	
PERF 2003 A/B Stagecraft II Part 1 & 2.....	3
PERF 2004 A/B Voice Practicum II Part 1 & 2.....	3
ENS 2025 A/B Elder Conservatorium Chorale II Part 1 & 2.....	3
Woodwind	
ENS 2009 A/B Elder Conservatorium Symphony Orchestra II Part 1 & 2.....	3
<i>or</i>	
ENS 2010 A/B Elder Conservatorium Wind Orchestra II Part 1 & 2.....	3
<i>and</i>	
ENS 2030 Chamber Music IIA.....	1.5
ENS 2031 Chamber Music IIB.....	1.5
and Music electives selected from clause 5.1.2.3 to complete a full load of 24 units.	
Level III	
MUSCORE 3005 Western Music in Theory & Practice III: 1950 Onward.....	3
<i>and</i>	
PERF 3500 A/B Classical Performance III Part 1 & 2.....	9
and an Ensemble from one of the following unless specified otherwise in the Specialist Requirements:	
ENS 3002 A/B Jazz Choir: Level III Part 1 & 2.....	3
ENS 3009 A/B Elder Conservatorium Symphony Orchestra III Part 1 & 2.....	3
ENS 3010 A/B Elder Conservatorium Wind Orchestra III Part 1 & 2.....	3
ENS 3025 A/B Elder Conservatorium Chorale III Part 1 & 2.....	3
ENS 3026 A/B Adelaide Voices III Part 1 & 2.....	3
ENS 3027 A/B Bella Voce III Part 1 & 2.....	3
and specialist requirements as specified:	
Brass	
ENS 3009 A/B Elder Conservatorium Symphony Orchestra III Part 1 & 2.....	3
<i>or</i>	
ENS 3010 A/B Elder Conservatorium Wind Orchestra III Part 1 & 2.....	3
Keyboard	
ENS 3030 Chamber Music IIIA.....	1.5
ENS 3031 Chamber Music IIIB.....	1.5
PERF 3010 Accompanying III.....	3

<i>and</i>	
another 3-unit course from clause 5.1.2.3.....	3
Percussion	
ENS 3017 A/B Percussion Ensemble III Part 1 & 2.....	3
<i>and</i>	
ENS 3009 A/B Elder Conservatorium Symphony Orchestra III Part 1 & 2.....	3
<i>or</i>	
ENS 3010 A/B Elder Conservatorium Wind Orchestra III Part 1 & 2.....	3
Strings	
ENS 3009 A/B Elder Conservatorium Symphony Orchestra II Part 1 & 2.....	3
<i>and</i>	
ENS 3030 Chamber Music IIIA.....	1.5
ENS 3031 Chamber Music IIIB.....	1.5
<i>and</i>	
another 3-unit Music elective from clause 5.1.2.3.....	3
Voice	
ENS 3025 A/B Elder Conservatorium Chorale III Part 1 & 2.....	3
PERF 3003 A/B Stagecraft III Part 1 & 2.....	3
PERF 3004 A/B Voice Practicum III Part 1 & 2.....	3
Woodwind	
ENS 3009 A/B Elder Conservatorium Symphony Orchestra III Part 1 & 2.....	3
<i>or</i>	
ENS 3010 A/B Elder Conservatorium Wind Orchestra III Part 1 & 2.....	3
ENS 3030 Chamber Music IIIA.....	1.5
ENS 3031 Chamber Music IIIB.....	1.5
and Music electives selected from clause 5.1.2.3 to complete a full load of 24 units.	

5.1.2.2 Jazz

Candidates shall satisfactorily complete the following courses:

Level I

JAZZ 1000 A/B Jazz Performance I Part 1 & 2.....	9
JAZZ 1003 A/B Jazz Improvisation I Part 1 & 2.....	3
MUSCORE 1005 Music Foundations I: Jazz.....	3
MUSCORE 1006 Music in Context I: Jazz.....	3
and one of the following large Jazz ensembles:	
ENS 1002 A/B Jazz Choir: Level I Part 1 & 2.....	3
ENS 1004 A/B Jazz Big Band: Level I Part 1 & 2.....	3
ENS 1011 A/B Jazz Guitar Band: Level I Part 1 & 2.....	3
and a 3-unit Music elective from clause 5.1.2.3.....	

Note: A Music elective from clause 5.1.2.3 may be presented in lieu of a large Jazz ensemble when an ensemble is unavailable.

Level II

JAZZ 2000 A/B Jazz Performance II Part 1 & 2.....9

JAZZ 2006 A/B Jazz Improvisation II Part 1 & 23

JAZZ 2007 A/B Jazz Arranging Class II
Part 1 & 2.....3

MUSCORE 2003 Music in Context IIA: Jazz.....3

MUSCORE 2004 Music in Context IIB: Jazz.....3

and one of the following large Jazz ensembles:

ENS 2002 A/B Jazz Choir: Level II Part 1 & 23

ENS 2004 A/B Jazz Big Band:
Level II Part 1 & 2.....3

ENS 2011 A/B Jazz Guitar Band:
Level II Part 1 & 2.....3

Note: A Music elective from clause 5.1.2.3 may be presented in lieu of a large Jazz ensemble when an ensemble is unavailable.

Level III

JAZZ 3000 A/B Jazz Performance III Part 1 & 2.....9

JAZZ 3005 A/B Jazz Improvisation III Part 1 & 2 ...3

MUSCORE 3002 Music in Context IIIA: Jazz.....3

MUSCORE 3003 Music in Context IIIB: Jazz.....3

and one of the following large Jazz ensembles:

ENS 3002 A/B Jazz Choir: Level III Part 1 & 23

ENS 3004 A/B Jazz Big Band:
Level III Part 1 & 2.....3

ENS 3011 A/B Jazz Guitar Band:
Level III Part 1 & 2.....3

and Electives selected from clause 5.1.2.3 to complete a full load of 24 units.

Note: A Music elective from clause 5.1.2.3 may be presented in lieu of a large Jazz ensemble when an ensemble is unavailable.

5.1.2.3 Music Electives

ENS 1002 A/B Jazz Choir: Level I Part 1 & 23

ENS 1004 A/B Jazz Big Band:
Level I Part 1 & 2.....3

ENS 1009 A/B Elder Conservatorium Symphony
Orchestra I Part 1 & 23

ENS 1010 A/B Elder Conservatorium Wind
Orchestra I Part 1 & 23

ENS 1011 A/B Jazz Guitar Band:
Level I Part 1 & 2.....3

ENS 1023 A/B Chamber Orchestra I Part 1 & 2.....3

ENS 1025 A/B Elder Conservatorium Chorale I
Part 1 & 2.....3

ENS 1026 A/B Adelaide Voices I Part 1 & 2.....3

ENS 1027 A/B Bella Voce I Part 1 & 23

ENS 1030 Chamber Music IA.....1.5

ENS 1031 Chamber Music IB.....1.5

ENS 2002 A/B Jazz Choir: Level II Part 1 & 23

ENS 2004 A/B Jazz Big Band:
Level II Part 1 & 2.....3

ENS 2009 A/B Elder Conservatorium Symphony
Orchestra II Part 1 & 2.....3

ENS 2010 A/B Elder Conservatorium Wind
Orchestra II Part 1 & 2.....3

ENS 2011 A/B Jazz Guitar Band:
Level II Part 1 & 2.....3

ENS 2023 A/B Chamber Orchestra II Part 1 & 2...3

ENS 2025 A/B Elder Conservatorium Chorale II
Part 1 & 2.....3

ENS 2026 A/B Adelaide Voices II Part 1 & 2.....3

ENS 2027 A/B Bella Voce II Part 1 & 2.....3

ENS 2030 Chamber Music IIA.....1.5

ENS 2031 Chamber Music IIB.....1.5

ENS 3002 A/B Jazz Choir: Level III Part 1 & 23

ENS 3004 A/B Jazz Big Band:
Level III Part 1 & 23

ENS 3009 A/B Elder Conservatorium Symphony
Orchestra III Part 1 & 2.....3

ENS 3010 A/B Elder Conservatorium Wind
Orchestra III Part 1 & 2.....3

ENS 3011 A/B Jazz Guitar Band:
Level III Part 1 & 23

ENS 3023 A/B Chamber Orchestra III Part 1 & 2...3

ENS 3025 A/B Elder Conservatorium Chorale III
Part 1 & 2.....3

ENS 3026 A/B Adelaide Voices III Part 1 & 2.....3

ENS 3027 A/B Bella Voce III Part 1 & 2.....3

ENS 3030 Chamber Music IIIA.....1.5

ENS 3031 Chamber Music IIIB.....1.5

GENMUS 1001 From Elvis to U2 I.....3

GENMUS 1003 Musics of the World I.....3

GENMUS 1014 Sound & Media Technology3

GENMUS 1026 A/B Perspectives in Music
Technology I Part 1 & 23

GENMUS 2005 Music, Media and Contemporary
Society II3

GENMUS 2006 Orchestration II3

GENMUS 2010 A/B Studies in Composition II
Part 1 & 23

GENMUS 2026 A/B Perspectives in Music
Technology II Part 1 & 23

GENMUS 3005 Music, Media and Contemporary
Society III3

GENMUS 3011 Village Voices:
Greenwich Village in the 1960s III.....3

GENMUS 3013 Music & Ideology II/III.....3

GENMUS 3026 A/B Perspectives in Music
Technology III Part 1 & 23

MUSED 3005 Primary Music Curriculum	3
MUSST 1010 A/B Studies in Composition I Part 1 & 2.....	3
MUSST 2001 Approaches to Music IIA	3
MUSST 2002 Approaches to Music IIB	3
MUSST 2003 Instrumental Music Pedagogy II	3
MUSST 2006 Orchestration.....	3
MUSST 3001 Approaches to Music III.....	3
MUSST 3004 Instrumental Music Pedagogy III	3
MUSST 3005 Foundation for Honours III: Music Studies	3
MUSST 3010 A/B Studies in Composition III Part 1 & 2.....	3
MUSST 3014 Rhythm in the 20th Century III.....	3
PERF 1002 A/B Functional Musicianship I Part 1 & 2.....	3
PERF 2001A/B Accompanying	3
PERF 2003 A/B Stagecraft II.....	3
PERF 2023 Conducting IIA	1.5
PERF 2024 Conducting IIB	1.5
PERF 3023 Conducting IIIA	1.5
PERF 3024 Conducting IIIB	1.5
5.1.3 No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award. A list of unacceptable course combinations is available from the Elder Conservatorium of Music.	
5.1.4 Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award.	

Notes (not forming part of the Academic Program Rules)

- 1 Work required to complete the Bachelor degree:

To qualify for the award of the degree of Bachelor of Music a candidate granted credit or status must, except in special cases approved by the School, complete all the work of the final Level of the prescribed program while attending the University.
- 2 Availability of courses and options:

The School reserves the right not to offer certain courses in any particular year. Decisions on which courses are to be offered will be determined partly by the availability of relevant staff members and partly by the numbers of students who enrol in a course or option. If the numbers are insufficient then the course may not be offered.
- 3 Changing specialisation:

Students may change specialisation after an audition if required. Applications to change specialisation are subject to the approval of the Director or nominee of the Director.

**5.2 Academic program:
Bachelor of Music Education**

5.2.1 The program for the degree of Bachelor of Music

Education may be taken with a Practical Study in Performance or in Composition or in Music Technology from Level II in conjunction with studies in Music Education.

- 5.2.2 To qualify for the Bachelor degree a candidate shall satisfactorily complete the requirements for courses listed below and those courses listed in 5.1.2.3. Courses to a total value of 96 units must be presented. Studies for Level IV may not be commenced until all of the requirements for Levels I-III have been completed. At least 18 units shall comprise Level IV courses. No student shall gain credit for a course more than once.
- Subject to Clause 5.2.2, Conceded Passes may be presented for elective courses only from Clause 5.1.2.3, provided that they do not exceed 6 units in total.

5.2.2.1 Music Education

Before proceeding to Level II of the Bachelor of Music Education, candidates shall satisfactorily complete the following:

Level I

Either

- 1 The requirements of Level I of clause 5.1.2.1 or 5.1.2.2 of the degree of Bachelor of Music *or*
- 2 The requirements of Level I of clause 5.3.2.1 or 5.3.2.2 or 5.3.2.3 or 5.3.2.4 of the degree of Bachelor of Music Studies before proceeding to Level II.

Level II

MUSED 2001 Music Education IIA	3
MUSED 2002 Music Education IIB	3
MUSED 2003 A/B Music Education Ensembles II Part 1 & 2.....	3
<i>and either</i>	
MUSCORE 2005 Western Music in Theory & Practice IIA: 1750-1850	3
MUSCORE 2006 Western Music in Theory & Practice IIB: 1850-1950	3
<i>or</i>	
MUSCORE 2003 Music in Context IIA: Jazz.....	3
MUSCORE 2004 Music in Context IIB: Jazz.....	3
<i>or</i>	
COMP 2500 A/B Composition II Part 1 & 2	6
<i>or</i>	
MUSTECH 2003 A/B Music Technology II Part 1 & 2.....	6
<i>and</i>	
GENMUS 2026 A/B Perspectives in Music Technology II Part 1 & 2	3
<i>or</i>	
PERF 2600 A/B Practical Study II: Performance Part 1 & 2.....	6
<i>or</i>	

JAZZ 2600 A/B Practical Study II:
Jazz Part 1 & 26
and Music electives selected from clause 5.1.2.3
to complete a full load of 24 units.

Level III

MUSED 3001 Music Education IIIA3
MUSED 3002 Music Education IIIB3
MUSED 3003 A/B Music Education Ensembles III
Part 1 & 2.....3
MUSED 3004 Music Education Practicum III.....3
and either
MUSCORE 3002 Music in Context IIIA: Jazz.....3
or
MUSCORE 3003 Music in Context IIIB: Jazz.....3
or
MUSCORE 3005 Western Music in Theory
& Practice III: 1950 Onward.....3
or
COMP 3500 A/B Composition III Part 1 & 26
or
MUSTECH 3003 A/B Music Technology III
Part 1 & 2..... 6
and
GENMUS 3026 A/B Perspectives in Music
Technology III Part 1 & 23
or
PERF 3600 A/B Practical Study III:
Performance Part 1 & 2.....6
or
JAZZ 3600 A/B Practical Study III:
Jazz Part 1 & 2.....6
or
Elective courses from other schools to the
value of 6 units6
and

Music electives selected from clause 5.1.2.3 to
complete a full load of 24 units.

Level IV

EDUC 4201 Education Culture & Indigenous
Perspectives (UG)3
EDUC 4202 Student Learning and
Interactions I (UG).....3
EDUC 4203 Curriculum, Assessment
and Learning3
EDUC 4204 Families, Schools & Special
Needs (UG)3
EDUC 4205 Teaching Practice Part I (UG)3
EDUC 4206 Teaching Practice Part II (UG)3
MUSED 4001 A/B Music Education IV Part 1 & 2 .. 3
and a Music elective selected from clause 5.1.2.3
or MUSED 4002 A/B Music Education Project IV

Part 1 & 2.....3

- 5.2.3 No candidate will be permitted to count towards an
award any course, together with any other course,
which, in the opinion of the Faculty concerned,
contains a substantial amount of the same
material; and no course or portion of a course
may be counted twice towards an award. A list of
unacceptable course combinations is available from
the Elder Conservatorium of Music.
- 5.2.4. Subject to Chapter 89 of the Statutes, candidates
who have satisfied the requirements for any award
of the University shall be admitted to that award.

Notes (not forming part of the Academic Program Rules)

- 1 Work required to complete the Bachelor degree

To qualify for the award of the degree of Bachelor of Music
Education a candidate granted credit or status must, except in
special cases approved by the School, complete all the
remaining work of the final level of the prescribed program
while attending the University.
- 2 Availability of courses and options:

The School reserves the right not to offer certain courses in any
particular year. Decisions on which courses are to be offered
will be determined partly by the availability of relevant staff
members and partly by the numbers of students who enrol in a
course or option. If the numbers are insufficient then the course
may not be offered.
- 3 Changing specialisation:

Students may change specialisation after an audition if
required. Applications to change specialisation are subject to
the approval of the Director or nominee of the Director.
- 4 Music Education students in a Jazz specialisation:

Students who change their specialisation to a Jazz major, but
who do not have the necessary prerequisites to take Music in
Context IIIA Jazz and Music in Context IIIB Jazz, may substitute
MUSCORE 3999A/B Jazz Theory for Music Education III Part 1 &
2 worth 3 units.

**5.3 Academic program:
Bachelor of Music Studies**

- 5.3.1 The program for the degree of Bachelor of Music
Studies may be taken with a specialisation in
Integrated Studies on an instrument or voice,
or in Composition or in Music Technology or in
Performance and Pedagogy.
- 5.3.2 To qualify for the Bachelor degree a candidate
shall satisfactorily complete the requirements for
courses listed below and those courses listed in
any one of 5.3.2.1 to 6.3.2.3. Courses to a total
value of 72 units must be presented. At least 18
units shall comprise Level III courses. No student
shall gain credit for a course more than once.

Subject to Clause 5.3.2, Conceded Passes may be
presented for elective courses only from Clause
5.1.2.3, provided that they do not exceed 6 units in
total.

5.3.2.1 Composition

Candidates shall satisfactorily complete the
following courses:

Level I

COMP 1500 A/B Composition I Part 1 & 2.....	6
GENMUS 1003 Musics of the World I.....	3
MUSCORE 1007 Introduction to Theory & Analysis of Music I.....	3
MUSCORE 1008 Contrapuntal Analysis & Composition I.....	3
MUSCORE 1009 Foundations of Music History IA.....	3
MUSCORE 1010 Foundations of Music History IB.....	3
and Music electives selected from clause 6.1.2.3 to complete a full load of 24 units.	

Level II

COMP 2500 A/B Composition II Part 1 & 2.....	6
MUSCORE 2005 Western Music in Theory & Practice IIA: 1750-1850.....	3
MUSCORE 2006 Western Music in Theory & Practice IIB: 1850-1950.....	3
MUSST 2001 Approaches to Music IIA.....	3
MUSST 2002 Approaches to Music IIB.....	3
and Music electives selected from clause 5.1.2.3 to complete a full load of 24 units.	

Level III

COMP 3500 A/B Composition III Part 1 & 2.....	6
MUSCORE 3005 Western Music in Theory & Practice III: 1950 Onward.....	3
MUSST 3001 Approaches to Music III.....	3
and Music electives selected from clause 5.1.2.3 to complete a full load of 24 units.	

5.3.2.2 Integrated Studies**Level I**

MUSCORE 1007 Introduction to Theory & Analysis of Music I.....	3
MUSCORE 1008 Contrapuntal Analysis & Composition I.....	3
MUSCORE 1009 Foundations of Music History IA.....	3
MUSCORE 1010 Foundations of Music History IB.....	3
MUSST 1001A/B Studies in Music I Part 1 & 2.....	6
PERF 1600 A/B Practical Study I: Performance Part 1 & 2.....	6

Level II

MUSCORE 2005 Western Music in Theory & Practice IIA: 1750-1850.....	3
MUSCORE 2006 Western Music in Theory & Practice IIB: 1850-1950.....	3
MUSST 2001 Approaches to Music IIA.....	3
MUSST 2002 Approaches to Music IIB.....	3
PERF 2600 A/B Practical Study II:	

Performance Part 1 & 2.....	6
and/or Music electives selected from clause 5.1.2.3 to complete a full load of 24 units.	

Level III

MUSCORE 3005 Western Music in Theory & Practice III: 1950 Onward.....	3
MUSST 3001 Approaches to Music III.....	3
PERF 3600 A/B Practical Study III: Performance Part 1 & 2.....	6
and/or Music electives selected from clause 5.1.2.3 to complete a full load of 24 units.	

5.3.2.3 Music Technology

Candidates shall satisfactorily complete the following courses:

Level I

GENMUS 1026 A/B Perspectives in Music Technology I Part 1 & 2.....	3
MUSCORE 1007 Introduction to Theory & Analysis of Music I.....	3
MUSCORE 1008 Contrapuntal Analysis & Composition I.....	3
MUSCORE 1009 Foundations of Music History IA.....	3
MUSCORE 1010 Foundations of Music History IB.....	3
MUSTECH 1003 A/B Music Technology I Part 1 & 2.....	6
and Music electives selected from clause 5.1.2.3 to complete a full load of 24 units.	

Level II

GENMUS 2026 A/B Perspectives in Music Technology II Part 1 & 2.....	3
MUSCORE 2005 Western Music in Theory & Practice IIA: 1750-1850.....	3
MUSCORE 2006 Western Music in Theory & Practice IIB: 1850-1950.....	3
MUSST 2001 Approaches to Music IIA.....	3
MUSST 2002 Approaches to Music IIB.....	3
MUSTECH 2003 A/B Music Technology II Part 1 & 2.....	6
and Music electives selected from clause 5.1.2.3 to complete a full load of 24 units.	

Level III

GENMUS 3026 A/B Perspectives in Music Technology III Part 1 & 2.....	3
MUSCORE 3005 Western Music in Theory & Practice III: 1950 Onward.....	3
MUSST 3001 Approaches to Music III.....	3
MUSTECH 3003 A/B Music Technology III Part 1 & 2.....	6
and Music electives selected from clause 5.1.2.3 to complete a full load of 24 units.	

5.3.2.4 Performance and Pedagogy

Candidates shall satisfactorily complete the following courses:

Level I

MUSCORE 1007 Introduction to Theory & Analysis of Music I	3
MUSCORE 1008 Contrapuntal Analysis & Composition I	3
MUSCORE 1009 Foundations of Music History IA	3
MUSCORE 1010 Foundations of Music History IB	3
MUSPED 1001 Pedagogy Studies I.....	3
PERF 1600 A/B Practical Study I: Performance Part 1 & 2.....	6

and Music electives selected from Clause 5.1.2.3 to complete a full load of 24 units.

Level II

MUSCORE 2005 Western Music in Theory and Practice IIA.....	3
MUSCORE 2006 Western Music in Theory and Practice IIB.....	3
MUSPED 2001 Pedagogy Studies II.....	3
MUSST 2001 Approaches to Music IIA	3
MUSST 2002 Approaches to Music IIB	3
PERF 2600 A/B Practical Study II: Performance Part 1 & 2.....	6

and Music electives selected from Clause 5.1.2.3 to complete a full load of 24 units.

Level III

MUSCORE 3005 Western Music in Theory and Practice III: 1950 Onward.....	3
MUSPED 3001A Pedagogy Studies IIIA.....	3
MUSPED 3001B Pedagogy Studies IIIB.....	3
MUSST 3001 Approaches to Music III.....	3
PERF 3600 A/B Practical Study III: Performance Part 1 & 2.....	6

and Music electives selected from Clause 5.1.2.3 to complete a full load of 24 units.

- 5.3.3 No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award. A list of unacceptable course combinations is available from the Elder Conservatorium of Music.

Notes (not forming part of the Academic Program Rules)

- 1 Work required to complete the Bachelor degree
- To qualify for the award of the degree of Bachelor of Music Studies a candidate granted credit or status must, except in special cases approved by the School, complete all the remaining work of the final level of the prescribed program while attending the University.

- 2 Availability of courses and options:

The School reserves the right not to offer certain courses in any particular year. Decisions on which courses are to be offered will be determined partly by the availability of relevant staff members and partly by the numbers of students who enrol in a course or option. If the numbers are insufficient then the course may not be offered.

- 3 Changing specialisation:

Students may change specialisation after an audition if required. Applications to change specialisation are subject to the approval of the Director or nominee of the Director.

- 5.3.4 Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award.

5.4 Academic program: Honours degree of Bachelor of Music

- 5.4.1 To qualify for the Honours degree a candidate shall complete the requirements for the Bachelor degree and comply with the provisions of Academic Program Rule 5.4.2.
- 5.4.2 To qualify for the Honours degree a candidate shall satisfactorily complete PERF 4005 A/B Honours Performance Part 1 & 2.
- 5.4.3 In special circumstances this course may be taken in combination with other Honours courses approved by the School. The combination shall include such parts as shall, when combined, be deemed by the School to be equivalent to one course.
- 5.4.4 No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award. A list of unacceptable course combinations is available from The Elder Conservatorium of Music Office.
- 5.4.5 Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award.

5.5 Academic program: The Honours degree of Bachelor of Music Education

- 5.5.1 To qualify for the Honours degree a candidate shall complete the requirements for the Bachelor degree and comply with the provisions of Academic Program Rule 5.5.2.
- 5.5.2 To qualify for the Honours degree a candidate shall satisfactorily complete MUSICED 4006 A/B Honours Music Education Part 1 & 2.
- 5.5.3 In special circumstances this course may be taken in combination with other courses approved by the School. The combination shall include such parts as shall, when combined, be deemed by the School to be equivalent to one course.
- 5.5.4 No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the

same material; and no course or portion of a course may be counted twice towards an award. A list of unacceptable course combinations is available from the Elder Conservatorium of Music.

- 5.5.5 Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award.

5.6 Academic program: The Honours degree of Bachelor of Music Studies

- 5.6.1 To qualify for the Honours degree a candidate shall complete the requirements for the Bachelor degree and comply with the provisions of Academic Program Rule 5.6.2.

- 5.6.2 To qualify for the Honours degree a candidate shall satisfactorily complete one of the following Honours courses:

ETHNO 4003A/B Honours Ethnomusicology
Part 1 & 2

MUSICOL 4011A/B Honours Musicology Part 1 & 2

MUSCOMP 4010A/B Honours Composition
Part 1 & 2

MUSTECH 4001A/B Honours Music Technology
Part 1 & 2

PERF 4006 A/B Honours Music Pedagogy Part 1 & 2

- 5.6.3 In special circumstances this course may be taken in combination with other Honours courses approved by the School. The combination shall include such parts as shall, when combined, be deemed by the School to be equivalent to one course.
- 5.6.4 No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award. A list of unacceptable course combinations is available from the Elder Conservatorium of Music.
- 5.6.5 Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award.

6 External performances/engagements

Students are encouraged to take outside engagements, provided that:

- a a student shall not take part in any public concert or engagement that prohibits the student from attending a scheduled lesson or class except by permission of the Director.
- b the Director reserves the right to determine whether or not a student shall be required to acknowledge the name of the Elder Conservatorium or its staff, at any public concert or engagement in which the student participates.

7 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.



Bachelor of Arts and Bachelor of Music

Bachelor of Arts and Bachelor of Music Education

Bachelor of Arts and Bachelor of Music Studies

These rules should be read in conjunction with Academic Program Rules for the Bachelor of Arts and parts 2, 3 and 4 of the Academic Program Rules for the Bachelor of Music, Bachelor of Music Education and Bachelor of Music Studies.

1 Duration of programs

- 1.1 The program of study for the degrees of Bachelor of Arts and Bachelor of Music shall extend over five academic years or equivalent.
- 1.2 The program of study for the degrees of Bachelor of Arts and Bachelor of Music Education shall extend over six academic years or equivalent.
- 1.3 The program of study for the degrees of Bachelor of Arts and Bachelor of Music Studies shall extend over five academic years or equivalent.
- 1.4 Students who commence this program but who subsequently decide that they do not wish to proceed with both areas of study may transfer to enrolment in the relevant Music degree where credit for courses completed will be decided on a case by case basis.
- 1.5 A student may interrupt the program for such periods and on such conditions as may in each case be determined by the School.
- 1.6 Students wishing to interrupt their studies in accordance with 1.5 above must apply for permission and obtain pre-approval from the relevant Head of Studies or Director on behalf of the School for leave of absence for a defined period.
- 1.7 A student who leaves the program without approval or who extends a leave of absence beyond the time period approved under 1.5 above shall be deemed to have withdrawn his or her candidature for the award but may reapply for admission to the program in accordance with the procedures in operation at that time.
- 1.8 Students who have interrupted their studies in prescribed courses may be required to resume at such point in the program and/or to undertake such additional or special programs of study as the Director of the School deems appropriate.

2 Qualification requirements

- 2.1 The attention of candidates is drawn to the Academic Program Rules of the degree of Bachelor of Arts. No course may be counted twice towards the degree and two courses that contain a substantial amount of the same material may not both be counted.
- 2.2 Candidates should have continuous enrolment in their instrumental or vocal studies. The attention

of candidates is drawn to Academic Program Rule 3 listed in the rules governing the Music Bachelor degrees.

- 2.3 Candidates should complete lower level prerequisites before commencing higher level courses.
- 2.4 No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty, contains a substantial amount of the same material, and no course or portion of a course may be counted twice towards an award.

**Note: A list of unacceptable combinations of courses is available from the Elder Conservatorium of Music.*

- 2.5 Candidates should note that an enrolment in courses exceeding a total value of 24 units per year will result in a program overload and be aware of the implications of doing so.

2.6 Academic programs: Bachelor of Arts and Bachelor of Music

- 2.6.1 To qualify for the Bachelor of Arts degree, in addition to completion of the requirements of the Bachelor of Music program defined below, students must complete the following:

Level I courses to the minimum value of 12 units

Level II or Advanced Level courses to the minimum value of 12 units

Level III or Advanced Level courses to the minimum value of 24 units

Candidates must complete all of the Level III requirements and satisfy the requirement for a major sequence of study in accordance with the relevant Academic Program Rules of the degree of Bachelor of Arts.

- 2.6.2 The program for the degree of Bachelor of Music may be taken with a major study in Classical Performance on an instrument or voice, or in Jazz Performance.
- 2.6.3 To qualify for the Bachelor of Music degree a candidate shall satisfactorily complete the requirements for courses listed in 5.1.2 above and where prescribed, Music elective courses listed in 5.1.2.3. Courses to a total value of 72 units must be presented. At least 18 units shall comprise Level III courses. No student shall gain credit for a course more than once.

2.7 Academic programs: Bachelor of Arts and Bachelor of Music Education

- 2.7.1 To qualify for the Bachelor of Arts degree, in addition to completion of the requirements of the Bachelor of Music Education program defined below, candidates must complete the following:
- Level I course to the minimum value of 12 units
 - Level II or Advanced Level courses to the minimum value of 12 units
 - Level III or Advanced Level courses to the minimum value of 24 units.
- Candidates must complete all of the Level III requirements in accordance with the relevant Academic Program Rules of the degree of Bachelor of Arts.
- 2.7.2 The program for the degree of Bachelor of Music Education may be taken with a Practical Study in Performance or in Composition or in Music Technology from Level II in conjunction with studies in Music Education.
- 2.7.3 To qualify for the Bachelor of Music Education degree a candidate shall satisfactorily complete the requirements for courses listed in 5.2.2 above and where prescribed, Music elective courses listed in 5.1.2.3. Courses to a total value of 96 units must be presented. Studies for Level IV may not be commenced until all of the requirements for Levels I-III have been completed. At least 18 units shall comprise Level IV courses. No student shall gain credit for a course more than once.

2.8 Academic program: Bachelor of Arts and Bachelor of Music Studies

- 2.8.1 To qualify for the Bachelor of Arts degree, in addition to completion of the requirements of the Bachelor of Music Studies program defined below, candidates must complete the following:
- Level I course to the minimum value of 12 units
 - Level II or Advanced Level courses to the minimum value of 12 units
 - Level III or Advanced Level courses to the minimum value of 24 units
- Candidates must complete all of the Level III requirements in accordance with the relevant Academic Program Rules of the degree of Bachelor of Arts.
- 2.8.2 The program for the degree of Bachelor of Music Studies may be taken with a specialisation in Integrated Studies on an instrument or voice, or in Composition or in Music Technology or in Performance and Pedagogy.
- 2.8.3 To qualify for the Bachelor of Music Studies degree a candidate shall satisfactorily complete the requirements for courses listed in 5.3.2 above and where prescribed, Music elective courses listed in 5.1.2.3. Courses to a total value of 72 units must be presented. At least 18 units shall comprise Level III courses. No student shall gain credit for a course more than once.



Appendix A: Single Studies in the Elder Conservatorium of Music

Rules

- 1 The Elder Conservatorium of Music provides for the teaching and study of various branches of music as Single Studies.
- 2 Before admission as a Single Studies student, the intending student shall satisfy the Director of his/her fitness to enter upon the course of study proposed, and shall be admitted irrespective of age or high school status. Fitness to proceed will usually be determined by audition.
- 3 Students may take Single Studies without proceeding to a degree or diploma and, subject to the approval of the Director, they may attend the Conservatorium without enrolling in an individual course.
- 4 In commencing a program of Single Studies a student shall:
 - a complete and sign a Single Studies enrolment form
 - b pay such fees and charges (entrance fee, general service fee, tuition fee, consumables fee and late fee) in accordance with timelines approved by the Vice-Chancellor.
 - ii The Single Studies student shall pay the difference between the sum awarded and the fees due for tuition.
- c A scholarship shall be awarded to the candidate who shows the greatest musical promise and not necessarily to the most advanced candidate at the audition. In most cases, preference will be given to singers who are aged eighteen years or over and, for major scholarships, to instrumentalists who are aged fifteen years or over.
- d Each holder of a scholarship tenable for tuition may be asked to take part in such concerts, classes and other activities as may be required.
- e If the holder of a scholarship tenable for more than one year fails to make satisfactory progress in the opinion of the Director, the student shall thereupon forfeit the scholarship for the remainder of its term of award, unless the Council shall otherwise decide.

Single studies

- 5 Single Studies may be taken in:
Flute, oboe, clarinet, bassoon, horn, trumpet, trombone, tuba, percussion, harp, saxophone, violin, violoncello, double bass, voice, pianoforte, harpsichord, organ, guitar, recorder, composition and jazz instruments.
- 6 The principal study courses will consist of 14 half or full hour tuition sessions per semester and a total of 14 or 28 hours per year. The sessions will be taken during the University academic calendar year over two semesters.
- 7 At the end of the year, a student of a Single Studies course may upon application in writing, receive a report on progress from the Director.

Scholarships

- 8 a Single Studies scholarships are offered by the Elder Conservatorium of Music at the discretion of the Director.
- b Unless the rules of the scholarship concerned allow otherwise:
 - i Single Studies scholarships shall be available only to Single Studies students and shall be applied towards tuition in the individual course for which it is awarded.

Single studies for international students

- 9 The Conservatorium will offer Single Studies for international students to enable students to maintain performance skills whilst English language studies are undertaken or to continue their performance studies while other tertiary studies are undertaken. An alternative fee schedule will apply.

Graduate Attributes

Bachelor of Music

The Elder Conservatorium of Music facilitates an environment in which graduates are encouraged to take personal responsibility for developing the following attributes:

- Knowledge and understanding of the structure of music and its role as an expressive tool
- Knowledge, understanding and mastery of the elements of musical performance, encompassing technique, style, interpretation and communication
- Knowledge, understanding and mastery of the conceptual and practical components of music
- The ability to analyse and synthesise complex material
- Confidence in the use of oral and written communication skills
- A high level of self-awareness and critical judgement
- An understanding of technology, its use in the profession and its role as a tool for education, communication and career development
- An imaginative and creative approach to problem solving
- Sensitivity to the contribution of others and the ability to function as part of a team
- A clear understanding of the professional world and the standards required for professional work
- The ability to locate information resources appropriate to independent, life long learning
- A high level of independence and initiative and a desire for continued improvement in all aspects of professional endeavour
- Flexibility to recognise and respond to a wide variety of professional opportunities and challenges
- A high level of cultural awareness and sensitivity
- Flexibility and agility of musical thought and judgement
- Commitment to excellence and the striving towards the highest possible personal and professional standards
- Commitment to ethical behaviour
- Appreciation and encouragement of artistic and cultural diversity.

Graduate Attributes

Bachelor of Music Education

The Elder Conservatorium of Music facilitates an environment in which graduates are encouraged to take personal responsibility for developing the following attributes:

- Knowledge and understanding of the breadth of music and its role as an expressive tool
- Knowledge, understanding and mastery of the conceptual and practical components of music
- Knowledge of the role of music in education and the principles of music learning and teaching
- The ability to analyse and synthesise complex material
- Proficiency in the use of oral and written communication skills and interpersonal skills, particularly as needed in the teaching profession
- A high level of self-awareness and critical judgement
- An understanding of technology and its use as a tool in music education
- An imaginative and creative approach to problem solving
- Leadership ability, sensitivity to others and the ability to function as part of a team
- A clear understanding of the teaching profession
- The ability to locate information resources relevant to independent, lifelong learning
- A high level of independence and initiative and a desire for continued improvement in all aspects of professional endeavour
- Flexibility to recognise and respond to a wide variety of professional opportunities and challenges
- A high level of cultural awareness and sensitivity
- Flexibility and agility of musical thought and judgement
- Commitment to excellence and the striving towards the highest possible personal and professional standards
- Commitment to ethical behaviour
- Appreciation and encouragement of artistic and cultural diversity.

Graduate Attributes

Bachelor of Music Studies

The Elder Conservatorium of Music facilitates an environment in which graduates are encouraged to take personal responsibility for developing the following attributes:

- Knowledge and understanding of the structure of music and its role as an expressive tool
- Knowledge, understanding and mastery of the elements of musical performance or composition or music technology or musical performance and pedagogy
- Knowledge, understanding and mastery of the conceptual and practical components of music
- The ability to analyse and synthesise complex material
- Confidence in the use of oral and written communication skills
- A high level of self-awareness and critical judgement
- An understanding of technology, its use in the profession and its role as a tool for education, communication and career development
- An imaginative and creative approach to problem solving
- Sensitivity to the contribution of others and the ability to function as part of a team
- A clear understanding of the professional world and the standards required for professional work
- The ability to locate information resources appropriate to independent, life long learning
- A high level of independence and initiative and a desire for continued improvement in all aspects of professional endeavour
- Flexibility to recognise and respond to a wide variety of professional opportunities and challenges
- A high level of cultural awareness and sensitivity
- Flexibility and agility of musical thought and judgement
- Commitment to excellence and the striving towards the highest possible personal and professional standards
- Commitment to ethical behaviour
- Appreciation and encouragement of artistic and cultural diversity.



Academic Program Rules

Faculty of Sciences

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Undergraduate Awards

- Diploma in Wine Marketing
- Degree of Bachelor of Agricultural Sciences
- Degree of Bachelor of Arts and Bachelor of Science
- Degree of Bachelor of Food and Nutrition Science
- Degree of Bachelor of Oenology
- Degree of Bachelor of Rural Enterprise Management*
- Degree of Bachelor of Science
- Degree of Bachelor of Science (Animal Science)
- Degree of Bachelor of Science (Biomedical Science)

- Degree of Bachelor of Science (Biotechnology)
- Degree of Bachelor of Science (Ecochemistry)
- Degree of Bachelor of Science (Evolutionary Biology)
- Degree of Bachelor of Science (High Performance Computational Physics)(Honours)
- Degree of Bachelor of Science (Marine Biology)
- Degree of Bachelor of Science (Mineral Geoscience)
- Degree of Bachelor of Science (Molecular and Drug Design)
- Degree of Bachelor of Science (Molecular Biology)
- Degree of Bachelor of Science (Nanoscience and Materials)
- Degree of Bachelor of Science (Natural Resources)
- Degree of Bachelor of Science (Optics & Photonics)
- Degree of Bachelor of Science (Petroleum Geoscience)
- Degree of Bachelor of Science (Pre-Veterinary)
- Degree of Bachelor of Science (Space Science & Astrophysics)
- Degree of Bachelor of Viticulture and Oenology
- Degree of Bachelor of Wine Marketing
- Honours degree of Bachelor of Agriculture
- Honours degree of Bachelor of Science
- Honours degree of Bachelor of Viticulture and Oenology
- Honours degree of Bachelor of Wine Marketing

*Not offered to students commencing in 2010.

Notes on Delegated Authority

1. Council has delegated the power to approve minor changes to the Academic Program Rules to the Executive Deans of Faculties.
2. Council has delegated the power to specify syllabuses to the Head of each department or centre concerned, such syllabuses to be subject to approval by the Faculty or by the Executive Dean on behalf of the Faculty.

Graduate Attributes

Bachelor of Science Degrees

Knowledge

- A broad scientific knowledge with a deep understanding of one or more science disciplines, commensurate with the highest international standards in science education
- To understand the observational and experimental character of science and to have skills in field and laboratory techniques and experimental design.

Intellectual and social capabilities

- The skills of inquiry, objective criticism, logical thought and problem solving that are considered to be the foundations of the scientific method
- The ability to communicate scientific information effectively, both orally and in writing
- To have a high order of numerical and analytical skills
- To possess scientific curiosity and the attitudes, knowledge and skills necessary for a commitment to life long learning
- To have experience with learning opportunities made available by new technologies and to be equipped with computing and information technology skills
- To have the skills required to tackle scientific problems as a member of a team.

Attitudes and values

- To appreciate the central role of science in society
- An enthusiasm for, and enjoyment of, the ethos of science and the process of scientific investigation
- To value the close relationship between scientific research and the development of new knowledge.

Graduate Attributes

Further Programs in the Faculty of Sciences

These graduate attributes apply to the following Academic Programs:

- All Diplomas
- Bachelor of Agricultural Sciences
- Bachelor of Food and Nutrition Science
- Bachelor of Oenology
- Bachelor of Rural Enterprise Management
- Bachelor of Science (Animal Science)
- Bachelor of Science (Pre-Veterinary)
- Bachelor of Science (Natural Resources)
- Bachelor of Viticulture and Oenology
- Bachelor of Wine Marketing.
- Knowledge and understanding of the content of their chosen discipline at levels that are internationally recognised and at the higher level of industry requirement
- The ability to analyse, evaluate and synthesise information from a wide variety of sources and experiences, and apply creative and innovative solutions to problems within changing contexts
- Numeracy and literacy skills of a high order
- Acquisition of the capacity to learn and maintain intellectual curiosity and a commitment to continuous learning throughout their lives
- An awareness of ethical, social and cultural contexts and their importance in the exercise of professional skills and responsibilities
- The capacity to communicate effectively and to work both independently and cooperatively
- The ability to take up a leadership role in the community and a commitment to the highest standards of professional endeavour
- Proficiency in the appropriate use of modern technologies within a socially responsible context.



1 Duration of program

The program of study for the diploma, which is only offered externally, shall extend over four years part-time study.

2 Admission

2.1 Status, exemption and credit transfer

- 2.1.1 Exemption from any part of the program on the first occasion on which a candidate takes a course will be granted only in exceptional cases and on grounds approved by the Faculty.

Note: Partial or full status may be granted on account of International Baccalaureate upon application to the Faculty.

- 2.1.2 Candidates who have previously passed courses offered in other programs at the University of Adelaide or other recognised tertiary institutions and who wish to count such courses towards their diploma may, on written application to the Faculty, be granted status towards such specific requirements as the Faculty shall determine, subject to the following conditions:

- a Status will normally only be considered for courses passed within the previous ten years. Status may be granted on a course for course basis or on the basis of course for group of courses. Status will be granted only for courses that meet the academic requirements of the award towards which credit is sought.
- b The candidate shall present a range of courses that fulfil the requirements of the relevant Academic Program Rules.
- c A candidate shall complete a minimum of 24 units towards the award, as defined in 4.2 following, which have not been presented for any other degree.

3 Assessment and examinations

- 3.1 In determining a candidate's final result in a course the assessors may take into account oral, written, practical or examination work, provided that the candidate has been given notice at the beginning of the course of the way in which the work will be taken into account and of its relative importance in the final result.
- 3.2 There shall be four classifications of pass in any course for the degrees, as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, Pass. In addition there shall be a classification of Conceded Pass. However, a candidate may only present courses for which a Conceded Pass has been obtained up to an aggregate value of 3 units. Courses for which a result of Conceded Pass has been obtained shall not satisfy any prerequisite requirement.

- 3.3
- a A candidate who obtains a Pass or higher grade in a course can not repeat the course.
 - b A candidate who fails to obtain a Pass or higher grade in a course or who obtains a Conceded Pass and who desires to take the course again shall, unless exempted wholly or partially therefrom by the Head of School concerned or their delegate, do written and laboratory or other work in that course to the satisfaction of the teaching staff concerned.
 - c A candidate who has twice failed to obtain a Pass or higher in any course shall not enrol for the course again, or for any other course which in the opinion of the Faculty contains a substantial amount of the same material, except by permission of the Faculty and under such conditions as the Faculty may prescribe.

4 Qualification requirements

- 4.1 To qualify for the degree a candidate shall pass courses, listed in 4.2 following, to the value of 48 units.

4.2 Academic program

For the award of the Diploma in Wine Marketing a student shall complete all courses listed in the program of study for Level 1 and Level 2 of the Bachelor of Wine Marketing as specified under Academic Program Rule 4.2 for that program.

4.3 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty, contains a substantial amount of the same material, and no course or portion of a course may be counted twice towards an award.

4.4 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award.

5 Special circumstances

When in the opinion of the Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

1 Duration of program

The program for the degree shall extend over three years of full-time study or the part-time equivalent, and that for the Honours degree over one additional year of full-time study or, in exceptional circumstances, over two years of part-time study.

2 Admission

2.1 Status, exemption and credit transfer

2.1.1 Exemption from any part of the program on the first occasion on which a candidate takes a course will be granted only in special cases and on grounds approved by the Faculty.

Note: Partial or full status may be granted on account of International Baccalaureate upon application to the Faculty.

2.1.2 Candidates who have previously passed courses offered in other programs at the University of Adelaide or other recognised tertiary institutions and who wish to count such courses towards their degree may, on written application to the Faculty, be granted status towards such specific degree requirements as the Faculty shall determine, subject to the following conditions:

- a Normally status will only be considered for courses passed within the previous ten years. Status may be granted on a course for course basis or on the basis of course for group of courses. Status will be granted only for courses that meet the academic requirements of the award towards which credit is sought.
- b The candidate shall present a range of courses that fulfil the requirements of the relevant Academic Program Rules.
- c A candidate shall complete a minimum of 24 units towards the award, as defined in 4.3 below, that have not been presented for any other degree.

3 Assessment and examinations

3.1 In determining a candidate's final result in a course the assessors may take into account oral, written, practical or examination work, provided that the candidate has been given notice at the beginning of the course of the way in which the work will be taken into account and of its relative importance in the final result.

3.2 There shall be four classifications of pass in any course for the degrees, as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, Pass. In addition there shall be a classification of Conceded Pass. However, a candidate may only present courses for which a Conceded Pass has been obtained up to an aggregate value of 6 units. Courses for which a result of Conceded Pass has been obtained shall

not satisfy any prerequisite requirement.

- 3.3
- a A candidate who obtains a Pass or higher grade in a course can not repeat the course.
 - b A candidate who fails to obtain a Pass or higher grade in a course or who obtains a Conceded Pass and who desires to take the course again shall, unless exempted wholly or partially there from by the Head of School concerned or their delegate, do written and laboratory or other work in that course to the satisfaction of the teaching staff concerned.
 - c A candidate who has twice failed to obtain a Pass or higher in any course shall not enrol for the course again, or for any other course which in the opinion of the Faculty contains a substantial amount of the same material, except by permission of the Faculty and under such conditions as the Faculty may prescribe.

4 Qualification requirements

4.1 To qualify for the degree a candidate shall pass courses, listed in 4.3 below, to the value of 72 units

4.2 Professional Internship

For the Bachelor of Agricultural Sciences program, a total of twelve weeks professional work experience is required and this should be undertaken during the University vacations by the start of Semester 2 of the third year.

The Faculty may grant either partial or total exemption from these requirements to a candidate who produces satisfactory evidence of professional experience obtained before their first enrolment in the Faculty; and in special cases, the Faculty may grant dispensation from the requirements.

Credit will not normally be given for periods of less than two consecutive weeks.

A candidate should seek a variety of professional work experience appropriate to the candidate's academic level. Work in the candidate's family business or farm will not normally contribute to the professional experience except with the approval of the Program coordinator. This approval must be obtained prior to undertaking the period of professional work experience.

Before beginning a period of professional work experience, a candidate may ensure that it will be satisfactory to the Faculty by consulting the Program Coordinator.

Upon completion of each period of professional work experience, a candidate is required to submit to the Program Coordinator a report on the work completed using the prescribed report format, certified by the employer for approval by the Program Coordinator.

4.3 Academic program

4.3.1 Level I

Passes in Level I courses, which shall include:

Semester 1

BIOLOGY 1101 Biology I: Molecules, Genes and Cells3

CHEM 1100 Chemistry IA.....3

or

CHEM 1101 Foundations of Chemistry IA

AGRIC 1510WT Agricultural Systems IA.....3

STATS 1000 Statistical Practice I3

Semester 2

BIOLOGY 1201 Biology I: Organisms3

CHEM 1200 Chemistry IB.....3

or

CHEM 1201 Foundations of Chemistry IB3

AGRIC 1520WT Agricultural Systems IB3

SOIL&WAT 1000WT Soils and Landscapes I.....3

4.3.2 Level II

Passes in Level II courses, which shall include:

Semester 1

AGRIC 2500WT Animal and Plant Biochemistry II.....3

Foundations in Plant Science II3

PLANT SC 2500WT Microbiology and Invertebrate Biology II3

SOIL&WAT 2500WT Soil and Water Resources II3

Semester 2

Crop Production II.....3

Agribusiness II3

ANIML SC 2503RW Livestock Production Sciences II.....3

ANIML SC 2501WT Genes and Inheritance II3

4.3.3 Level III

Passes in Level III courses, which shall include:

Semester 1

Research Methodology3

Agricultural Economics & Policy III3

Semester 2

Agricultural Resource Management III.....3

Professional Skills III3

Plus elective courses to the value of 12 units chosen from:

Livestock Science and Production

Summer Semester

ANIML SC 3043RW Animal Biotechnology III.....3

Semester 1

ANIML SC 3045RW Animal Breeding & Genetics III.....3

ANIML SC 3016RW Animal Health III3

Semester 2

ANIML SC 3015RW Animal Nutrition & Metabolism III3

Soil Science

Summer Semester

SOIL&WAT 3004WT Environmental Toxicology and Remediation.....3

Semester 1

SOIL&WAT 3002WT Soil Management and Conservation III3

SOIL&WAT 3016WT Soil Ecology and Nutrient Cycling III3

Winter Semester

SOIL&WAT 3012WT Soil and Water Management III (MY)*3

Semester 2

SOIL&WAT 3014WT GIS for Agricultural Science III3

Crop and Pasture Science

Courses in Agronomy, Animal Breeding & Genetics, Plant Biotechnology, Plant Health, & Soil and Plant Nutrition are likely to be offered.

Students may substitute other Level III elective courses offered by the Faculty of Sciences, with the approval of the Bachelor of Agricultural Sciences Program Coordinator.

*(MY) taught in mid-year break

4.4 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty, contains a substantial amount of the same material, and no course or portion of a course may be counted twice towards an award.

4.5 The Honours degree

Candidates completing a Bachelor of Agricultural Sciences to a standard that is acceptable to the Faculty may proceed to the Honours degree. Refer to Academic Program Rule 5.6 of the degree of Bachelor of Science for an indicative structure subject to approval.

4.6 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award.

5 Special circumstances

When in the opinion of the Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.



Bachelor of Food and Nutrition Science

1 Duration of program

The program for the degree shall extend over three years of full-time study or the part-time equivalent, and that for the Honours degree over one additional year of full-time study or, in exceptional circumstances, over two years of part-time study.

2 Admission

2.1 Status, exemption and credit transfer

2.1.1 Exemption from any part of the program on the first occasion on which a candidate takes a course will be granted only in special cases and on grounds approved by the Faculty.

Note: Partial or full status may be granted on account of International Baccalaureate upon application to the Faculty.

2.1.2 Candidates who have previously passed courses offered in other programs at the University of Adelaide or other recognised tertiary institutions and who wish to count such courses towards their degree may, on written application to the Faculty, be granted status towards such specific degree requirements as the Faculty shall determine, subject to the following conditions:

- a Status will normally only be considered for courses passed within the previous ten years. Status may be granted on a course for course basis or on the basis of course for group of courses. Status will be granted only for courses that meet the academic requirements of the award towards which credit is sought.
- b The candidate shall present a range of courses that fulfil the requirements of the relevant Academic Program Rules.
- c A candidate shall complete a minimum of 24 units towards the award, as defined in 4.2 following, that have not been presented for any other degree.

3 Assessment and examinations

3.1 In determining a candidate's final result in a course the assessors may take into account oral, written, practical or examination work, provided that the candidate has been given notice at the beginning of the course of the way in which the work will be taken into account and of its relative importance in the final result.

3.2 There shall be four classifications of pass in any course for the degrees, as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, Pass. In addition there shall be a classification of Conceded Pass. However,

a candidate may only present courses for which a Conceded Pass has been obtained up to an aggregate value of 6 units. Courses for which a result of Conceded Pass has been obtained shall not satisfy any prerequisite requirement.

- 3.3
- a A candidate who obtains a Pass or higher grade in a course can not repeat the course.
 - b A candidate who fails to obtain a Pass or higher grade in a course or who obtains a Conceded Pass and who desires to take the course again shall, unless exempted wholly or partially therefrom by the Head of School concerned or their delegate, do written and laboratory or other work in that course to the satisfaction of the teaching staff concerned.
 - c A candidate who has twice failed to obtain a Pass or higher in any course shall not enrol for the course again, or for any other course that in the opinion of the Faculty contains a substantial amount of the same material, except by permission of the Faculty and under such conditions as the Faculty may prescribe.

4 Qualification requirements

4.1 To qualify for the degree a candidate shall pass courses, listed in 4.2 below, to the value of 72 units.

4.2 Academic program

4.2.1 Level I

Passes in Level I courses, which shall include:

Semester 1

BIOLOGY 1101 Biology I: Molecules Genes and Cells3
CHEM 1100 Chemistry IA.....3

or

CHEM 1101 Foundations of Chemistry IA3
FOOD SC 1001 Consumers, Food and Health.....3
FOOD SC 1000RG Introduction to Food Technology I.....3

Semester 2

BIOLOGY 1201 Biology I: Human Perspectives3
CHEM 1200 Chemistry IB.....3

or

CHEM 1201 Foundations of Chemistry IB3
FOOD SC 1002RG Practical Food Production I.... 3
STATS 1004 Statistical Practice I (Life Sciences).....3

4.2.2 Level II

- i Passes in Level II courses, which shall include:

Semester 1

AGRIC 2500WT Animal and Plant Biochemistry II.....	3
FOOD SC 2501RG Food Engineering Principles II	3
FOOD SC 2503RG Food Processing Technology II.....	3
PLANT SC 2500WT Microbiology & Invertebrate Biology II	3

Semester 2

FOOD SC 2500RG Food Chemistry II	3
FOOD SC 2502RG Food Microbiology II.....	3
FOOD SC 2504RG Sensory Evaluation of Foods II	3

- ii passes in an additional Level II courses to the value of 3 units chosen from:

BIOMET 2500WT Research Methodology II ...	3
ANIML SC 2501WT Genes and Inheritance II	3

4.2.3 Level III

- Passes in Level III courses, which shall include:

Semester 1

FOOD SC 3500RG Food & Nutrition Science: Industry Experience III	3
FOOD SC 3014RG Food Quality & Regulation III	3
PLANT SC 3500WT Biotechnology in the Food and Wine Industry III	3
WINEMKTG 3503WT Food Marketing III.....	3

Semester 2

FOOD SC 3503RG Food Processing Technology III.....	3
FOOD SC 3502WT Nutrition III.....	3
FOOD SC 3021RG Food Product Development III	3
PLANT SC 3230WT Communication in the Agri-Food Industry III	3

4.3 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty, contains a substantial amount of the same material, and no course or portion of a course may be counted twice towards an award.

4.4 The Honours degree

- 4.4.1 Candidates completing the Bachelor of Food and Nutrition Science, and to a standard that is acceptable to the Faculty, may proceed to the Honours degree.

- 4.4.2 A candidate, subject to the approval of the Head of School, will proceed to the Honours degree in the following course:

Honours Food and Nutrition Science.....24

- 4.4.3 The work of the Honours program must be completed in one year of full-time study, except where, on the recommendation of the Head of School, a candidate may complete the work for the Honours degree over two consecutive years, but no more.

- 4.4.4 The Honours grade may be awarded in one of the following classifications:

1	First Class
2A	Second Class div A
2B	Second Class div B
3	Third Class
NAH	Not Awarded.

- 4.4.5 A candidate may obtain a Bachelor degree, an Honours degree, or both. A graduate who has obtained the Honours degree of Bachelor of Arts, or the Honours degree of the Bachelor of Science, may not proceed to the Honours degree of Bachelor of Food and Nutrition Science in the Faculty of Sciences in the same course.

4.5 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award.

5 Special circumstances

When in the opinion of the Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.



1 Duration of program

The program for the degree shall extend over four years of full-time study or the part-time equivalent. The first two years of the program shall follow the program of study for Level I and II of the Bachelor of Science (Viticulture) program as specified under the Academic Program Rule of 1.2 of that program.

2 Admission

2.1 Status, exemption and credit transfer

2.1.1 Exemption from any part of the program on the first occasion on which a candidate takes a course will be granted only in special cases and on grounds approved by the Faculty.

Note: Partial or full status for some Level I courses may be granted on account of International Baccalaureate upon application to the Faculty.

2.1.2 Candidates who have previously passed courses offered in other programs at the University of Adelaide or other recognised tertiary institutions and who wish to count such courses towards their degree may, on written application to the Faculty, be granted status towards such specific degree requirements as the Faculty shall determine, subject to the following conditions:

- a Status will normally only be considered for courses passed within the previous ten years. Status may be granted on a course for course basis or on the basis of course for group of courses. Status will be granted only for courses that meet the academic requirements of the award towards which credit is sought.
- b The candidate shall present a range of courses that fulfil the requirements of the relevant Academic Program Rules.
- c A candidate shall complete a minimum of 24 units towards the award, as defined in 4.2 below that have not been presented for any other degree.

3 Assessment and examinations

3.1 In determining a candidate's final result in a course the assessors may take into account oral, written, practical or examination work, provided that the candidate has been given notice at the beginning of the course of the way in which the work will be taken into account and of its relative importance in the final result.

3.2 There shall be four classifications of pass in any course for the degrees, as follows: Pass with High Distinction, Pass with Distinction, Pass

with Credit, Pass. In addition there shall be a classification of Conceded Pass. However, a candidate may only present courses for which a Conceded Pass has been obtained up to an aggregate value of 9 units. Courses for which a result of Conceded Pass has been obtained shall not satisfy any prerequisite requirement.

- 3.3
 - a A candidate who obtains a Pass or higher grade in a course can not repeat the course.
 - b A candidate who fails to obtain a Pass or higher grade in a course or who obtains a Conceded Pass and who desires to take the course again shall, unless exempted wholly or partially therefrom by the Head of School concerned or their delegate, do written and laboratory or other work in that course to the satisfaction of the teaching staff concerned.
 - c A candidate who has twice failed to obtain a Pass or higher in any course shall not enrol for the course again, or for any other course which in the opinion of the Faculty contains a substantial amount of the same material, except by permission of the Faculty and under such conditions as the Faculty may prescribe.

4 Qualification requirements

4.1 To qualify for the degree a candidate shall pass courses, listed in 4.2 below, to the value of 96 units that satisfy the following requirements:

- a a candidate shall present passes in courses to the value of 24 units at each of Level I and II in accordance with the rules of Bachelor of Science (Viticulture)
- b a candidate shall present passes in courses to the value of 24 units at each of Level III and IV in accordance with rules 4.2.1 and 4.2.2 below.

4.2 Academic program

4.2.1 Level III

Passes in Level III courses, which shall include:

Semester 1

OENOLOGY 3007WT Stabilisation & Clarification III	3
OENOLOGY 3018WT Cellar and Winery Waste Management III.....	3
OENOLOGY 3047WT Winemaking at Vintage III	3
VITICULT 3021WT Viticultural Production III	3

Semester 2

AGRIBUS 3017WT Business Management for Applied Science III	3
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OENOLOGY 3037WT Distillation, Fortified and Sparkling Winemaking III.....	3
OENOLOGY 3046WT Fermentation Technology III.....	3
CHEM ENG 3007WT Winery Engineering III.....	3

4.2.2 Level IV

Passes in Level III courses, which shall include:

- i passes in core courses

Semester 1

Oenology course:

VITICULT 3500WT Grape Industry Practice, Policy and Communication III.....	3
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OENOLOGY 3500WT Industry Experience (Viticulture & Oenology) III.....	3
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Semester 2

OENOLOGY 3003WT Wine Packaging and Quality Management III.....	3
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OENOLOGY 3045WT Advances in Oenology III.....	3
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- ii passes in additional courses to the value of 12 units chosen from

FREN 3013WT Technical French (Oenology) ..	3
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HORTICUL 3004WT Olive Production and Marketing III (MY)*	3
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PLANT SC 3500WT Biotechnology in the Food and Wine Industries III	3
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SOIL&WAT 3014WT GIS for Agricultural Sciences III.....	3
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OENOLOGY 4002WT Honours Oenology.....	12
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or from courses offered in the Faculty of Sciences selected in consultation with the Program Coordinator.

*(MY) - taught in mid-year break

4.3 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty, contains a substantial amount of the same material, and no course or portion of a course may be counted twice towards an award.

4.4 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award.

5 Special circumstances

When in the opinion of the Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.



Bachelor of Rural Enterprise Management

Note: not offered to students commencing in 2010

1 Duration of program

The program for the degree shall extend over one year of full-time study or the part-time equivalent.

2 Admission

- 2.1 Except as provided in 2.2 below, an applicant for admission to the program of study for the Bachelor of Rural Enterprise Management shall have qualified for the Diploma of Agricultural Production or for the South Australian TAFE Advanced Diploma in Rural Enterprise Management or for an award accepted by the Faculty of Sciences as equivalent to those qualifications for the purpose of this rule.
- 2.2 The Faculty may, subject to such conditions (if any) as it may wish to impose, accept as a candidate for the Bachelor of Rural Enterprise Management a person who does not qualify under 2.1 above, but has given evidence satisfactory to the Faculty of fitness to undertake the academic program.

2.3 Status, exemption and credit transfer

Candidates who have previously passed courses in programs in the University or other tertiary educational institutions may, on written application to the Faculty, be granted such status in appropriate courses in the academic program for the degree of Bachelor of Rural Enterprise Management as the Faculty in each case may determine.

3 Assessment and examinations

- 3.1
 - a A candidate shall not be eligible to attend for examination unless written and laboratory or other practical work, where required, has been completed to the satisfaction of the teaching staff concerned.
 - b In determining a candidate's final result in a course the assessors may take into account oral, written, practical or examination work, provided that the candidate has been given notice at the beginning of the course of the way in which the work will be taken into account and of its relative importance in the final result.
- 3.2 There shall be four classifications of pass in any course for the degrees, as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, Pass. In addition there shall be a classification of Conceded Pass. However, a candidate may only present a maximum of one course at the Conceded Pass level towards this award.
Courses for which a result of Conceded Pass has been obtained may not be presented towards a major in any discipline, nor as a prerequisite.

- 3.3
 - a A candidate who fails to pass in a course or who obtains a Conceded Pass and who desires to take the course again shall, unless exempted wholly or partially therefrom by the Head of Department concerned, do written and laboratory or other work in that course to the satisfaction of the teaching staff concerned.
 - b A candidate who has twice failed to obtain a Pass or higher in any course shall not enrol for the course again, or for any other course which in the opinion of the Faculty contains a substantial amount of the same material, except by permission of the Faculty and under such conditions as the Faculty may prescribe. For the purpose of this clause a candidate who fails to receive permission to sit for or does not attend the examination in any course after having attended substantially the full program of instruction in it, shall be deemed to have failed to pass the course.

4 Qualification requirements

4.1 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty, contains a substantial amount of the same material, and no course or portion of a course may be counted twice towards an award.

4.2 Academic program

Candidates must pass courses to the value of not less than 24 units including a minimum of 20 units at Level III.

- 4.2.1 All candidates shall complete the compulsory courses:
 - AGRIBUS 3010RW International Agri-Business Environment III.....3
 - AGRIBUS 3012RW Rural Business Management III.....3
- 4.2.2 Candidates who have not previously completed the following courses or courses deemed by Faculty to be equivalent to those courses shall complete the following:
 - AGRIBUS 2502RW Rural Finance II.....3
 - WINEMKTG 1015EX Data Analysis for Wine and Food Business I.....3
- 4.2.3 Students must complete sufficient electives from the courses listed below to bring to a total value of 24 units the courses presented for the degree. To qualify for the Bachelor of Rural Enterprise Management students must have completed three courses from one of the production areas

listed below. Choice of electives must be approved by the Program Coordinator.

General Electives

AGRIBUS 2009WT Issues in Australian Agribusiness II3
 AGRIBUS 3001RW Economics of Resource Management III.....3
 AGRIBUS 3017WT Business Management of Applied Sciences III3
 WINEMKTG 2500WT Applied Management Science II3
 WINEMKTG 2501WT/EX Applied Market Research II3
 WINEMKTG 2502EX Consumer Behavioural Analysis II.....3
 WINEMKTG 2505WT/EX Strategic Marketing Management II3
 WINEMKTG 3014WT/EX Food Marketing III3
 WINEMKTG 3034WT/EX Advertising and Promotion III3

Production Electives

Agronomy

AGRONOMY 2502RW Production Agronomy II ...3
 AGRONOMY 3004RW Land Management Systems for the Future III.....3
 AGRONOMY 3012RW Advanced Agronomy III....3
 AGRONOMY 3020RW Principles and Practice of Communications III.....3
 AGRONOMY 3026RW Ecology & Management of Rangelands III (MY)*3

Animal Production

ANIML SC 2503RW Livestock Production Science II3
 ANIML SC 3015RW Animal Nutrition and Metabolism III.....3
 ANIML SC 3016RW Animal Health III3
 ANIML SC 3045RW Animal Breeding and Genetics III.....3

Horticulture

HORTICUL 3000WT Production Horticulture III ...3
 HORTICUL 3001WT Horticulture Systems III.....3
 HORTICUL 3004WT Olive Production III and Marketing (MY)*3

Soil and Water

SOIL&WAT 3002WT Soil Management and Conservation III.....3
 SOIL&WAT 3014WT GIS for Agricultural Sciences III.....3
 SOIL&WAT 3016WT Soil Ecology and Nutrient

Cycling III3
 *(MY) - taught in mid-year break

4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

5 Special circumstances

When in the opinion of the Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.



Bachelor of Science

Students who commenced their program of study prior to 2008 will normally complete their course of study under the provision of the specific Academic Program Rules current at the time of commencement. Student should consult the University of Adelaide Calendar Handbook of Undergraduate Programs 2007.

On application to the Faculty, continuing students may be permitted to complete their studies under the current Academic Program Rules, with such modifications and stipulations as the Faculty may deem necessary.

1 General

- 1.1 There shall be a Bachelor of Science and an Honours Degree of Bachelor of Science. A candidate may obtain a Bachelor degree, an Honours degree or both.
- 1.2 A graduate who has obtained the Honours degree of Bachelor of Arts or the Honours degree of Bachelor of Mathematical Sciences or the Honours degree of Bachelor of Mathematical & Computer Sciences, may not proceed to the Honours degree of Bachelor of Science in the Faculty of Sciences in the same course.

2 Duration of program

The program of study for the degrees shall extend over three years of full-time study or the part-time equivalent and that for the Honours degree over one additional year of full-time study or, subject to approval by the School or Discipline, over two years of part-time study.

Note: Students may commence study in February (Semester 1) or July (Semester 2). However, some courses offered in Semester 2 require prerequisite courses offered in Semester 1.

3 Admission

3.1 Status, exemption and credit transfer - all programs

- 3.1.1 Exemption from any part of the program on the first occasion on which a candidate takes a course will be granted only in special cases and on grounds approved by the Faculty.

Note: Partial or full exemption/status for some Level I courses may be granted on account of International Baccalaureate studies upon application to the Faculty.

- 3.1.2 Candidates who have previously passed courses offered in other programs at the University of Adelaide or other recognised tertiary institutions and who wish to count such courses towards their degree may, on written application to the Faculty, be granted status towards such specific degree requirements as the Faculty shall determine, subject to the following conditions:
 - a Status will normally only be considered for courses passed within the previous ten years. Status may be granted on a course for course basis or on the basis of course for group of courses. Status will be granted only for

courses that meet the academic requirements of the award towards which credit is sought.

- b The candidate shall present a range of courses that fulfil the requirements of the relevant Academic Program Rules and
- c The candidate shall present courses that satisfy the Level III course requirements and the major in a science discipline requirements of the relevant Academic Program Rules, and which have not been presented for any other degree.

4 Assessment and examinations

- 4.1 In determining a candidate's final result in a course the assessors may take into account oral, written, practical or examination work, provided that the candidate has been given notice at the beginning of the course of the way in which the work will be taken into account and of its relative importance in the final result.

- 4.2 a There shall be four classifications of pass in any courses offered by the Faculty of Sciences, as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, Pass. In addition there shall be a classification of Conceded Pass. However, a candidate may only present courses for which a Conceded Pass has been obtained up to an aggregate value of 6 units.

- b Courses for which a result of Conceded Pass has been obtained may not be presented towards a major in any discipline, nor as a prerequisite.

- 4.3 a A candidate who obtains a Pass or higher grade in a course can not repeat the course.

- b A candidate who fails to obtain a Pass or higher grade in a course or who obtains a Conceded Pass and who desires to take the course again shall, unless exempted wholly or partially there from by the Head of School concerned, undertake written and laboratory and/or other work in that course to the satisfaction of the teaching staff concerned.

- c A candidate who has twice failed to obtain a Pass or higher grade in any course shall not enrol for the course again, or for any other course which in the opinion of the Faculty contains a substantial amount of the same

material, except by permission of the Faculty and under such conditions as the Faculty may prescribe.

5 Qualification requirements

5.1 To qualify for the degree a candidate shall, subject to the conditions and modifications specified under 5.3 and 5.4 below, pass courses from 5.5 below to the value of 72 units which satisfy the following requirements:

- a a candidate shall present passes in Level I courses to the value of not more than 30 units
- b a candidate shall present passes in Level III courses to the value of at least 24 units
- c a candidate shall complete a major in a science discipline as set out in 5.4 below.

In all cases, a candidate may substitute an appropriate course chosen from Level II to fulfil the requirements of Level I, or from Level III to fulfil the requirements of Level I or II.

5.2 As part of the requirements of 5.1 above, a candidate may, in lieu of Level I or II courses, present passes to the value of 9 units, no more than 6 units at Level I, in courses offered by the Faculty of Humanities and Social Sciences, the Faculty of Engineering, Computer and Mathematical Sciences, and the School of Architecture, Landscape Architecture and Urban Design. Passes in courses offered by other Faculties may also be presented, provided the enrolment is approved both by the Faculty of Sciences and the other School or Faculty.

5.3 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty, contains a substantial amount of the same material, and no course or portion of a course may be counted twice towards an award.

Note: A list of unacceptable combinations of courses is available from the Faculty of Sciences.

5.4 To complete a major in a Science discipline a candidate shall present Level III courses, for which a result of Pass, Pass with Credit, Pass with Distinction or Pass with High Distinction has been obtained. No candidate may present the same course towards more than one major. A major must satisfy one of the following criteria:

Science Discipline - major requirements

Anatomical Sciences

At least three of:

ANAT SC 3101 Anthropological & Forensic Anatomy III.....	3
ANAT SC 3102 Comparative Reproductive Biology of Mammals III.....	3
ANAT SC 3103 Integrative & Comparative Neuroanatomy III	3

ANAT SC 3104 Structural Cell Biology III.....

Biochemistry

BIOCHEM 3000 Molecular & Structural Biology III	6
BIOCHEM 3001 Cell & Developmental Biology III..	6

Botany

ENV BIOL 3002 Australian Biota: Past, Present and Future III.....

and

ENV BIOL 3009 Ecophysiology of Plants III

and an additional Environmental Biology course to the value of 3 units.

Chemistry

CHEM 3111 Chemistry III

and at least two of following Chemistry courses:

CHEM 3211 Heterocyclic Chemistry & Molecular Devices III

CHEM 3212 Materials Chemistry III

CHEM 3213 Advanced Synthetic Methods III

CHEM 3214 Medicinal & Biological Chemistry III...3

CHEM 3530 Environmental & Analytical Chemistry III

CHEM 3540 Research Methods in Chemistry III ...3

Chemistry - Double Major

CHEM 3111 Chemistry III

and at least four of following Chemistry courses:

CHEM 3213 Advanced Synthetic Methods III

CHEM 3211 Heterocyclic Chemistry & Molecular Devices III

CHEM 3212 Materials Chemistry III

CHEM 3214 Medicinal & Biological Chemistry III...3

CHEM 3530 Environmental & Analytical Chemistry III.....

CHEM 3540 Research Methods in Chemistry III ...3

Ecology

ENV BIOL 3121 Concepts in Ecology III

ENV BIOL 3006 Research Methods in Environmental Biology III.....

and at least one of:

ENV BIOL 3004 Freshwater Ecology III.....

ENV BIOL 3008 Conservation & Restoration III.....

ENV BIOL 3010 Marine Ecology III

SOIL&WAT 3016WT Soil Ecology and Nutrient Cycling III

Entomology

ENV BIOL 3011 Evolution and Diversity of Insects III

at least two of:

ENV BIOL 3002 Australian Biota: Past, Present and Future III.....

or

ENV BIOL 3008 Conservation & Restoration III3

or

ENV BIOL 3122 Evolution and Palaeobiology III ..3

or

PLANT SC 3131WT Integrated Pest Management III..... 3

Additional courses may be available through Entomology Curriculum Australia.

Environmental Geoscience

GEOLOGY 3014 Environmental Geoscience Applications III3

GEOLOGY 3015 Environmental Geoscience Processes III.....3

SOIL&WAT 3007WT GIS for Environmental Management III.....3

or

SOIL&WAT 3010 Remote Sensing (S) III3

Geology

GEOLOGY 3013 Tectonics III.....3

GEOLOGY 3016 Igneous & Metamorphic Geology III.....3

GEOLOGY 3019 Field Geoscience Program III3

Geophysics

GEOLOGY 3008 Geophysics III3

GEOLOGY 3017 Petroleum Exploration III3

GEOLOGY 3018 Mineral Exploration III.....3

Genetics

GENETICS 3111 Genes, Genomes & Molecular Evolution III6

GENETICS 3211 Genetic Expression & Human and Developmental Genetics III6

Microbiology and Immunology

MICRO 3000 Infection and Immunity IIIA6

MICRO 3001 Infection and Immunity IIIB6

Molecular and Biomedical Science

Courses to the value of 12 units taken from the courses offered by the disciplines of Biochemistry, Genetics, Microbiology & Immunology, and Physiology. (This major is only available to student wishing to undertake study overseas. Students wishing to take out this major must apply in writing to the Faculty and have their program of study approved prior to commencing study overseas).

Pharmacology

PHARM 3010 Pharmacology A III.....6

PHARM 3011 Pharmacology B III.....6

Physics

PHYSICS 3002 Experimental Physics III.....3

PHYSICS 3542 Physics III6

Physics and Theoretical Physics

Courses to the value of at least 18 units, which include:

PHYSICS 3002 Experimental Physics III.....3

and

PHYSICS 3542 Physics III6

and at least one of

PHYSICS 3006 Advanced Dynamics and Relativity III3

or

PHYSICS 3544 Quantum Mechanics III3

Together with additional Physics courses as required:

PHYSICS 3532 Atmospheric & Astrophysics III3

PHYSICS 3534 Computational Physics III3

PHYSICS 3540 Optics & Photonics III3

Theoretical Physics

PHYSICS 3542 Physics III6

and

PHYSICS 3006 Advanced Dynamics and Relativity III3

or

PHYSICS 3544 Quantum Mechanics III3

Physiology

PHYSIOL 3000 Advanced Systems Physiology III.. 6

PHYSIOL 3001 Neurobiology III6

Psychology

PSYCHOL 3020 Doing Research in Psychology: Advanced Research Design, Methods & Analysis ...3

and at least three of following Psychology courses:

PSYCHOL 3021 Health & Lifespan Developmental Psychology.....3

PSYCHOL 3022 Individual Differences, Personality & Assessment3

PSYCHOL 3023 Perception, Cognition & Neuropsychology.....3

PSYCHOL 3024 Psychology in Society: Advanced3

PSYCHOL 3025 Psychology, Ideas and Action3

Soil Science

Courses to the value of at least 9 units, which include at least two of the following:

SOIL&WAT 3002WT Soil Management & Conservation III3

SOIL&WAT 3012WT Soil Water Management III (MY)*3

SOIL&WAT 3016WT Soil Ecology & Nutrient Cycling III.....3

and additional courses if required, from the following:

GEOLOGY 3014 Environmental Geoscience Applications III	3
PLANT SC 3004WT Mineral Nutrition of Plants III	3
SOIL&WAT 3004WT Environmental Toxicology & Remediation.....	3
Spatial Information	
SOIL&WAT 3010 Remote Sensing (S) III	3
<i>and</i>	
SOIL&WAT 3007WT GIS for Environmental Management III.....	3
<i>or</i>	
SOIL&WAT 3014WT GIS for Agricultural Sciences III.....	3
<i>and either</i>	
GEOLOGY 3015 Environmental Geoscience Processes III.....	3
<i>or</i>	
another Level III course chosen from Soil & Land Systems or Ecology & Evolutionary Biology.	
Wildlife	
Courses to the value of 9 units, which include:	
ENV BIOL 3003 Ecophysiology of Animals III.....	3
ENV BIOL 3008 Conservation and Restoration.....	3
and at least one of the following:	
ENV BIOL 3002 Australian Biota: Past, Present and Future III.....	3
ENV BIOL 3004 Freshwater Ecology III.....	3
ENV BIOL 3121 Concepts in Ecology III.....	3

Notes (not forming part of the Academic Program Rules)

- 1 Pattern of study

Commencing students are encouraged to enrol in one of the recommended Foundation Packages that have been developed to ensure appropriate preparation for Level II and III studies. Information on foundation packages is available from the Faculty of Sciences Office or at www.sciences.adelaide.edu.au/current/ However, provided that they comply with the prerequisites for each course, students may select their own combinations of courses at first and subsequent year levels. It is highly recommended that at Level I students take a minimum of 9 units per semester of continuing courses to ensure pathways into Level II science courses. At Level II students are encouraged to take a minimum of 6 units per semester of continuing courses to enable pathways into Level III science courses and the completion of a major.

Full-time students normally take courses with an aggregate value of 24 units at each of levels I, II and III.
- 2 Work required to complete an Adelaide degree program (policy of the Faculty of Sciences)
 - a Graduates in another Faculty who wish to qualify for the degree of Bachelor of Science and to count towards that degree courses that have already been presented for another degree may do so, provided that the courses presented fulfil the requirements of 5.1 and 5.2 above, and

include a major in a science discipline and Level III courses to the value of at least 24 units that have not been presented for any other degree.

- b Students coming from other institutions and wishing to obtain a University of Adelaide degree, are required as a minimum to complete Level III courses from 5.5 with an aggregate units value of 24 including a major in a science discipline.
- c With the special permission of the Faculty, a student who has completed most of the degree at the University of Adelaide including Level III courses with an aggregate value of 12 units and a major in a science discipline may be permitted to complete the requirements for the degree at another institution. All applications must be made in writing to the Faculty.

- 3 Under certain circumstances, and only with prior approval from the Faculty, courses to the value of not more than 6 units selected from the following list may be presented towards the degree of Bachelor of Science in lieu of Level III courses:

AGRONOMY 3026RW Ecology & Management of Rangelands (MY)*	3
PATHOL 3003 General Pathology IIIHS.....	6
PLANT SC 3030AEX/BEX Integrated Weed Management.....	3

Student wishing to present any of these courses towards the B.Sc. must apply in writing to the Faculty Office prior to enrolling in these courses.

* (MY) - taught in the mid-year break

5.5 Academic program

5.5.1 Level I Sciences

Semester 1

BIOLOGY 1101 Biology I: Molecules, Genes & Cells.....	3
CHEM 1100 Chemistry IA.....	3
CHEM 1101 Foundations of Chemistry IA.....	3
GEOLOGY 1103 Earth Systems I	3
PHYSICS 1002 Astronomy I	3
PHYSICS 1008 Physics Principles & Applications I.....	3
PHYSICS 1100 Physics IA.....	3
PHYSICS 1101 Physics for the Life & Earth Sciences IA	3
PSYCHOL 1000 Psychology IA.....	3
STATS 1000 Statistical Practice I	3

Semester 2

BIOLOGY 1201 Biology I: Human Perspectives* ..	3
BIOLOGY 1202 Biology I: Organisms*	3
CHEM 1200 Chemistry IB.....	3
CHEM 1201 Foundations of Chemistry IB	3
ENV BIOL 1002 Ecological Issues I.....	3
GEOLOGY 1100 Earth's Interior I	3
PHYSICS 1200 Physics IB	3
PHYSICS 1201 Physics for the Life & Earth Sciences IB	3

PSYCHOL 1001 Psychology IB3

*Only one of BIOLOGY 1201 Biology I: Human Perspectives and BIOLOGY 1202 Biology I: Organisms may be presented towards the B.Sc.

5.5.2 Level I Mathematical & Computer Sciences

COMP SCI 1012 Scientific Computing I.....3

COMP SCI 1008 Computer Science IA.....3

COMP SCI 1009 Computer Science IB.....3

MATHS 1008 Mathematics for Information Technology I.....3

MATHS 1011 Mathematics IA.....3

MATHS 1012 Mathematics IB.....3

MATHS 1013 Mathematics IMA.....3

STATS 1000 Statistical Practice I.....3

STATS 1004 Statistical Practice (Life Sciences) I..3

Note: COMP SCI 1003 Internet Computing cannot be presented towards the Bachelor of Science.

5.5.3 Level II Science

Semester 1

ANAT SC 2500 Cells and Tissues II.....3

BIOCHEM 2500 Biochemistry II: Molecular and Cell Biology.....3

CHEM 2510 Chemistry IIA.....3

CHEM 2530 Environmental & Analytical Chemistry II.....3

ENV BIOL 2500 Botany II.....3

ENV BIOL 2503 Zoology II.....3

GENETICS 2510 Genetics IIA.....3

GEOLOGY 2500 Sedimentary Geology II.....3

GEOLOGY 2501 Structural Geology II.....3

MICRO 2500 Microbiology II.....3

PHYSICS 2510 Physics IIA.....3

PHYSIOL 2510 Human Physiology IIA.....3

PSYCHOL 2004 Doing Research in Psychology: Research Design, Methods & Analysis.....3

PSYCHOL 2006 Foundations of Perception & Cognition.....3

SOIL&WAT 2500WT Soil & Water Resources II.....3

SOIL&WAT 2501 Spatial Information and Land Evaluation II.....3

Semester 2

ANAT SC 2501 Comparative Anatomy of Body Systems II.....3

BIOCHEM 2501 Biochemistry II: Metabolism.....3

CHEM 2520 Chemistry IIB.....3

CHEM 2540 Medicinal & Biological Chemistry II..3

ENV BIOL 2501 Evolutionary Biology II.....3

ENV BIOL 2502 Ecology II.....3

GENETICS 2520 Genetics IIB.....3

GEOLOGY 2502 Igneous and Metamorphic Geology II.....3

GEOLOGY 2503 Landscape Processes and Environments II.....3

MICRO 2501 Immunology & Virology II.....3

PHYSICS 2520 Physics IIB.....3

PHYSICS 2530 Astrophysics II.....3

PHYSICS 2532 Classical Physics II.....3

PHYSICS 2534 Electromagnetism II.....3

PHYSIOL 2520 Human Physiology IIB.....3

PSYCHOL 2005 Foundations of Health & Lifespan Developmental Psychology.....3

PSYCHOL 2007 Psychology in Society.....3

5.5.4 Level II Mathematical & Computer Sciences

All Level II Mathematical and Computer Sciences courses, listed under Academic Program Rule 4.2.2.1 of the degree of Bachelor of Mathematical and Computer Sciences.

5.5.5 Level III Science

Semester 1

ANAT SC 3102 Comparative Reproductive Biology of Mammals III.....3

ANAT SC 3103 Integrative and Comparative Neuroanatomy III.....3

BIOCHEM 3000 Molecular and Structural Biology III.....6

CHEM 3111 Chemistry III.....6

CHEM 3530 Environmental & Analytical Chemistry III.....3

CHEM 3540 Research Methods in Chemistry III...3

ENV BIOL 3004 Freshwater Ecology III.....3

ENV BIOL 3006 Research Methods in Environmental Biology III.....3

ENV BIOL 3011 Evolution and Diversity of Insects III.....3

ENV BIOL 3121 Concepts in Ecology III.....3

ENV BIOL 3122 Evolution and Palaeobiology III...3

GEOLOGY 3013 Tectonics III.....3

GEOLOGY 3015 Environmental Geoscience Processes III.....3

GEOLOGY 3016 Igneous & Metamorphic Geology III.....3

GEOLOGY 3017 Petroleum Exploration III.....3

GENETICS 3111 Genes, Genomes and Molecular Evolution III.....6

MICRO 3000 Infection and Immunity IIIA.....6

PHARM 3010 Pharmacology A III.....6

PHYSIOL 3001 Neurobiology III.....6

PHYSICS 3006 Advanced Dynamics & Relativity III.....3

PHYSICS 3532 Astrophysics & Atmospheric Physics III.....	3
PHYSICS 3542 Physics III.....	6
PLANT SC 3131WT Integrated Pest Management III.....	3
PLANT SC 3200WT Plant Breeding III.....	3
PSYCHOL 3022 Individual Differences, Personality & Assessment.....	3
PSCYHOL 3024 Psychology in Society: Advanced.....	3
PSYCHOL 3025 Psychology, Ideas and Action.....	3
SOIL&WAT 3016WT Soil Ecology & Nutrient Cycling III.....	3
SOIL&WAT 3022WT Soil Management & Conservation III.....	3
Semester 2	
AGRONOMY 3000RW Agroforestry III.....	3
ANAT SC 3101 Anthropological and Forensic Anatomy III.....	3
ANAT SC 3104 Structural Cell Biology III.....	3
BIOCHEM 3001 Cell and Developmental Biology III.....	6
CHEM 3211 Heterocyclic Chemistry and Molecular Devices III.....	3
CHEM 3212 Materials Chemistry III.....	3
CHEM 3213 Advanced Synthetic Methods III.....	3
CHEM 3214 Medicinal and Biological Chemistry III.....	3
ENV BIOL 3002 Australian Biota: Past, Present & Future III.....	3
ENV BIOL 3003 Ecophysiology of Animals III.....	3
ENV BIOL 3008 Conservation & Restoration III.....	3
ENV BIOL 3009 Ecophysiology of Plants III.....	3
ENV BIOL 3010 Marine Ecology III.....	3
ENV BIOL 3012WT Integrated Catchment Management III.....	3
GEOLOGY 3008 Geophysics III.....	3
GEOLOGY 3014 Environmental Geoscience Applications III.....	3
GEOLOGY 3018 Mineral Exploration III.....	3
GEOLOGY 3019 Field Geoscience Program III.....	3
GENETICS 3211 Gene Expression and Human and Developmental Genetics.....	6
MICRO 3001 Infection and Immunity IIIB.....	6
PHARM 3011 Pharmacology B III.....	6
PHYSIOL 3000 Advanced Systems Physiology.....	6
PHYSICS 3002 Experimental Physics III.....	3
PHYSICS 3534 Computational Physics III.....	3
PHYSICS 3540 Optics & Photonics III.....	3
PHYSICS 3544 Quantum Mechanics III.....	3
PLANT SC 3004WT Mineral Nutrition of Plants III.....	3
PLANT SC 3009WT Plant Molecular Biology III.....	6
PSYCHOL 3020 Doing Research in Psychology: Advanced Research Design, Methods & Analysis.....	3
PSYCHOL 3021 Health & Lifespan Developmental Psychology.....	3
PSYCHOL 3023 Perception & Cognition.....	3
SOIL&WAT 3010 Remote Sensing III.....	3
SOIL&WAT 3014WT GIS for Agricultural Sciences III.....	3
Summer semester	
SOIL&WAT 3004WT Environmental Toxicology and Remediation III.....	3
SOIL&WAT 3007WT GIS for Environmental Management III.....	3
Winter Semester	
SOIL&WAT 3012WT Soil Water Management III.....	3
5.5.6 Level III Mathematical & Computer Sciences	
All Level III Mathematical and Computer Sciences courses listed under the Academic Program Rule 4.2.3.1 of the degree of Bachelor of Mathematical and Computer Sciences.	
5.6 The Honours degree	
5.6.1	To be eligible to be admitted to the Honours degree program, a candidate shall complete the requirements for the degree or equivalent to a standard which is acceptable to the Faculty for the purpose of admission to the Honours degree.
5.6.2	A candidate may, subject to the approval by the Head of the School concerned, proceed to the Honours degree in one of the following courses:
	ANIML SC 4004ARW/BRW Honours Animal Science
	BIOCHEM 4000A/B Honours Biochemistry
	CHEM 4000A/B Honours Chemistry
	ENV BIOL 4000A/B Honours Environmental Biology
	GENETICS 4000A/B Honours Genetics
	GEOLOGY 4000A/B Honours Geology
	GEOLOGY 4001A/B Honours Geophysics
	GEOLOGY 4002A/B Honours Environmental Geoscience
	HORTICUL 4003AWT/BWT Honours in Horticulture
	MICRO 4000A/B Honours Microbiology and Immunology
	PETROL 4000ATB/BTB Honours Petroleum Geology and Geophysics
	PHYSICS 4000A/B Honours Physics
	PHYSICS 4001A/B Honours Mathematical Physics

PHYSIOL 4000A/B Honours Physiology

PLANT SC 4012AWT/BWT Honours

Plant and Pest Science

SOIL&WAT 4001AWT/BWT Honours

Soil and Land Systems

VITICULT 4006AWT/BWT Honours Viticulture

Note: see calendar entries for the Faculty of Health Sciences for information on Honours programs in Anatomical Sciences, Pharmacology and Psychology.

- 5.6.3 A candidate may subject to the approval of the Faculty in each case, proceed to the Honours degree in a course taught in another Faculty. Such candidates must consult the Head of the School concerned and apply, in writing, to the Faculty, before 30 November in the preceding year for admission to the Honours program.
- 5.6.4 The work of the Honours program must be completed in one year of full-time study, except where, on the recommendation of the Head/s of the School/s concerned, the Faculty may permit a candidate to complete the work for the Honours degree over two consecutive years, but no more, under such conditions as it may determine.
- 5.6.5 A candidate who satisfies the requirements for Honours shall be awarded the Honours degree, but the Faculty shall decide within which of the following classes and divisions the degree shall be awarded:
- 1 First Class
 - 2A Second Class div A
 - 2B Second Class div B
 - 3 Third Class
 - NAH Not awarded.

5.7 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award.

6 Special circumstances

When in the opinion of the Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

Bachelor of Science (Animal Science)

These rules should be read in conjunction with Academic Program Rules parts 2, 3 and 4 of the Bachelor of Science.

1 Qualification requirements

- 1.1 To qualify for the degree a candidate shall pass courses, listed in 1.2 below, to the value of 72 units, which satisfy the following requirements:
- a a candidate shall present passes in courses to the value of 24 units at each of Level I, II and III
 - b a candidate may substitute an appropriate course chosen from Level II to fulfil the requirements of Level I, or from Level III to fulfil the requirements of Level I or II.

1.2 Academic program

1.2.1 Level I

Level I courses, which shall include:

- i passes in core courses

Semester 1

ANIML SC 1015RW Perspectives in Animal Science.....3

BIOLOGY 1101 Biology I: Molecules, Genes and Cells.....3

CHEM 1100 Chemistry IA3

or

CHEM 1101 Foundations of Chemistry IA.....3

Semester 2

ANIML SC 1016RW Principles in Animal Behaviour, Welfare & Ethics I3

BIOLOGY 1202 Biology I: Organisms3

CHEM 1200 Chemistry IB3

or

CHEM 1201 Foundations of Chemistry IB.....3

STATS 1004 Statistical Practice 1 (Life Sciences)*3

- ii passes in additional courses to the value of 3 units chosen from:

Semester 1

PHYSICS 1008 Physics Principles and Applications I.....3

or

PHYSICS 1101 Physics for the Life and Earth Sciences IA.....3

Semester 2

ENV BIOL 1002 Ecological Issues I3

* STATS 1000 Statistical Practice I (offered in semester 1 and 2) may be taken instead of STATS 1004 Statistical Practice I (Life Sciences).

1.2.2 Level II

Level II courses, which shall include passes in core courses:

Semester 1

AGRIC 2500RW Animal and Plant Biochemistry II.....3

ANIML SC 2500RW Companion Animal and Equine Studies II.....3

ANIML SC 2502RW Wildlife Management II3

ANIML SC 2506RW Comparative Animal Anatomy & Physiology IIA3

Semester 2

ANIML SC 2501RW Genes and Inheritance II..... 3

ANIML SC 2503RW Livestock Production Science II3

ANIML SC 2507RW Comparative Animal Anatomy & Physiology IIB3

BIOMET 2500RW Research Methodology II.....3

1.2.3 Level III

Level III courses, which shall include:

- i passes, not Conceded Passes, in core courses

Semester 1

ANIML SC 3045RW Animal Breeding and Genetics III.....3

ANIML SC 3046RW Animal Reproduction and Development III.....3

ANIML SC 3020RW Animal Microbiology and Invertebrates III3

Semester 2

ANIML SC 3100RW Laboratory Animal Science III3

ANIML SC 3015RW Animal Nutrition & Metabolism III3

ANIML SC 3016RW Animal Health III.....3

- ii passes in additional courses to the value of 6 units chosen from:

Summer semester

ANIML SC 3019RW Ecology & Management of Vertebrate Pests III3

ANIML SC 3043RW Animal Biotechnology III ...3

ANIML SC 3018RW Pig Production - Science into Management III3

Semester 1

AGRONOMY 3020RW Principles & Practice of Communications III	3
BIOMET 3000WT Agricultural Experimentation III	3
ENV BIOL 3121 Concepts in Ecology III	3

Semester 2

AGRIBUS 3017WT Business Management for Applied Science III	3
AGRONOMY 3026RW Ecology and Management of Rangelands III (MY)*	3
ENV BIOL 3008 Conservation Restoration III	3

*(MY) - taught in mid-year break

1.3 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty, contains a substantial amount of the same material, and no course or portion of a course may be counted twice towards an award.

Note: A list of unacceptable combinations of courses is available from the Faculty of Sciences.

1.4 The Honours degree

Refer to Academic Program Rule 5.6 of the degree of Bachelor of Science.

1.5 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award.

2 Special circumstances

When in the opinion of the Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.



Bachelor of Science (Biomedical Science)

1 Qualification requirements

1.1 To qualify for the degree a candidate shall pass courses, listed in 1.2 below, to the value of 72 units, which satisfy the following requirements:

- a a candidate shall present passes in courses to the value of 24 units at each of Level I, II and III
- b a candidate may substitute an appropriate course chosen from Level II to fulfil the requirements of Level I, or from Level III to fulfil the requirements of Level I or II
- c a candidate shall complete a major in a discipline as set out in 1.2 below
- d a candidate may also complete a major as set out in Academic Program Rule 5.4 of the degree of Bachelor of Science.

1.2 Academic program

1.2.1 Level I

Level I courses, which shall include:

i passes in core courses:

Semester 1

BIOLOGY 1101 Biology I:
Molecules, Genes and Cells.....3

CHEM 1100 Chemistry IA3

or

CHEM 1101 Foundations of Chemistry IA.....3

Semester 2

BIOLOGY 1201 Biology I:
Human Perspectives.....3

CHEM 1200 Chemistry IB3

or

CHEM 1201 Foundations of Chemistry IB.....3

ii passes in additional Level I courses to the value of 12 units (which may include BIOLOGY 1202 Biology I: Organisms) selected in consultation with the Program Coordinator and in accordance with Academic Program Rules 5.2, 5.5.1 and 5.5.2 for the degree of Bachelor of Science.

1.2.2 Level II

Level II courses, which shall include:

i passes in core courses to the value of 6 units

Semester 1

GENETICS 2511 Genetics IIA
(Biomedical Science)3

and

Semester 2

GENETICS 2522 Genetics IIB
(Biomedical Science)3

or

Semester 1

MICRO 2502 Microbiology II
(Biomedical Science).....3

and

Semester 2

MICRO 2503 Immunology and Virology II
(Biomedical Science).....3

or

Semester 1

PHYSIOL 2512 Human Physiology IIA
(Biomedical Science).....3

and

Semester 2

PHYSIOL 2522 Human Physiology IIB
(Biomedical Science).....3

ii passes in courses to the value of 6 units:

Semester 1

ANAT SC 2500 Cells and Tissues II.....3

and

Semester 2

ANAT SC 2501 Comparative Anatomy
of Body Systems II3

or

Semester 1

BIOCHEM 2500 Biochemistry II: Molecular
and Cell Biology.....3

and

Semester 2

BIOCHEM 2501 Biochemistry II:
Metabolism.....3

or

Semester 1

GENETICS 2510 Genetics IIA: Foundation of
Genetics.....3

and

Semester 2

GENETICS 2520 Genetics IIB: Function &
Diversity of Genomes.....3

or

Semester 1

MICRO 2500 Microbiology II.....3

and

Semester 2

MICRO 2501 Immunology and Virology II3

or

Semester 1

PHYSIOL 2510 Human Physiology IIA:
Heart, Lungs and Circulation.....3

and

Semester 2

PHYSIOL 2520 Human Physiology IIB:
Homeostasis and Nervous System.....3

- iii passes in additional Level II course to the value of 12 units selected in consultation with the Program Coordinator and in accordance with Academic Program Rules 5.5.3 and 5.5.4 for the degree of Bachelor of Science (including those listed in (ii) above).

1.2.3 Level III

Level III courses, which shall include:

- i passes in core courses to the value of 12 units:

For a major in Genetics

Semester 1

GENETICS 3111 Genes, Genomes and
Molecular Evolution III.....6

Semester 2

GENETICS 3212 Gene Expression and Human
and Developmental Genetics (Biomedical
Sciences) III6

For a major in Microbiology and Immunology

Semester 1

MICRO 3102 Infection and Immunity IIIA
(Biomedical Science).....6

Semester 2

MICRO 3202 Infection and Immunity IIIB
(Biomedical Science).....6

For a major in Physiology

Semester 1

PHYSIOL 3102 Human Physiology IIIA
(Biomedical Science).....6

Semester 2

PHYSIOL 3202 Human Physiology IIIB
(Biomedical Science).....6

- ii passes in additional Level III course to the value of 12 units in the disciplines of Anatomical Sciences, Biochemistry, Chemistry, Genetics, Microbiology and Immunology, Pharmacology or Physiology selected in consultation with the Program Coordinator and in accordance with Academic Program Rules 5.5.5 for the degree of Bachelor of Science.

1.3 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty, contains a substantial amount of the same

material, and no course or portion of a course may be counted twice towards an award.

Note: A list of unacceptable combinations of courses is available from the Faculty of Sciences.

1.4 The Honours degree

Refer to Academic Program Rule 5.6 of the degree of Bachelor of Science.

2 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award.



Bachelor of Science (Biotechnology)

These rules should be read in conjunction with Academic Program Rules parts 2, 3 and 4 of the Bachelor of Science.

1 Qualification requirements

- 1.1 To qualify for the degree a candidate shall pass courses, listed in 1.2 below, to the value of 72 units, which satisfy the following requirements:
- a a candidate shall present passes in courses to the value of 24 units at each of Level I, II and III
 - b a candidate may substitute an appropriate course chosen from Level II to fulfil the requirements of Level I, or from Level III to fulfil the requirements of Level I or II
 - c a candidate shall complete a major in a discipline as set out in 1.2 below
 - d a candidate may also complete a major in a discipline as set out in Academic Program Rule 5.4 of the degree of Bachelor of Science.

1.2 Academic program

1.2.1 Level I

Level I courses, which shall include:

- i passes in core courses

Semester 1

BIOLOGY 1101 Biology I:
Molecules, Genes and Cells.....3
BIOTECH 1000 Introduction
to Biotechnology I3
CHEM 1100 Chemistry IA3

or

CHEM 1101 Foundations of Chemistry IA.....3
CHEM ENG 1004 Introduction
to Bio-processing3

Semester 2

BIOLOGY 1201 Biology I:
Human Perspectives.....3
and/or
BIOLOGY 1202 Biology I: Organisms3
CHEM 1200 Chemistry IB3

or

CHEM 1201 Foundations of Chemistry IB.....3

- ii passes in additional Level I courses to the value of 6 units selected in consultation with the Program Coordinator and in accordance with Academic Program Rules 5.2, 5.51 and 5.5.2 for the degree of Bachelor of Science.

1.2.2 Level II

Level II courses, which shall include:

- i passes in core courses

Semester 1

BIOCHEM 2502 Biochemistry II:
Molecular & Cell Biology (Biotechnology)3
MICRO 2504 Microbiology II (Biotechnology) ...3

Semester 2

- CHEM ENG 2015 Principles of
Biotechnology II.....3
- ii passes in additional courses to the value of 15 units selected from:

Semester 1

CHEM 2510 Chemistry IIA3
CHEM 2530 Environmental & Analytical
Chemistry II3
ENV BIOL 2503 Zoology II3
GENETICS 2510 Genetics IIA Foundation
of Genetics3
PHYSIOL 2510 Human Physiology IIA3

Semester 2

BIOCHEM 2503 Biochemistry II:
Metabolism (Biotechnology)3
CHEM 2520 Chemistry IIB3
CHEM 2540 Medicinal & Biological
Chemistry II.....3
ENV BIOL 2501 Evolutionary Biology II3
GENETICS 2520 Genetics IIB Function
& Diversity of Genomes.....3
MICRO 2505 Immunology & Virology II
(Biotechnology).....3
PHYSIOL 2520 Human Physiology IIB3

or passes in additional Level II course selected in consultation with the Program Coordinator and in accordance with Academic Program Rules 5.2, 5.5.3 and 5.5.4 for the degree of Bachelor of Science.

1.2.3 Level III

Level III courses, which shall include:

- i passes, not Conceded Passes, in core courses:

For a major in Biochemistry

Semester 1

BIOCHEM 3000 Molecular and Structural
Biology III6

Semester 2

BIOTECH 3000 Biotechnology Practice III6

- ii passes in additional Level III course to the value of 12 units chosen from:

Semester 1

CHEM 3111 Chemistry III.....	6
GENETICS 3111 Genes, Genomes and Molecular Evolution III.....	6
MICRO 3000 Infection and Immunity IIIA.....	6

or passes in additional Level III course selected in consultation with the Program Coordinator and in accordance with Academic Program Rules 5.5.5 and 5.5.6 for the degree of Bachelor of Science.

Semester 2

BIOCHEM 3001 Cell & Developmental Biology III.....	6
CHEM 3211 Heterocyclic Chemistry & Molecular Devices III.....	3
CHEM 3212 Materials Chemistry III.....	3
CHEM 3213 Advanced Synthetic Methods III.....	3
CHEM 3214 Medicinal & Biological Chemistry III.....	3
GENETICS 3211 Gene Expression & Human & Developmental Genetics.....	6
MICRO 3001 Infection and Immunity IIIB.....	6
PLANT SC 3009WT Plant Molecular Biology III.....	6

or passes in additional Level III course selected in consultation with the Program Coordinator and in accordance with Academic Program Rules 5.5.5 and 5.5.6 for the degree of Bachelor of Science.

1.3 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty, contains a substantial amount of the same material, and no course or portion of a course may be counted twice towards an award.

Note: A list of unacceptable combinations of courses is available from the Faculty of Sciences.

1.4 The Honours degree

Refer to Academic Program Rule 5.6 of the degree of Bachelor of Science.

1.5 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award.

2 Special circumstances

When in the opinion of the Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.



Bachelor of Science (Ecochemistry)

These rules should be read in conjunction with Academic Program Rules parts 2, 3 and 4 of the Bachelor of Science.

1 Qualification requirements

- 1.1 To qualify for the degree a candidate shall pass courses, listed in 1.2 below, to the value of 72 units, which satisfy the following requirements:
- a a candidate shall present passes in courses to the value of 24 units at each of Level I, II and III
 - b a candidate may substitute an appropriate course chosen from Level II to fulfil the requirements of Level I, or from Level III to fulfil the requirements of Level I or II
 - c a candidate shall complete a major in a discipline as set out in Academic Program Rule 5.4 of the degree of Bachelor of Science.

1.2 Academic program

1.2.1 Level I

Level I courses, which shall include:

- i passes in core courses

Semester 1

BIOLOGY 1101 Biology I: Molecules, Genes and Cells.....	3
CHEM 1100 Chemistry IA	3
<i>or</i>	
CHEM 1101 Foundations of Chemistry IA.....	3
GEOLOGY 1103 Earth Systems I	3

Semester 2

BIOLOGY 1202 Biology I: Organisms	3
<i>and/or</i>	
ENV BIOL 1002 Ecological Issues I	3
CHEM 1200 Chemistry IB	3
<i>or</i>	
CHEM 1201 Foundations of Chemistry IB.....	3
GEOLOGY 1100 Earth's Interior I	3

- ii passes in additional Level I course up to the value of 6 units selected in consultation with the Program Coordinator and in accordance with Academic Program Rules 5.2, 5.5.1 and 5.5.2 for the degree of Bachelor of Science but not including BIOLOGY 1201 Biology I: Human Perspectives.

1.2.2 Level II

Level II courses, which shall include:

- i passes in core courses

Semester 1

CHEM 2512 Chemistry IIA (Ecochemistry)	3
CHEM 2530 Environmental & Analytical Chemistry II.....	3

Semester 2

CHEM 2522 Chemistry IIB (Ecochemistry)	3
CHEM 2540 Medicinal & Biological Chemistry II.....	3

- ii passes in Level II courses to the value of 6 units chosen from:

Semester 1

at least one from:

ENV BIOL 2500 Botany II	3
GEOLOGY 2500 Sedimentary Geology II.....	3
SOIL&WAT 2500WT Soil & Water Resources II	3

Semester 2

at least one from:

ENV BIOL 2502 Ecology II.....	3
GEOLOGY 2503 Landscape Processes and Environments II	3

- iii passes in additional Level II courses to the value of 6 units selected in consultation with the Program Coordinator and in accordance with Academic Program Rules 5.2 and 5.5.3 for the degree of Bachelor of Science.

1.2.3 Level III

Level III courses, which shall include:

- i passes, not Conceded Passes, in core courses:

Semester 1

CHEM 3111 Chemistry III.....	6
CHEM 3530 Environmental & Analytical Chemistry III.....	3

Semester 2

CHEM 3211 Heterocyclic Chemistry & Molecular Devices III.....	3
CHEM 3212 Materials Chemistry III.....	3

- ii passes in additional Level III course to the value of 9 units chosen from:

Summer semester

SOIL&WAT 3004WT Environmental Toxicology and Remediation III	3
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Semester 1

CHEM 3540 Research Methods in Chemistry III.....	3
ENV BIOL 3004 Freshwater Ecology III.....	3
ENV BIOL 3121 Concepts in Ecology EBII.....	3
GEOLOGY 3015 Environmental Geoscience Processes III	3

SOIL&WAT 3002WT Soil Management and Conservation III.....	3
SOIL&WAT 3016WT Soil Ecology and Nutrient Cycling III.....	3
Semester 2	
CHEM 3213 Advanced Synthetic Methods III	3
CHEM 3214 Medicinal & Biological Chemistry III.....	3
ENV BIOL 3008 Conservation and Restoration	3
ENV BIOL 3009 Ecophysiology of Plants III....	3
ENV BIOL 3010 Marine Ecology III	3
ENV BIOL 3012WT Integrated Catchment Management III (MS)#	3
GEOLOGY 3014 Environmental Geoscience Applications III	3
SOIL&WAT 3010 Remote Sensing III.....	3
SOIL&WAT 3012WT Soil Water Management III (MY)*	3
#(MS) Semester 2 course taught in mid-semester break	
*(MY) taught in mid-year break	

1.3 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty, contains a substantial amount of the same material, and no course or portion of a course may be counted twice towards an award.

Note: A list of unacceptable combinations of courses is available from the Faculty of Sciences.

1.4 The Honours degree

Refer to Academic Program Rule 5.6 of the degree of Bachelor of Science.

1.5 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award.

2 Special circumstances

When in the opinion of the Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.



Bachelor of Science (Evolutionary Biology)

These rules should be read in conjunction with Academic Program Rules parts 2, 3 and 4 of the Bachelor of Science.

1 Qualification requirements

1.1 To qualify for the degree a candidate shall pass courses, listed in 1.2 below, to the value of 72 units, which satisfy the following requirements:

- a a candidate shall present passes in courses to the value of 24 units at each of Level I, II and III
- b a candidate may substitute an appropriate course chosen from Level II to fulfil the requirements of Level I, or from Level III to fulfil the requirements of Level I or II
- c a candidate shall complete a major in a discipline as set out in 1.2 below.

1.2 Academic program

1.2.1 Level I

Level I courses, which shall include:

- i passes in core courses

Semester 1

BIOLOGY 1101 Biology I:	
Molecules Genes & Cells.....	3
GEOLOGY 1103 Earth Systems	3

Semester 2

BIOLOGY 1202 Biology I: Organisms	3
GEOLOGY 1100 Earth's Interior I	3

- ii passes in additional Level I courses to the value of 12 units chosen from:

Semester 1

CHEM 1100 Chemistry IA	3
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or

CHEM 1101 Foundations of Chemistry IA.....	3
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MATHS 1011 Mathematics IA*	
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or

MATHS 1013 Mathematics IMA	3
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Semester 2

ENV BIOL 1002 Ecological Issues I	3
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CHEM 1200 Chemistry IB	3
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or

CHEM 1201 Foundations of Chemistry IB.....	3
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MATHS 1011 Mathematics IA*	3
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or

MATHS 1012 Mathematics IB.....	3
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STATS 1004 Statistical Practice I (Life Sciences)#.....	3
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or courses selected in consultation with the Program Coordinator and in accordance with

Academic Program Rules 5.2, 5.5.1 and 5.5.2 for the degree of Bachelor of Science.

* may be taken in either Semester 1 or 2

STATS 1000 Statistical Practice I (offered in semester 1 and 2) may be taken instead of STATS 1004 Statistical Practice I (Life Sciences).

1.2.2 Level II

Level II courses, which shall include:

For a major in Palaeontology

- i passes in core courses

Semester 1

ENV BIOL 2500 Botany II	3
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or

ENV BIOL 2503 Zoology II.....	3
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GEOLOGY 2500 Sedimentary Geology II	3
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Semester 2

ENV BIOL 2501 Evolutionary Biology II	3
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- ii passes in additional Level II courses to the value of 15 units chosen from:

Semester 1

ENV BIOL 2500 Botany II	3
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ENV BIOL 2503 Zoology II.....	3
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GENETICS 2510 Genetics IIA: Foundations of Genetics	3
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GEOLOGY 2501 Structural Geology II.....	3
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Semester 2

ENV BIOL 2502 Ecology II.....	3
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GENETICS 2520 Genetics IIB: Function & Diversity of Genomes.....	3
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GEOLOGY 2503 Landscape Processes and Environments II	3
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or additional courses selected in consultation with the Program Coordinator and in accordance with Academic Program Rules 5.5.3 for the degree of Bachelor of Science.

For a major in Systematic & Molecular Evolution

- i passes in core courses

Semester 1

ENV BIOL 2500 Botany II	3
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or

ENV BIOL 2503 Zoology II.....	3
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GENETICS 2510 Genetics IIA: Foundations of Genetics	3
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Semester 2

ENV BIOL 2501 Evolutionary Biology II	3
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- GENETICS 2520 Genetics IIB: Function & Diversity of Genomes.....3
- ii passes in additional Level II courses to the value at least 12 units chosen from:
 - Semester 1**
 - ENV BIOL 2500 Botany II3
 - ENV BIOL 2503 Zoology II.....3
 - GEOLOGY 2500 Sedimentary Geology II3
 - Semester 2**
 - ENV BIOL 2502 Ecology II.....3
 - GEOLOGY 2503 Landscape Processes and Environments II3
- iii or additional courses selected in consultation with the Program Coordinator and in accordance with Academic Program Rules 5.5.3 for the degree of Bachelor of Science.

1.2.3 Level III

Level III courses, which shall include:

For a major in Palaeontology

- i passes, not Conceded Passes, in core courses
 - Semester 1**
 - ENV BIOL 3122 Evolution & Palaeobiology III3
 - Semester 2**
 - ENV BIOL 3002 Australian Biota: Past, Present & Future III3
 - ENV BIOL 3123 Issues in Evolutionary Biology III.....3
 - GEOLOGY 3014 Environmental Geoscience Applications III3
 - ii passes in additional Level III courses to the value of 12 units chosen from:
 - Semester 1**
 - ENV BIOL 3006 Research Methods in Environmental Biology III.....3
 - ENV BIOL 3011 Evolution and Diversity of Insects III.....3
 - ENV BIOL 3121 Concepts in Ecology III3
 - GENETICS 3111 Genes, Genomes & Molecular Evolution III.....6
 - GEOLOGY 3015 Environmental Geoscience Processes III3
 - Semester 2**
 - SOIL&WAT 3010 Remote Sensing III.....3
- or additional courses selected in consultation with the Program Coordinator and in accordance with Academic Program Rules 5.5.5 for the degree of Bachelor of Science.

For a major in Systematics & Molecular Evolution

- i passes, not Conceded Passes, in core courses:
 - Semester 1**
 - ENV BIOL 3122 Evolution & Palaeobiology III3

- GENETICS 3111 Genes, Genomes & Molecular Evolution III.....6

Semester 2

- ENV BIOL 3002 Australian Biota: Past, Present & Future III3
- ENV BIOL 3123 Issues in Evolutionary Biology III.....3
- ii passes in additional Level III courses to the value of 9 units chosen from:
 - Semester 1**
 - ENV BIOL 3006 Research Methods in Environmental Biology III.....3
 - ENV BIOL 3011 Evolution and Diversity of Insects III3
 - ENV BIOL 3121 Concepts in Ecology III3
 - GEOLOGY 3015 Environmental Geoscience Processes III3
 - Semester 2**
 - ENV BIOL 3003 Ecophysiology of Animals III.. 3
 - ENV BIOL 3008 Conservation & Restoration III3
 - ENV BIOL 3009 Ecophysiology of Plants III...3
 - ENV BIOL 3010 Marine Ecology III3
 - GENETICS 3211 Gene Expression & Human Developmental Genetics III6
 - GEOLOGY 3014 Environmental Geoscience Applications III3

1.3 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty, contains a substantial amount of the same material, and no course or portion of a course may be counted twice towards an award.

Note: A list of unacceptable combinations of courses is available from the Faculty of Sciences.

1.4 The Honours degree

Refer to Academic Program Rule 5.6 of the degree of Bachelor of Science.

1.5 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award.

2 Special circumstances

When in the opinion of the Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

Bachelor of Science (High Performance and Computational Physics)(Honours)

These rules should be read in conjunction with Academic Program Rules parts 2, 3 and 4 of the Bachelor of Science.

1 Duration of program

The program of study for the degree shall extend over four years of full time study or the part-time equivalent.

2 Qualification requirements

2.1 To qualify for the degree a candidate shall pass courses, listed in 2.2 below, to the value of 96 units, which satisfy the following requirements:

- a a candidate shall present passes in courses to the value of 24 units at each of Level I, II, III and IV
- b a candidate may substitute an appropriate course chosen from Level II to fulfil the requirements of Level I, or from Level III to fulfil the requirements of Level I or II
- c a candidate may complete a major in a discipline as set out in Academic Program Rule 5.4 of the degree of Bachelor of Science.

2.2 Academic program

2.2.1 Level I

Level I courses, which shall include:

- i passes in core courses
 - Semester 1**
 - COMP SCI 1008 Computer Science IA.....3
 - MATHS 1011 Mathematics IA.....3
 - PHYSICS 1100 Physics IA3
 - Semester 2**
 - COMP SCI 1009 Computer Science IB.....3
 - MATHS 1012 Mathematics IB.....3
 - PHYSICS 1200 Physics IB3
- ii passes in additional Level I courses to the value of 6 units chosen from:
 - Semester 1**
 - COMP SCI 1012 Scientific Computing I3
 - CHEM 1100 Chemistry IA3
 - ELEC ENG 1009 Electrical & Electronic Engineering IA3
 - Semester 2**
 - CHEM 1200 Chemistry IB3
 - or courses selected in consultation with the Program Coordinator and in accordance with Academic Program Rules 5.2, 5.5.1 and 5.5.2 for the degree of Bachelor of Science.

2.2.2 Level II

Level II courses, which shall include:

- i passes in core courses
 - Semester 1**
 - MATHS 2101 Multivariable and Complex Calculus3
 - MATHS 2102 Differential Equations3
 - PHYSICS 2510 Physics IIA3
 - Semester 2**
 - MATHS 2104 Numerical Methods3
 - PHYSICS 2532 Classical Physics II.....3
 - PHYSICS 2534 Electromagnetism II3
- ii passes in additional Level II courses to the value of 6 units chosen from:
 - Semester 1**
 - COMP SCI 2000 Computer Systems3
 - MATHS 2103 Probability and Statistics.....3
 - Semester 2**
 - COMP SCI 2005 Systems Programming in C and C++3
 - MATHS 2100 Real Analysis3
 - PHYSICS 2520 Physics IIB3
 - or courses selected in consultation with the Program Coordinator and in accordance with Academic Program Rules 5.5.3 and 5.5.4 for the degree of Bachelor of Science in the disciplines of Applied Mathematics, Computer Science, Physics and Pure Mathematics.

2.2.3 Level III

Level III courses, which shall include:

- i passes, not Conceded Passes, in core courses
 - Semester 1**
 - PHYSICS 3006 Advanced Dynamics and Relativity III3
 - PHYSICS 3542 Physics III.....6
 - Semester 2**
 - PHYSICS 3534 Computational Physics III.....3
 - PHYSICS 3544 Quantum Mechanics III3
- ii passes in additional Level III course to the value of 9 units chosen from:
 - Semester 1**
 - APP MTH 3000 Computational Mathematics ..3

PHYSICS 3532 Atmospheric and Astrophysics III	3
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Semester 2

PHYSICS 3002 Experimental Physics III	3
PHYSICS 3540 Optics and Photonics III	3
APP MTH 3002 Fluid Mechanics III	3
PURE MTH 3012 Fields & Geometry III.....	3
PURE MTH 3019 Complex Analysis III.....	3

or courses selected in consultation with the Program Coordinator and in accordance with Academic Program Rules 5.5.5 and 5.5.6 for the degree of Bachelor of Science in the disciplines of Applied Mathematics, Computer Science, Physics and Pure Mathematics.

2.2.4 Level IV

An acceptable standard, in accordance with the Academic Program Rule 5.6 for the Bachelor of Science for the Honours degrees, in

PHYSICS 4000A/B Honours Physics	24
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or

PHYSICS 4001A/B Honours Mathematical Physics.....	24
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including some Level IV content selected in consultation with the Program Coordinator from COMP SCI 4999 A/B Honours Computer Science.

2.3 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty, contains a substantial amount of the same material, and no course or portion of a course may be counted twice towards an award.

Note: A list of unacceptable combinations of courses is available from the Faculty of Sciences.

2.4 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award.

3 Special circumstances

When in the opinion of the Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.



Bachelor of Science (Marine Biology)

These rules should be read in conjunction with Academic Program Rules parts 2, 3 and 4 of the Bachelor of Science.

1 Qualification requirements

- 1.1 To qualify for the degree a candidate shall pass courses, listed in 1.2 below, to the value of 72 units, which satisfy the following requirements:
- a a candidate shall present passes in courses to the value of 24 units at each of Level I, II and III
 - b a candidate may substitute an appropriate course chosen from Level II to fulfil the requirements of Level I, or from Level III to fulfil the requirements of Level I or II
 - c a candidate may complete a major in a discipline as set out in Academic Program Rule 5.4 of the degree of Bachelor of Science.

1.2 Academic program

1.2.1 Level I

Level I courses, which shall include:

- i passes in core courses
 - Semester 1**
 - BIOLOGY 1101 Biology I: Molecules Genes & Cells.....3
 - GEOLOGY 1103 Earth Systems I3
 - Semester 2**
 - BIOLOGY 1202 Biology I: Organisms.....3
 - ENV BIOL 1002 Ecological Issues I3
 - STATS 1004 Statistical Practice I (Life Sciences) *3
 - * STATS 1000 Statistical Practice I (offered in semester 1 and 2) may be taken instead of STATS 1004 Statistical practice I (Life Sciences).
- ii passes in additional Level I courses to the value of 9 units selected in consultation with the Program Coordinator and in accordance with Academic Program Rules 5.2 and 5.5.1 for the degree of Bachelor of Science.

1.2.2 Level II

Level II courses, which shall include:

- i passes in core courses
 - Semester 1**
 - ENV BIOL 2500 Botany II3
 - ENV BIOL 2503 Zoology II.....3
 - GEOLOGY 2500 Sedimentary Geology II3

Semester 2

- ENV BIOL 2502 Ecology II.....3
- ii passes in additional Level II course to the value of 12 units chosen from:

Semester 1

- SOIL&WAT 2501 Spatial Information & Land Evaluation II3
- GEST 2043 Introduction to Environmental Impact Assessment..... 3
- and** additional courses selected in consultation with the Program Coordinator and in accordance with Academic Program Rules 5.5.3 for the degree of Bachelor of Science.

1.2.3 Level III

Level III courses, which shall include:

- i passes in core courses
 - Semester 1**
 - ENV BIOL 3006 Research Methods in Environmental Biology III.....3
 - ENV BIOL 3121 Concepts in Ecology III3
 - ENV BIOL 3124 Frontiers In Marine Biology III3
 - Semester 2**
 - ENV BIOL 3010 Marine Ecology III3
 - ENV BIOL 3221 Research Methods in Marine Biology III.....3
- ii passes in additional Level III courses to the value of 9 units chosen from:
 - Summer semester**
 - SOIL&WAT 3007WT GIS for Environmental Management III3
 - Semester 1**
 - ENV BIOL 3004 Freshwater Ecology III.....3
 - GEST 2031 Global Change and Coasts.....3
 - Semester 2**
 - GEST 2030 Managing Coastal Environments .3
 - GEST 2043 Introduction to Environmental Impact Assessment.....3
 - SOIL&WAT 3010 Remote Sensing III.....3
 - or selected in consultation with the Program Coordinator and in accordance with Academic Program Rules 5.5.5 for the degree of Bachelor of Science.

1.3 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty, contains a substantial amount of the same material, and no course or portion of a course may be counted twice towards an award.

Note: A list of unacceptable combinations of courses is available from the Faculty of Sciences.

1.4 The Honours degree

Refer to Academic Program Rule 5.6 of the degree of Bachelor of Science.

1.5 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award.

2 Special circumstances

When in the opinion of the Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.



Bachelor of Science (Mineral Geoscience)

These rules should be read in conjunction with Academic Program Rules parts 2, 3 and 4 of the Bachelor of Science.

1 Qualification requirements

1.1 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty, contains a substantial amount of the same material, and no course or portion of a course may be counted twice towards an award.

Note: A list of unacceptable combinations of courses is available from the Faculty of Sciences.

1.2 To qualify for the degree a candidate shall pass courses, listed below, to the value of 72 units, which satisfy the following:

A candidate shall present passes in courses to the value of 24 units at each of Level I, II and III.

1.3 Academic program

1.3.1 Level I

Level I courses, which shall include:

i passes in core courses

Semester I

GEOLOGY 1103 Earth Systems I3

MATHS 1011 Mathematics IA.....3

or

MATHS 1013 Mathematics IMA3

or

STATS 1000 Statistical Practice I.....3

PHYSICS 1008 Physics Principles & Applications I.....3

or

PHYSICS 1101 Physics for the Life & Earth Sciences IA3

ii passes in an additional Level I course to the value of 3 units selected in accordance with Academic Program Rules 5.2, 5.5.1 and 5.5.2 for the degree of Bachelor of Science, or from the list below:

CHEM 1100 Chemistry IA3

or

CHEM 1101 Foundations of Chemistry IA3

Semester 2

i passes in core courses

GEOLOGY 1100 Earth's Interior I3

C&ENVENG 1011 Introduction to Mining Engineering.....3

ii passes in additional Level I courses to the value of 6 units selected in accordance with

Academic Program Rules 5.2, 5.5.1 and 5.5.2 for the degree of Bachelor of Science, or from the list below:

CHEM 1200 Chemistry IB3

or

CHEM 1201 Foundations of Chemistry IB.....3

Note: STATS 1004 Statistical Practice I (Life Sciences) may be taken in semester 2 instead of STATS 1000 Statistical Practice I in semester 1.

1.3.2 Level II

Level II courses, which shall include:

i passes in core courses

Semester I

GEOLOGY 2500 Sedimentary Geology II.....3

GEOLOGY 2501 Structural Geology II.....3

GEST 2034 Resource Scarcity & Allocation3

ii passes in additional Level II courses to the value of 3 units selected in accordance with Academic Program Rules 5.2 and 5.5.3 for the degree of Bachelor of Science.

Semester 2

GEOLOGY 2502 Igneous & Metamorphic Geology II 3

GEOLOGY 2503 Landscape Processes and Environments II..... 3

GEOLOGY 2504 Economic and Mine Geology..... 3

GEST 2043 Introduction to Environmental Impact Assessment..... 3

1.3.3 Level III

Level III courses, which shall include:

i passes in core courses

Semester I

Mineral Geoscience Research Project III3

GEOLOGY 3013 Tectonics III3

GEOLOGY 3016 Igneous and Metamorphic Geology III.....3

ii passes in an additional Level III course to the value of 3 units selected in accordance with Academic Program Rules 5.5.5 for the degree of Bachelor of Science.

Semester 2

a passes in core courses

GEOLOGY 3008 Geophysics III3

GEOLOGY 3018 Mineral Exploration III3

GEOLOGY 3019 Field Geoscience

Program III3

- b passes in additional Level III courses to the value of 3 units selected in accordance with Academic Program Rules 5.5.5 for the degree of Bachelor of Science.

1.4 The Honours program

Refer to Academic program rule 5.6 for the degree of Bachelor of Science.

1.5 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award.

2 Special circumstances

When in the opinion of the Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

Graduate Attributes

Bachelor of Science (Mineral Geoscience)

Knowledge

On completion of this program, students will:

- Have developed a broad-based and well-founded understanding of geology, earth materials and earth processes
- Have developed knowledge of global geologic environments and an international perspective of geology
- Be able to demonstrate practical techniques for field mapping and field data collection in a variety of geological environments
- Have developed an understanding of how other scientific disciplines such as chemistry, physics mathematics and engineering can be drawn on to increase our understanding of mineral systems
- Be able to define and characterise a geological spatial/temporal problem
- Be familiar with field techniques, quantitative technologies and the minerals industry best practice
- Be able to generate and interpret geochemical, geophysical and structural data in the context of geological exploration and characterisation of a minerals system.

Intellectual & Social Capabilities

- Have the ability to communicate with other scientists, with engineers and with the general public in both oral and written forms of communication
- Be able to interact effectively with others in order to work towards a common outcome.
- Be able select and use the appropriate level, style and means of communication when preparing geological maps, cross sections and scientific reports
- Have developed the ability to work independently, and to organise field work effectively and efficiently
- Have developed the ability to identify a geological problem and create solutions, using current best practice in analysis and interpretation of geological and geophysical data.

Attitudes & Values

- Have an understanding of the highest professional, ethical and safety responsibilities in the field of mineral exploration
- Realise there are ethical dimensions to many of the issues associated with their profession, and that these issues have to be considered in decision making
- Realise there is a need for ongoing development of improved and sustainable practices in the minerals industry
- Understand the processes involved in negotiating and consensus decision-making, especially through the field-based aspects of their program
- Have learned the spirit of courtesy and social responsibility that is an essential part of society, through the communal living situation in the field-based parts of their program.

Bachelor of Science (Molecular and Drug Design)

These rules should be read in conjunction with Academic Program Rules parts 2, 3 and 4 of the Bachelor of Science.

1 Qualification requirements

- 1.1 To qualify for the degree a candidate shall pass courses, listed in 1.2 below, to the value of 72 units, which satisfy the following requirements:
- a candidate shall present passes in courses to the value of 24 units at each of Level I, II and III
 - a candidate may substitute an appropriate course chosen from Level II to fulfil the requirements of Level I, or from Level III to fulfil the requirements of Level I or II
 - a candidate shall complete a major in a discipline as set out in Academic Program Rule 5.4 of the degree of Bachelor of Science.

1.2 Academic program

1.2.1 Level I

Level I courses, which shall include:

- i passes in core courses

Semester 1

BIOLOGY 1101 Biology I:
Molecules, Genes & Cells3
CHEM 1100 Chemistry IA3

or

CHEM 1101 Foundations of Chemistry IA3

Semester 2

BIOLOGY 1201 Biology I:
Human Perspectives.....3
CHEM 1200 Chemistry IB3

or

CHEM 1201 Foundations of Chemistry IB3

STATS 1004 Statistical Practice I
(Life Sciences) *3

* STATS 1000 Statistical Practice I (offered in semester 1 and 2) may be taken instead of STATS 1004 Statistical Practice I (Life Sciences).

- ii passes in additional Level I course to the value of 9 units selected in consultation with the Program Coordinator and in accordance with Academic Program Rules 5.2, 5.5.1 and 5.5.2 for the degree of Bachelor of Science

1.2.2 Level II

Level II courses, which shall include:

- i passes in core courses

Semester 1

BIOCHEM 2500 Biochemistry II:
Molecular and Cell Biology3

CHEM 2514 Chemistry IIA
(Molecular and Drug Design)3
CHEM 2530 Environmental & Analytical
Chemistry II.....3

Semester 2

BIOCHEM 2501 Biochemistry II: Metabolism ...3
CHEM 2524 Chemistry IIB
(Molecular and Drug Design)3
CHEM 2540 Medicinal and Biological
Chemistry II.....3

- ii passes in additional Level II course to the value of 6 units selected in consultation with the Program Coordinator and in accordance with Academic Program Rules 5.5.3 for the degree of Bachelor of Science.

1.2.3 Level III

Level III courses, which shall include:

- i passes, not Conceded Passes, in core courses

Semester 1

BIOCHEM 3000 Molecular & Structural
Biology III6
CHEM 3111 Chemistry III.....6

Semester 2

CHEM 3213 Advanced Synthetic
Methods III3
CHEM 3214 Medicinal & Biological
Chemistry III.....3

- ii passes in additional Level III course to the value of 6 units selected in consultation with the Program Coordinator and in accordance with Academic Program Rules 5.5.5 for the degree of Bachelor of Science.

1.3 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty, contains a substantial amount of the same material, and no course or portion of a course may be counted twice towards an award.

Note: A list of unacceptable combinations of courses is available from the Faculty of Sciences.

1.4 The Honours degree

Refer to Academic Program Rule 5.6 of the degree of Bachelor of Science.

1.5 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award.

2 Special circumstances

When in the opinion of the Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.



Bachelor of Science (Molecular Biology)

These rules should be read in conjunction with Academic Program Rules parts 2, 3 and 4 of the Bachelor of Science.

1 Qualification requirements

1.1 To qualify for the degree a candidate shall pass courses, listed in 1.2 below, to the value of 72 units, which satisfy the following requirements:

- a a candidate shall present passes in courses to the value of 24 units at each of Level I, II and III
- b a candidate may substitute an appropriate course chosen from Level II to fulfil the requirements of Level I, or from Level III to fulfil the requirements of Level I or II
- c a candidate shall complete a major in a discipline as set out in 1.2 below
- d a candidate may also complete a major as set out in Academic Program Rule 5.4 of the degree of Bachelor of Science.

1.2 Academic program

1.2.1 Level I

Level I courses, which shall include:

- i passes in core courses

Semester 1

BIOLOGY 1101 Biology I:
Molecules, Genes & Cells3
CHEM 1100 Chemistry IA3

or

CHEM 1101 Foundations of Chemistry IA3

Semester 2

BIOLOGY 1201 Biology I:
Human Perspectives.....3
CHEM 1200 Chemistry IB3

or

CHEM 1201 Foundations of Chemistry IB3

- ii passes in additional Level I course to the value of 12 units selected in consultation with the Program Coordinator and in accordance with Academic Program Rules 5.2, 5.5.1 and 5.5.2 for the degree of Bachelor of Science.

1.2.2 Level II

Level II courses, which shall include:

- i passes in core courses

Semester 1

BIOCHEM 2510 Advanced Molecular Biology
IIA 3
CHEM 2510 Chemistry IIA3

and either

BIOCHEM 2500 Biochemistry II:
Molecular and Cell Biology3

or

GENETICS 2510 Genetics IIA:
Foundation of Genetics3

Semester 2

BIOCHEM 2520 Advanced Molecular
Biology IIB3

and

CHEM 2520 Chemistry IIB3

or

CHEM 2540 Medicinal and Biological
Chemistry II.....3

and either

BIOCHEM 2501 Biochemistry II: Metabolism 3
or

GENETICS 2520 Genetics IIB: Function and
Diversity of Genomes.....3

- ii passes in additional Level II course to the value of 6 units selected in consultation with the Program Coordinator and in accordance with Academic Program Rules 5.5.3 and 5.5.4 for the degree of Bachelor of Science.

1.2.3 Level III

Level III courses, which shall include:

- i passes, not Conceded Passes, in core courses to the value of 12 units

For a major in Biochemistry

Semester 1

BIOCHEM 3125 Advanced Molecular
Biology IIIA (Biochemistry)6

Semester 2

BIOCHEM 3225 Advanced Molecular
Biology IIIB (Biochemistry)6

For a major in Genetics

Semester 1

GENETICS 3110 Advanced Molecular
Biology IIIA (Genetics)6

Semester 2

GENETICS 3210 Advanced Molecular
Biology IIIB (Genetics)6

- ii passes in additional Level III course to the value of 12 units selected in consultation with the Program Coordinator and in accordance with Academic Program Rules 5.5.5 for the degree of Bachelor of Science in the disciplines of Anatomical Sciences, Biochemistry, Chemistry, Genetics, Microbiology and Immunology, Pharmacology or Physiology.

1.3 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty, contains a substantial amount of the same material, and no course or portion of a course may be counted twice towards an award.

Note: A list of unacceptable combinations of courses is available from the Faculty of Sciences.

1.4 The Honours degree

Refer to Academic Program Rule 5.6 of the degree of Bachelor of Science.

1.5 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award.

2 Special circumstances

When in the opinion of the Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.



Bachelor of Science (Nanoscience and Materials)

These rules should be read in conjunction with Academic Program Rules parts 2, 3 and 4 of the Bachelor of Science.

1 Qualification requirements

- 1.1 To qualify for the degree a candidate shall pass courses, listed in 1.2 below, to the value of 72 units, which satisfy the following requirements:
- a a candidate shall present passes in courses to the value of 24 units at each of Level I, II and III
 - b a candidate may substitute an appropriate course chosen from Level II to fulfil the requirements of Level I, or from Level III to fulfil the requirements of Level I or II
 - c a candidate shall complete a major in a discipline as set out in Academic Program Rule 5.4 of the degree of Bachelor of Science.

1.2 Academic program

1.2.1 Level I

Level I courses, which shall include:

- i passes in core courses
 - Semester 1**
 - CHEM 1100 Chemistry IA3
 - or*
 - CHEM 1101 Foundations of Chemistry IA3
 - PHYSICS 1100 Physics IA*3
 - or*
 - PHYSICS 1101 Physics for the Life & Earth Sciences IA.....3
 - or*
 - PHYSICS 1008 Physics Principles & Applications I.....3
 - and*
 - BIOLOGY 1101 Biology I: Molecules, Genes and Cells.....3
 - Semester 2**
 - CHEM 1200 Chemistry IB3
 - or*
 - CHEM 1201 Foundations of Chemistry IB3
 - PHYSICS 1200 Physics IB**.....3
 - or*
 - PHYSICS 1201 Physics for the Life & Earth Sciences IB.....3
 - and*
 - BIOLOGY 1201 Biology I: Human Perspectives.....3
 - or*
 - BIOLOGY 1202 Biology I: Organisms3

- ii passes in additional Level I course to the value of 6 units selected in consultation with the Program Coordinator and in accordance with Academic Program Rules 5.2, 5.5.1 and 5.5.2 for the degree of Bachelor of Science.
 - * Requires MATHS 1011 Mathematics IA as a corequisite
 - ** Requires MATHS 1012 Mathematics IB as a corequisite

1.2.2 Level II

Level II courses, which shall include:

- i passes in core courses
 - Semester 1**
 - CHEM 2516 Chemistry IIA (Nanoscience & Materials).....3
 - CHEM 2530 Environmental & Analytical Chemistry II.....3
 - Semester 2**
 - CHEM 2526 Chemistry IIB (Nanoscience & Materials).....3
 - CHEM 2540 Medicinal and Biological Chemistry II.....3
- ii passes in additional Level II course to the value of 12 units selected in consultation with the Program Coordinator and in accordance with Academic Program Rules 5.2, 5.5.3 and 5.5.4 for the degree of Bachelor of Science.

1.2.3 Level III

Level III courses, which shall include:

- i passes, not Conceded Passes, in core courses
 - Semester 1**
 - CHEM 3111 Chemistry III.....6
 - Semester 2**
 - CHEM 3211 Heterocyclic Chemistry & Molecular Devices III.....3
 - CHEM 3212 Materials Chemistry III.....3
 - CHEM 3213 Advanced Synthetic Methods III3
- ii passes in additional Level III course to the value of 9 units selected in consultation with the Program Coordinator and in accordance with Academic Program Rules 5.5.5 and 5.5.6 for the degree of Bachelor of Science.

1.3 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty, contains a substantial amount of the same material, and no course or portion of a course may be counted twice towards an award.

Note: A list of unacceptable combinations of courses is available from the Faculty of Sciences.

1.4 The Honours degree

Refer to Academic Program Rule 5.6 of the degree of Bachelor of Science.

1.5 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award.

2 Special circumstances

When in the opinion of the Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.



Bachelor of Science (Natural Resources)

These rules should be read in conjunction with Academic Program Rules parts 2, 3 and 4 of the Bachelor of Science.

1 Qualification requirements

- 1.1 To qualify for the degree a candidate shall pass courses, listed in 1.2 below, to the value of 72 units, which satisfy the following requirements:
- a candidate shall present passes in courses to the value of 24 units at each of Level I, II and III
 - a candidate may substitute an appropriate course chosen from Level II to fulfil the requirements of Level I, or from Level III to fulfil the requirements of Level I or II.

1.2 Academic program

1.2.1 Level I

Level I courses, which shall include:

- passes in core courses
 - Semester 1**
 - BIOLOGY 1101 Biology I: Molecules, Genes and Cells.....3
 - GEOLOGY 1103 Earth Systems I.....3
 - Semester 2**
 - BIOLOGY 1202 Biology I: Organisms.....3
 - ENV BIOL 1002 Ecological Issues I.....3
 - GEOLOGY 1100 Earth's Interior I.....3
 - STATS 1004 Statistical Practice I (Life Sciences) *3
- passes in additional Level I course to the value of 6 units chosen from:
 - CHEM 1100 Chemistry IA3
 - or
 - CHEM 1101 Foundations of Chemistry IA.....3
 - or Level I courses selected in consultation with the Program Coordinator and in accordance with Academic Program Rules 5.2, 5.5.1 and 5.5.2 for the degree of Bachelor of Science.
 - * STATS 1000 Statistical Practice I (offered in semester 1 & 2) may be taken instead of STATS 1004 Statistical Practice I (Life Sciences).

1.2.2 Level II

Level II courses, which shall include:

- passes in core courses
 - Semester 1**
 - ENV BIOL 2500 Botany II.....3
 - GEOLOGY 2500 Sedimentary Geology II.....3
 - SOIL&WAT 2500WT Soil & Water Resources II.....3

SOIL&WAT 2501 Spatial Information and Land Evaluation II3

Semester 2

- ENV BIOL 2502 Ecology II.....3
- ii passes in additional Level II course to the value of 9 units chosen from:
 - GEOLOGY 2503 Landscape Processes & Environments II.....3
 - GEST 2043 Introduction to Environmental Impact Assessment.....3
 - and from Level II courses selected in consultation with the Program Coordinator and in accordance with Academic Program Rules 5.2, 5.5.3 and 5.5.4 for the degree of Bachelor of Science.

1.2.3 Level III

Level III courses, which shall include:

- passes, not Conceded Passes, in core courses
 - Semester 1**
 - AGRONOMY 3020RW Principles and Practice of Communications III3
 - Semester 2**
 - ENV BIOL 3220 Issues in Sustainable Environments III.....3
 - or
 - SOIL&WAT 3014WT GIS for Agricultural Sciences III3
 - Summer semester**
 - SOIL&WAT 3007WT GIS for Environmental Management III3
- passes in additional Level III course to the value of 15 units chosen from at least two of the following thematic groupings (at least 6 units chosen in each of the chosen thematic grouping):
 - Land & Water Management**
 - Summer semester**
 - SOIL&WAT 3004WT Environmental Toxicology & Remediation III3
 - Semester 1**
 - SOIL&WAT 3002WT Soil Management & Conservation III.....3
 - SOIL&WAT 3016WT Soil Ecology & Nutrient Cycling III.....3
 - Semester 2**
 - AGRONOMY 3000RW Agroforestry III.....3

AGRONOMY 3026RW Ecology & Management of Rangelands III (MY)*	3
ENV BIOL 3012WT Integrated Catchment Management III	3

*(MY) - taught in mid-year break

Conservation & Wildlife Ecology

Full year

PLANT SC 3030AEX/BEX Integrated Weed Management III	3
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Semester 1

ENV BIOL 3004 Freshwater Ecology III.....	3
ENV BIOL 3006 Research Methods in Environmental Biology III.....	3
ENV BIOL 3121 Concepts in Ecology III	3

Semester 2

ENV BIOL 3010 Marine Ecology III	3
ENV BIOL 3008 Conservation & Restoration III	3

Environmental Geoscience

Semester 1

GEOLOGY 3015 Environmental Geoscience Processes III	3
SOIL&WAT 3002WT Soil Management & Conservation III.....	3

Semester 2

SOIL&WAT 3010 Remote Sensing III.....	3
GEOLOGY 3014 Environmental Geoscience Applications III	3

1.3 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty, contains a substantial amount of the same material, and no course or portion of a course may be counted twice towards an award.

Note: A list of unacceptable combinations of courses is available from the Faculty of Sciences.

1.4 The Honours degree

Refer to Academic Program Rule 5.6 of the degree of Bachelor of Science.

1.5 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award.

2 Special circumstances

When in the opinion of the Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.



Bachelor of Science (Optics and Photonics)

These rules should be read in conjunction with Academic Program Rules parts 2, 3 and 4 of the Bachelor of Science.

1 Qualification requirements

- 1.1 To qualify for the degree a candidate shall pass courses, listed in 1.2 below, to the value of 72 units, which satisfy the following requirements:
- a a candidate shall present passes in courses to the value of 24 units at each of Level I, II and III
 - b a candidate may substitute an appropriate course chosen from Level II to fulfil the requirements of Level I, or from Level III to fulfil the requirements of Level I or II
 - c a candidate shall complete a major in a discipline as set out in Academic Program Rule 5.4 of the degree of Bachelor of Science.

1.2 Academic program

1.2.1 Level I

Level I courses, which shall include:

- i passes in core courses
 - Semester 1**
 - PHYSICS 1100 Physics IA3
 - MATHS 1011 Mathematics IA.....3
 - Semester 2**
 - PHYSICS 1200 Physics IB3
 - MATHS 1012 Mathematics IB.....3
- ii passes in additional Level I courses to the value of 12 units chosen from:
 - Semester 1**
 - COMP SCI 1012 Scientific Computing I3
 - CHEM 1100 Chemistry IA3
 - COMP SCI 1008 Computer Science IA.....3
 - COMP SCI 1009 Computer Science IB.....3
 - ELEC ENG 1009 Electrical & Electronic Engineering IA3
 - Semester 2**
 - CHEM 1200 Chemistry IB3
 - COMP SCI 1008 Computer Science IA.....3
 - COMP SCI 1009 Computer Science IB.....3
 - ELEC ENG 1010 Electrical & Electronic Engineering IB3

or courses selected in consultation with the Program Coordinator and in accordance with Academic Program Rules 5.2, 5.5.1 and 5.5.2 for the degree of Bachelor of Science.

1.2.2 Level II

Level II courses, which shall include:

- i passes in core courses
 - Semester 1**
 - MATHS 2101 Multivariable and Complex Calculus3
 - MATHS 2102 Differential Equations3
 - PHYSICS 2510 Physics IIA3
 - Semester 2**
 - PHYSICS 2525 Physics IIB (Optics & Photonics).....3
 - PHYSICS 2532 Classical Physics II.....3
 - PHYSICS 2534 Electromagnetism II3
- ii passes in additional Level II course to the value of 6 units chosen from:
 - Semester 1**
 - CHEM 2510 Chemistry IIA3
 - ELEC ENG 2008 Electronics II.....3
 - MATHS 2103 Probability & Statistics.....3
 - PURE MTH 2106 Algebra.....3
 - Semester 2**
 - CHEM 2520 Chemistry IIB3
 - ELEC ENG 2007 Signals and Systems II.....3
 - MATHS 2100 Real Analysis3
 - PHYSICS 2530 Astrophysics II3

or courses selected in consultation with the Program Coordinator and in accordance with Academic Program Rules 5.2, 5.5.3 and 5.5.4 for the degree of Bachelor of Science.

1.2.3 Level III

Level III courses, which shall include:

- i passes, not Conceded Passes, in core courses
 - Semester 1**
 - PHYSICS 3542 Physics III.....6
 - Semester 2**
 - PHYSICS 3537 Experimental Physics III (Optics & Photonics).....3
 - PHYSICS 3540 Optics and Photonics III3
 - PHYSICS 3544 Quantum Mechanics III3
- ii passes in additional Level III course to the value of 9 units chosen from:
 - Semester 1**
 - APP MATHS 3017 Waves III3
 - ELEC ENG 3016 Control III.....3
 - ELEC ENG 3018 RF Engineering III.....3

PHYSICS 3532 Atmospheric and Astrophysics III	3
PHYSICS 3006 Advanced Dynamics and Relativity III	3

Semester 2

ELEC ENG 3019A/B Practical Electrical and Electronic Design III	3
PHYSICS 3534 Computational Physics III	3
or courses selected in consultation with the Program Coordinator and in accordance with Academic Program Rules 5.5.5 and 5.5.6 for the degree of Bachelor of Science.	

1.3 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty, contains a substantial amount of the same material, and no course or portion of a course may be counted twice towards an award.

Note: A list of unacceptable combinations of courses is available from the Faculty of Sciences.

1.4 The Honours degree

Refer to Academic Program Rule 5.6 of the degree of Bachelor of Science.

1.5 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award.

2 Special circumstances

When in the opinion of the Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.



Bachelor of Science (Petroleum Geoscience)

These rules should be read in conjunction with Academic Program Rules parts 2, 3 and 4 of the Bachelor of Science.

1 Qualification requirements

- 1.1 To qualify for the degree a candidate shall pass courses, listed in 1.2 below, to the value of 72 units, which satisfy the following requirements:
- a a candidate shall present passes in courses to the value of no more than 30 units at Level I
 - b a candidate shall present passes in courses to the value of no more than 18 units at Level II
 - c a candidate shall present passes in courses to the value of 24 units at Level III
 - d a candidate may substitute an appropriate course chosen from Level II to fulfil the requirements of Level I, or from Level III to fulfil the requirements of Level I or II.

1.2 Academic program

1.2.1 Level I

Level I courses, which shall include:

- i passes in core courses
 - Semester 1**
 - GEOLOGY 1103 Earth Systems I 3
 - MATHS 1011 Mathematics IA 3
 - or*
 - MATHS 1013 Mathematics IMA 3
 - Semester 2**
 - GEOLOGY 1100 Earth's Interior I 3
 - MATHS 1011 Mathematics IA 3
 - or*
 - MATHS 1012 Mathematics IB 3
- ii passes in additional Level I courses to the value of 12 units selected in accordance with Academic Program Rules 5.2, 5.5.1 and 5.5.2 for the degree of Bachelor of Science, which must include at least one of the following per semester:
 - Semester 1**
 - CHEM 1100 Chemistry IA 3
 - or*
 - CHEM 1101 Foundations of Chemistry IA 3
 - PHYSICS 1100 Physics IA 3
 - or*
 - PHYSICS 1101 Physics for the Life & Earth Sciences IA 3
 - or*
 - PHYSICS 1008 Physics Principles & Applications I 3

Semester 2

- CHEM 1200 Chemistry IB 3
- or*
- CHEM 1201 Foundations of Chemistry IB 3
- PHYSICS 1200 Physics IB 3
- or*
- PHYSICS 1201 Physics for the Life & Earth Sciences IB 3

1.2.2 Level II

Level II courses, which shall include passes in core courses:

Semester 1

- GEOLOGY 2500 Sedimentary Geology II 3
- GEOLOGY 2501 Structural Geology II 3
- PETROENG 1005 Introduction to Petroleum Geosciences & the Oil Industry 3
- PETROENG 2010 Drilling Engineering 3

Semester 2

- GEOLOGY 2502 Igneous & Metamorphic Geology II 3
- GEOLOGY 2503 Landscape Processes and Environments II 3
- PETROENG 1006 Introduction to Petroleum Engineering 3
- PETROENG 2009 Formation Evolution, Petrophysics & Rock Properties 3

1.2.3 Level III

Level III courses, which shall include passes in core courses:

Semester 1

- GEOLOGY 3013 Tectonics III 3
- GEOLOGY 3017 Petroleum Exploration III 3
- GEOLOGY 3020 Reservoir Geoscience Project III 3
- PETROENG 3005 Reservoir Characterisation & Modelling 3

Semester 2

- GEOLOGY 3019 Field Geoscience Program III 3
- SOIL&WAT 3010 Remote Sensing III 3
- with additional Level III courses to the value of 6 units, chosen from:
- GEOLOGY 3008 Geophysics III 3
- GEOLOGY 3014 Environmental Geoscience Applications III 3
- GEOLOGY 3018 Mineral Exploration III 3

PETROENG 3019 Structural Geology
& Seismic Methods.....3

1.3 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty, contains a substantial amount of the same material, and no course or portion of a course may be counted twice towards an award.

Note: A list of unacceptable combinations of courses is available from the Faculty of Sciences.

1.4 The Honours degree

Refer to Academic Program Rule 5.6 of the degree of Bachelor of Science.

1.5 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award.

2 Special circumstances

When in the opinion of the Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.



Bachelor of Science (Pre-Veterinary)

These rules should be read in conjunction with Academic Program Rules parts 2, 3 and 4 of the Bachelor of Science.

1 Academic Progress

- 1.1 A candidate must maintain the prescribed level of performance for progression from each of Levels I, II, and III. Any student who fails to maintain a minimum cumulative GPA of 4.00 or greater (based on the first attempt result for each course) will be determined to be making unsatisfactory progress and will be required to show cause why they should not be excluded from the program. Students in this position will be written to in December of the year concerned. The letter will outline the show cause procedures.
- 1.2 A candidate who does not maintain the level of performance prescribed in 1.1 may not proceed with the Bachelor of Science (Pre-Veterinary) program and will be required to transfer into the Bachelor of Science (Animal Science) program.

2 Qualification requirements

- 2.1 Unacceptable combinations of courses No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty, contains a substantial amount of the same material, and no course or portion of a course may be counted twice towards an award.
- 2.2 To qualify for the degree a candidate shall pass courses, listed in 2.3 below, to the value of 72 units.

2.3 Academic program

2.3.1 Level I

Semester 1

ANIML SC 1017RW Perspectives in Animal Science (Pre-Vet)3

BIOLOGY 1510 Biology I: Molecules, Genes and Cells (Pre-Vet).....3

CHEM 1510 Chemistry IA (Pre-Vet)3

or

CHEM 1511 Foundations of Chemistry IA (Pre-Vet)3

PHYSICS 1501 Physics for the Life and Earth Sciences IA (Pre-Vet).....3

or

PHYSICS 1508 Physics Principles and Applications I (Pre-Vet).....3

Semester 2

ANIML SC 1018RW Principles in Animal Behaviour, Welfare and Ethics I (Pre-Vet)3

BIOLOGY 1520 Biology I: Organisms (Pre-Vet).....3

CHEM 1520 Chemistry IB (Pre-Vet)3

or

CHEM 1521 Foundations of Chemistry IB (Pre-Vet)..3

STATS 1504 Statistical Practice I (Life Sciences) (Pre-Vet)3

2.3.2 Level II

Semester 1

AGRIC 2501RW Animal & Plant Biochemistry II (Pre-Vet).....3

VET SC 2500RW Veterinary Skills II (Pre-Vet)3

VET SC 2510ARW Animal Form & Function II (Pre-Vet).....6

Semester 2

ANIML SC 2505RW Animal Nutrition & Metabolism II (Pre-Vet)3

ANIML SC 2508RW Genes and Inheritance II (Pre-Vet)3

VET SC 2510BRW Animal Form & Function II (Pre-Vet).....6

2.3.3 Level III

Semester 1

VET SC 3510ARW Animal Form and Function III ...6

VET SC 3511ARW Veterinary Pathobiology and Skills III.....6

Semester 2

VET SC 3510BRW Animal Form and Function III ...6

VET SC 3511BRW Veterinary Pathobiology and Skills III.....6

2.4 The Honours degree

Refer to Academic Program Rule 5.6 of the degree of Bachelor of Science.

2.5 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award.

3 Special circumstances

When in the opinion of the Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.



Bachelor of Science (Space Science and Astrophysics)

These rules should be read in conjunction with Academic Program Rules parts 2, 3 and 4 of the Bachelor of Science.

1 Qualification requirements

- 1.1 To qualify for the degree a candidate shall pass courses, listed in 1.2 below, to the value of 72 units, which satisfy the following requirements:
- a a candidate shall present passes in courses to the value of not more than 30 units at Level I
 - b candidate shall present passes in courses to the value of at least 24 units at Level III
 - c a candidate may substitute an appropriate course chosen from Level II to fulfil the requirements of Level I, or from Level III to fulfil the requirements of Level I or II
 - d a candidate may complete a major in a discipline as set out in Academic Program Rule 5.4 of the degree of Bachelor of Science.

1.2 Academic program

1.2.1 Level I

Level I courses, which shall include:

- i passes in core courses
 - Semester 1**
 - MATHS 1011 Mathematics IA.....3
 - PHYSICS 1007 Space Science & Astrophysics I.....3
 - PHYSICS 1100 Physics IA3
 - Semester 2**
 - MATHS 1012 Mathematics IB.....3
 - PHYSICS 1200 Physics IB3
- ii passes in additional Level I courses to the value of not more than 9 units chosen from:
 - COMP SCI 1012 Scientific Computing I3
 - GEOLOGY 1100 Earth's Interior I3
 - PHYSICS 1005 Physics, Ideas and Society I...3
 - STATS 1000 Statistical Practice I.....3
 or selected in consultation with the Program Coordinator and in accordance with Academic Program Rules 5.2, 5.5.1 and 5.5.2 for the degree of Bachelor of Science.

1.2.2 Level II

Level II courses, which shall include:

- i passes in core courses
 - Semester 1**
 - MATHS 2101 Multivariable and Complex Calculus3
 - MATHS 2102 Differential Equations3
 - PHYSICS 2510 Physics IIA3

Semester 2

- PHYSICS 2520 Physics IIB3
 - PHYSICS 2534 Electromagnetism II3
 - PHYSICS 2536 Space Science and Astrophysics II.....3
- ii passes in additional Level II courses chosen from:

Semester 2

- PHYSICS 2532 Classical Physics II.....3
- or selected in consultation with the Program Coordinator and in accordance with Academic Program Rules 5.2, 5.5.3 and 5.5.4 for the degree of Bachelor of Science, or selected courses listed for the Bachelor degree of Engineering (Aerospace).

1.2.3 Level III

Level III courses, which shall include:

- i passes, not Conceded Passes, in core courses
 - Semester 1**
 - PHYSICS 3532 Atmospheric and Astrophysics III3
 - PHYSICS 3542 Physics III.....6
 - Semester 2**
 - PHYSICS 3002 Experimental Physics III3
- ii passes in additional Level III course to the value of 12 units chosen from:
 - Semester 2**
 - PHYSICS 3534 Computational Physics III3
 - PHYSICS 3540 Optics and Photonics III3
 or courses selected in consultation with the Program Coordinator and in accordance with Academic Program Rules 5.5.5 and 5.5.6 for the degree of Bachelor of Science or selected courses listed for the Bachelor degree of Engineering (Aerospace).

1.3 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty, contains a substantial amount of the same material, and no course or portion of a course may be counted twice towards an award.

Note: A list of unacceptable combinations of courses is available from the Faculty of Sciences.

1.4 The Honours degree

Refer to Academic Program Rule 5.6 of the degree of Bachelor of Science.

1.5 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award.

2 Special circumstances

When in the opinion of the Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.



Bachelor of Viticulture and Oenology

1 Duration of program

The program for the degree shall extend over four years of full-time study or the part-time equivalent.

2 Admission

2.1 Status, exemption and credit transfer

- 2.1.1 Exemption from any part of the program on the first occasion on which a candidate takes a course will be granted only in special cases and on grounds approved by the Faculty.

Note: Partial or full status for some Level I courses may be granted on account of International Baccalaureate upon application to the Faculty.

- 2.1.2 Candidates who have previously passed courses offered in other programs at the University of Adelaide or other recognised tertiary institutions and who wish to count such courses towards their degree may, on written application to the Faculty, be granted status towards such specific degree requirements as the Faculty shall determine, subject to the following conditions:

- status will normally only be considered for courses passed within the previous ten years. Status may be granted on a course for course basis or on the basis of course for group of courses. Status will be granted only for courses that meet the academic requirements of the award towards which credit is sought.
- the candidate shall present a range of courses that fulfil the requirements of the relevant Academic Program Rules.
- a candidate shall complete a minimum of 24 units towards the award, as defined in 4.2 following, which have not been presented for any other degree.

3 Assessment and examinations

- 3.1 In determining a candidate's final result in a course the assessors may take into account oral, written, practical or examination work, provided that the candidate has been given notice at the beginning of the course of the way in which the work will be taken into account and of its relative importance in the final result.
- 3.2 There shall be four classifications of pass in any course for the degrees, as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, and Pass. In addition there shall be a classification of Conceded Pass. However, a candidate may only present courses for which a Conceded Pass has been obtained up to an

aggregate value of 9 units. Courses for which a result of Conceded Pass has been obtained shall not satisfy any prerequisite requirement.

- 3.3
- A candidate who obtains a Pass or higher grade in a course can not repeat the course.
 - A candidate who fails to obtain a Pass or higher grade in a course or who obtains a Conceded Pass and who desires to take the course again shall, unless exempted wholly or partially there from by the Head of School concerned or their delegate, do written and laboratory or other work in that course to the satisfaction of the teaching staff concerned.
 - A candidate who has twice failed to obtain a Pass or higher in any course shall not enrol for the course again, or for any other course which in the opinion of the Faculty contains a substantial amount of the same material, except by permission of the Faculty and under such conditions as the Faculty may prescribe.

4 Qualification requirements

- 4.1 To qualify for the degree a candidate shall pass courses, listed in 4.2 below, to the value of 96 units, which satisfy the following requirements:

- a candidate shall present passes in courses to the value of 24 units at each of Level I, II and III
- a candidate shall present passes in courses to the value of 24 units at Level IV in accordance with the rules 4.2.4 (Bachelor of Viticulture and Oenology) or 4.2.5 of Bachelor of Viticulture and Oenology (Hons).

4.2 Academic program

4.2.1 Level I

Passes in Level I courses, which shall include:

Semester 1

BIOLOGY 1101 Biology I: Molecules, Genes and Cells3

OENOLOGY 1018NW Foundations in Wine Science I3

CHEM 1100 Chemistry IA3

or

CHEM 1101 Foundations of Chemistry IA3

PHYSICS 1101 Physics for the Life and Earth Sciences IA3

or

PHYSICS 1008 Physics Principles and Applications I3

Semester 2	
BIOLOGY 1202 Biology I: Organisms	3
SOIL&WAT 1000WT Soils and Landscapes I	3
STATS 1004 Statistical Practice I (Life Sciences)	3
CHEM 1200 Chemistry IB	3
<i>or</i>	
CHEM 1201 Foundations of Chemistry IB	3

4.2.2 Level II

Passes in Level II courses, which shall include:

Semester 1

AGRIC 2500WT Animal & Plant Biochemistry II ...	3
ENV BIOL 2500 Botany II	3
OENOLOGY 2501WT Microbiology for Viticulture and Oenology II	3
SOIL&WAT 2500WT Soil and Water Resources II	3

Semester 2

ANIML SC 2501WT Genes & Inheritance II	3
OENOLOGY 2503WT Introductory Winemaking II	3
OENOLOGY 2502WT Sensory Studies II	3
VITICULT 2500WT Viticultural Science II	3

4.2.3 Level III

Passes in Level III courses, which shall include:

Semester 1

OENOLOGY 3007WT Stabilisation and Clarification III	3
OENOLOGY 3016WT Cellar & Winery Waste Management III.....	3
Winemaking at Vintage & Fermentation Technology III.....	3
VITICULT 3021WT Viticultural Science III.....	3

Semester 2

OENOLOGY 3037WT Distillation, Fortified & Sparkling Winemaking III.....	3
VITICULT 3044WT Viticultural Methods & Procedures III	3
Engineering for Viticulture and Oenology III	3
Plant Health III	3

4.2.4 Level IV for Bachelors Stream

i Passes in Level III courses, which shall include:

Semester 1

OENOLOGY 3500WT Industry Experience (Viticulture & Oenology) III.....	3
VITICULT 3500WT Grape Industry Practice, Policy & Communication III.....	3

Semester 2

Advances in Wine Science IV.....	3
OENOLOGY 3003WT Wine Packaging and Quality Management III.....	3

ii Passes in additional courses to the value of 12 units chosen from:

Semester 1

FOOD SC 3501WT Biotechnology in the Food and Wine Industries III	3
SOIL&WAT 3002WT Soil Management & Conservation III.....	3
SOIL&WAT 3016WT Soil Ecology & Nutrient Cycling III	3
PLANT SC 3030AEX/BEX Integrated Weed Management III	3
PLANT SC 3130WT Plant Pathology III	3
WINEMKTG 3505WT/EX Wine & Food Tourism & Festivals III.....	3
WINEMKTG 2506EX Wine and Society II.....	3

Semester 2

PLANT SC 3004WT Mineral Nutrition of Plants III	3
ENV BIOL 3009 Ecophysiology of Plants III ...	3
FREN 3013WT Technical French (Oenology) ...	3
SOIL&WAT 3014WT GIS for Agricultural Sciences III	3
AGRIBUS 3017WT Business Management for Applied Sciences III.....	3
PLANT SC 3009WT Plant Molecular Biology III.....	6
Agronomy	3
Horticulture	3

Winter Semester

SOIL&WAT 3012WT Soil Water Management	3
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4.2.5 Level IV for Bachelor of Viticulture and Oenology (Hons)

To be eligible to be admitted to the Honours degree program, a candidate shall complete Levels I, II and III as set out in 4.2.1, 4.2.2 and 4.2.3 to a standard that is acceptable to the Faculty for the purpose of admission to the Honours degree. A candidate who wishes to proceed to the Honours degree must obtain the approval of the Head of School.

The work of the Honours program shall normally be completed in the final year of study. The Faculty may permit a candidate to present the work over a period of not more than two years on such conditions as it may determine.

A candidate who satisfies the requirements for Honours shall be awarded the Honours degree, but the Faculty shall decide within which of the following classes and divisions the degree shall be awarded:

1	First Class
2A	Second Class div A
2B	Second Class div B

3 Third Class
NAH Not awarded

Passes in Level III courses, which shall include:

Semester 1

OENOLOGY 3500WT Industry Experience
(Viticulture & Oenology) III3
VITICULT 3500WT Grape Industry Practice,
Policy & Communication III3
Honours in Viticulture and Oenology A6

Semester 2

Advances in Wine Science3
OENOLOGY 3003WT Wine Packaging & Quality
Management III.....3
Honours in Viticulture and Oenology B6



1 Duration of program

The program for the degree shall extend over three years of full-time study or the part-time equivalent, and that for the Honours degree over one additional year of full-time study or, in exceptional circumstances, over two years of part-time study.

2 Admission

2.1 Status, exemption and credit transfer

2.1.1 Exemption from any part of the program on the first occasion on which a candidate takes a course will be granted only in exceptional cases and on grounds approved by the Faculty.

Note: Partial or full status may be granted on account of International Baccalaureate upon application to the Faculty.

2.1.2 Candidates who have previously passed courses offered in other programs at the University of Adelaide or other recognised tertiary institutions and who wish to count such courses towards their degree may, on written application to the Faculty, be granted status towards such specific degree requirements as the Faculty shall determine, subject to the following conditions:

- a Status will normally only be considered for courses passed within the previous ten years. Status may be granted on a course for course basis or on the basis of course for group of courses. Status will be granted only for courses that meet the academic requirements of the award towards which credit is sought.
- b The candidate shall present a range of courses which fulfils the requirements of the relevant Academic Program Rules.
- c A candidate shall complete a minimum of 24 units towards the award, as defined in 5.2 below which have not been presented for any other degree.

3 Assessment and examinations

3.1 In determining a candidate's final result in a course the assessors may take into account oral, written, practical or examination work, provided that the candidate has been given notice at the beginning of the course of the way in which the work will be taken into account and of its relative importance in the final result.

3.2 There shall be four classifications of pass in any course for the degrees, as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, Pass. In addition there shall be a classification of Conceded Pass. However, a candidate may only

present courses for which a Conceded Pass has been obtained up to an aggregate value of 6 units. Courses for which a result of Conceded Pass has been obtained shall not satisfy any prerequisite requirement.

- 3.3 a A candidate who obtains a Pass or higher grade in a course can not repeat the course.
- b A candidate who fails to obtain a Pass or higher grade in a course or who obtains a Conceded Pass and who desires to take the course again shall, unless exempted wholly or partially therefrom by the Head of School concerned or their delegate, do written and laboratory or other work in that course to the satisfaction of the teaching staff concerned.
- c A candidate who has twice failed to obtain a Pass or higher in any course shall not enrol for the course again, or for any other course which in the opinion of the Faculty contains a substantial amount of the same material, except by permission of the Faculty and under such conditions as the Faculty may prescribe.

4 Qualification requirements

4.1 To qualify for the degree a candidate shall pass courses, listed in 4.2 following, to the value of 72 units.

4.2 Academic program

4.2.1 Level I

Passes in Level I courses:

Semester 1

ECON 1004 Principles of Microeconomics I.....3
or

WINEMKTG 1026EX Microeconomic Principles ...3

ECON 1008 Business and Economic Statistics I...3

or

WINEMKTG 1015EX Data Analysis for Food and Wine Business I.....3

OENOLOGY 1000NW/1000EX Introductory Grape and Wine Knowledge3

WINEMKTG 1013WT/1013EX Wine and Food Marketing Principles I3

Semester 2

ACCTING 1002 Accounting for Decision Makers3

or

WINEMKTG 1008EX Introduction to Managerial and Financial Accounting I3

COMMLAW 1004 Commercial Law I (S).....3

or

WINEMKTG 1003EX Legal Issues in Wine Marketing I.....	3
ECON 1000 Principles of Macroeconomics I.....	3

or

WINEMKTG 1063EX Macroeconomic Essentials for Wine and Food Business I.....	3
OENOLOGY 1001NW/1001EX Vineyard and Winery Operations I.....	3

4.2.2 Level II

Level II courses, which shall include:

- i passes in core courses:

Semester 1

AGRIBUS 2500EX Introduction to Business Management II	3
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or

WINEMKTG 2500WT Applied Management Science II	3
OENOLOGY 2500NW/2500EX Vineyard and Winery Operations II	3

Semester 2

WINEMKTG 2501WT/2501EX Applied Marketing Research II	3
WINEMKTG 2503WT/2503EX International Marketing of Wine & Agricultural Products II... 3	

- ii passes in additional Level II courses to the value of 12 units selected in consultation with the Program Coordinator.

4.2.3 Level III

Level III courses, which shall include:

- i passes, not Conceded Passes, in core courses

Semester 1

WINEMKTG 3500WT/3500EX Global Wine Market III.....	3
WINEMKTG 3507WT/3507EX Wine Retail and Distribution Management III	3

Semester 2

WINEMKTG 3501WT/3501EX Winery Business Management III.....	6
WINEMKTG 3505WT/3505EX Wine and Food Tourism and Festivals III	3

- ii passes in additional courses to the value of 9 units chosen from:

Semester 1

WINEMKTG 2506WT/2506EX Wine and Society II	3
WINEMKTG 2504WT/2504EX International Wine Law II.....	3
WINEMKTG 3503WT/3503EX Food Marketing III.....	3
WINEMKTG 3504WT/3504EX Internet	

Marketing and E-Commerce III	3
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Semester 2

AGRIBUS 2009WT Issues in Australian Agribusiness II.....	3
AGRIBUS 3010WT International Agribusiness Environment III	3
WINEMKTG 2505WT/2505EX Strategic Marketing Management II.....	3
WINEMKTG 3506WT/3506EX Database Marketing for Food and Wine Business III	3

It is recommended that students wishing to specialise in marketing include the following courses amongst their electives:

Semester 1

WINEMKTG 3502WT/3502EX Advertising and Promotion III	3
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Semester 2

MARKETNG 2501 Consumer Behaviour II.....	3
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or

WINEMKTG 2502EX Consumer Behavioural Analysis II.....	3
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It is recommended that students wishing to specialise in finance, economics and trade include the following courses amongst their electives:

Semester 1

ECON 2506 Intermediate Microeconomics II.. 3	
ECON 3506 International Trade III.....	3

Semester 2

ECON 2507 Intermediate Microeconomics II.... 3	
ECON 2500 International Trade & Investment Policy II.....	3

or additional courses offered by the Faculty of Sciences or any courses in the Bachelor of Commerce or Bachelor of Economics for which the student is eligible to enrol.

4.3 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty, contains a substantial amount of the same material, and no course or portion of a course may be counted twice towards an award.

4.4 The Honours degree

- 4.4.1 Candidates completing the Bachelor of Wine Marketing and to a standard that is acceptable to the Faculty may proceed to the Honours degree.
- 4.4.2 The work of the Honours program must be completed in one year of full-time study, except where, on the recommendation of the Head of School, a candidate may complete the work for the Honours degree over two consecutive years, but no more.

4.4.3 The Honours grade may be awarded in one of the following classifications:

- 1 First Class
- 2A Second Class div A
- 2B Second Class div B
- 3 Third Class
- NAH Not Awarded

4.5 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award.

5 Special circumstances

When in the opinion of the Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.



Bachelor of Arts and Bachelor of Science

These rules should be read in conjunction with Academic Program Rules parts 2, 3 and 4 of the Bachelor of Science.

1 General

Students may enrol directly in a program of study leading, after four years of full-time study (or part-time equivalent thereof), to the award of both the degree of Bachelor of Arts and the degree of Bachelor of Science.

2 Qualification requirements

2.1 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty, contains a substantial amount of the same material, and no course or portion of a course may be counted twice towards an award.

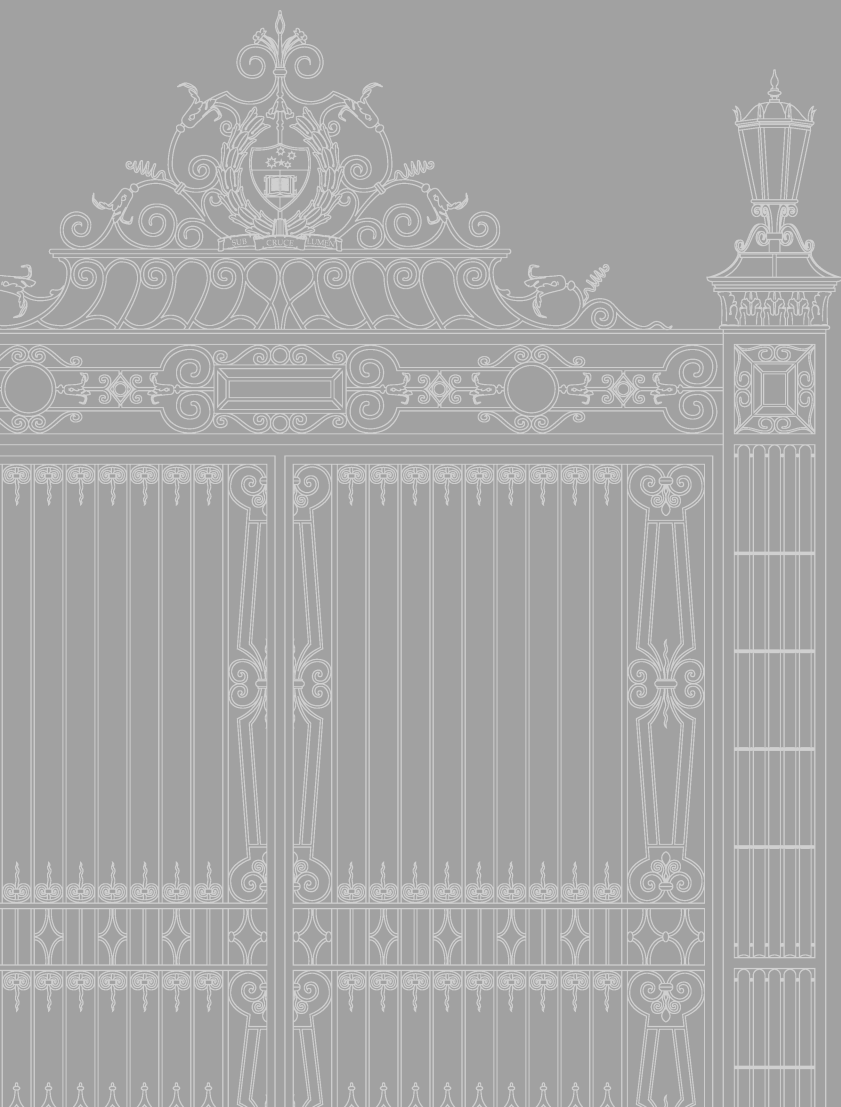
Note: A list of unacceptable combinations of courses is available from the Faculty of Sciences.

2.2 Science Component

To qualify for the award of the degree of B.Sc. students must pass courses listed in Academic Program Rule 5.5 of the Rules for the degree of Bachelor of Science in the Faculty of Sciences to a minimum unit value of 48, as follows:

- a Level I courses to the value of not less than 12 units
- b Level II courses to the value of not less than 12 units - being prerequisites for courses at Level III
- c Level III courses to the value of not less than 24 units
- d courses comprising a major in a science discipline, as defined in the Academic Program Rule 5.4 for the degree of B.Sc. in the Faculty of Sciences
- e a student must concurrently qualify for both awards.

Students who commence this program but who subsequently decide that they do not wish to proceed with both areas of study may transfer to enrolment in a program for the degree of Bachelor of Science in the Faculty of Sciences where credit of courses completed will be considered on a case by case basis.



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Aboriginal Studies in Music

LEVEL I

MUSIC 1001A/B Style Studies I CM

2 units - full year

1.5 hour lecture per week

Restriction: Aboriginal and Torres Strait Islander students only

Assessment: Continuous 60%, major assignments 40%

Historical, theoretical and practical study of the following musical styles: African-American music (blues, soul, reggae etc), folk, country, rock; inma studies.

MUSIC 1002A/B Practical Music Study I CM

4 units - full year

1 hour individual lesson per week

Restriction: Aboriginal and Torres Strait Islander students only

Assessment: Continuous progress 60%, semester exams 40%

One to one individual tuition on the student's selected instrument (or voice). Includes technical development, musical literacy, musicianship, repertoire and the use, care and maintenance of the instrument (voice). Includes participation in master classes.

MUSIC 1007A/B Studies in Community and Culture I

3 units - full year

1 lecture, 1 tutorial per week.

Restriction: Aboriginal and Torres Strait Islander students only

Assessment: Attendance, participation 10%, assignments 40%, end of semester exams 40%, field studies workbook 10%

An exploration of the arts in society drawing on examples from a variety of indigenous and non-indigenous communities and cultures in Australia and elsewhere. Themes include: the social, political, religious and educational roles of art, artists and arts institutions; cultural identity, cultural maintenance and development; aesthetics, technology and the arts, commercialism, culture contact and culture change.

This course includes classes presented by Visiting Lecturers from the Pitjantjatjara communities, and a field studies visit to the Anangu Pitjantjatjara Lands.

MUSIC 1009A/B Practical Music Study I MS

4 units - full year

1 hour individual lesson per week

Restriction: Aboriginal and Torres Strait Islander students only

Assessment: Continuous progress 60%, semester exams 40%

One to one individual tuition on the student's selected instrument (or voice). Includes technical development,

musical literacy, musicianship, repertoire and the use, care and maintenance of the instrument (or voice). Includes participation in master classes.

MUSIC 1010A/B Theory of Music I MS

3 units - full year

3 x 1 hour lectures or equivalent per week

Restriction: Aboriginal and Torres Strait Islander students only

Assessment: Tests 37.5%, assignments 22.5%, semester exams 40%

Consolidation and extension of the basic concepts and structures underlying Western music and Western music theory, including the application of the Western music notation system. Introduction to analysis and composition in a range of stylistic contexts.

MUSIC 1011A/B Research Studies (CASM) I MS

3 units - full year

1.5 hour lecture per week

Restriction: Aboriginal and Torres Strait Islander students only

Assessment: attendance participation 10%, assignments 25%, Field Studies Workbook 10%, research journal 10%, class report 10%, research proposal 25%, exam 10%

This course provides an introduction to research in music and provides an opportunity for students to gain experience in designing and conducting their own research projects. The course also explores major directions, themes and paradigms in the research of music and society, whilst also focussing on the development of student research skills and the completion of research proposals reflecting students' musical, cultural and academic interests.

In addition the Field Studies trip to the Anangu Pitjantjatjara lands provides an opportunity for students to critically explore and reflect on the possible applications for their research skills. The course includes classes presented by visiting Lecturers from the Anangu Pitjantjatjara communities and may also include visits to prominent Kurna events and places.

MUSIC 1013A/B Performance I MS

4 units - full year

2 x 2 hour rehearsals per week

Restriction: Aboriginal and Torres Strait Islander students only

Assessment: Attendance, participation 20%, rehearsals 30%, in-house performance workshops/public performances/school or community workshops determined and approved by department 20%, recording project 10%, field studies trip 10%, performance workbook 10%

The development of ensemble and performance skills through group rehearsals, in-house performance workshops, performance activities which may include public performances/school or community workshops/ tours as determined and approved by the Department, a recording project and a field studies trip to the Anangu Pitjantjatjara Lands. Includes the application of learning skills/behaviours; the development of repertoire, arranging

skills and rehearsal techniques; and the application of music literacy as appropriate.

MUSIC 1014A/B **Performance I CM**

4 units - full year

2 x 2 hour rehearsals per week

Restriction: Aboriginal and Torres Strait Islander students only

Assessment: Attendance, participation 20%, rehearsals 30%, in-house performance workshops/public performances/school or community workshops determined and approved by department 20%, recording project 10%, field studies trip 10%, performance workbook 10%

The development of ensemble and performance skills through group rehearsals, in-house performance workshops, performance activities which may include public performances/school or community workshops/tours as determined and approved by the Department, a recording project and a field studies trip to the Anangu Pitjantjatjara Lands. Includes the application of learning skills/behaviours; the development of repertoire, arranging skills and rehearsal techniques; and the application of music literacy as appropriate.

MUSIC 1015A/B **General Studies (New) I**

2 units - full year

Contact hours vary according to the topic/s chosen

Restriction: Aboriginal and Torres Strait Islander students only

Assessment: Determined by the lecturer in charge, in consultation with the academic coordinator

A range of elective topics such as CASM choir; Torres Strait Islander dance; computing for musicians - an introduction to the use of synthesisers, MIDI, sequencers; computer notation and educational software; studio techniques - an introduction to the function and use of equipment used in the live performance and recording of music; songwriting - an introduction to the various techniques used in developing ideas and turning them into songs. All topics will not necessarily be offered in any one year and others may be offered from time to time. At the discretion of the Academic Coordinator a student may be credited with external units; in such cases the Academic Coordinator will also determine the appropriate weighting. Students will be encouraged to undertake projects which relate to their areas of special interest, where possible.

MUSIC 1016A/B **Research Studies (CASM) I CM**

3 units - full year

1.5 hour lecture per week

Restriction: Aboriginal and Torres Strait Islander students only

Students to undertake supervised research projects of personal cultural significance in relation to music. The specific learning expectations and assessment requirements will be determined through consultation between the individual student, the course lecturer and the academic coordinator, and formalised through individual learning contracts. The course also requires

participation in the field studies trip to the Anangu Pitjantjatjara Lands

MUSIC 1018A/B **Practical Extension I**

2 units - full year

1 hour lecture per week or equivalent

Restriction: Aboriginal and Torres Strait Islander students only

Assessment: Attendance, participation 20%, assignments 80%

An introduction to practical aspects related to music-making. Topics are acoustics and audio engineering techniques; computers and music; introduction to principles of teaching; principles of music marketing and promotion.

MUSIC 1020A/B **Theory of Music I CM**

3 units - full year

3 x 1 hour lectures or equivalent per week

Restriction: Aboriginal and Torres Strait Islander students only

Assessment: Assignments and tests 60%, semester exams 40%

Consolidation and extension of the basic concepts and structures underlying Western music and Western music theory, particularly through practical application on the student's selected instrument and/or keyboard. Includes application of the Western music notation system.

MUSIC 1021A/B **Style Studies I MS**

2 units - full year

1.5 hour lecture per week

Restriction: Aboriginal and Torres Strait Islander students only

Assessment: Continuous 60%, major assignments 40%

Historical, theoretical and practical study of the following musical styles: African-American music (blues, soul, reggae etc), folk, country, rock; inma studies.

MUSIC 1024A/B **Aural Development (New) I**

1 units - full year

1 hour lecture per week

Restriction: Aboriginal and Torres Strait Islander students only

Assessment: Attendance, participation 20%, assignments and tests 40%, semester exams 40%

The development of musical literacy through practical application, and the development of aural awareness and analytical listening skills. Includes the recognition and reproduction of rhythmic, melodic and harmonic structures.

LEVEL II

MUSIC 2000A/B **Theory of Music II CM**

4 units - full year

3 x 1 hour lectures or equivalent per week

Restriction: Aboriginal and Torres Strait Islander students only

Prerequisite: MUSIC 1020 A/B or MUSIC 1010 A/B

Assessment: Assignments and class tests 60%, semester exams 40%

Consolidation and application of theoretical knowledge learned in Level I of the Associate Diploma in Aboriginal Studies in Music (New), and extension of this knowledge primarily through arranging and composing in the context of the student's stylistic interests.

MUSIC 2001A/B Style Studies II CM

2 units - full year

1.5 hour lecture per week

Restriction: Aboriginal and Torres Strait Islander students only

Prerequisite: MUSIC 1001 A/B or MUSIC 1021 A/B, and MUSIC 1020 or MUSIC 1010 A/B

Assessment: Topic I - attendance and participation 30%, major assignment 20%; Topic II - attendance and participation 15%, assignments 20%, concert report 15%

Topic I - historical, theoretical and practical study of the stylistic characteristics of Jazz; inma studies. Topic II - a survey of the main stylistic characteristics of Western 'art' music in historical and cultural context, including particular reference to contemporary Australian music; inma studies.

MUSIC 2002A/B Style Studies II MS

2 units - full year

1.5 hour lecture per week

Restriction: Aboriginal and Torres Strait Islander students only

Prerequisite: MUSIC 1021 A/B or Distinction in MUSIC 1001 A/B & MUSIC 1010 A/B or Distinction in MUSIC 1020 A/B

Assessment: Topic I attendance and participation 30%, major assignment 20%; Topic II - attendance and participation 15%, assignments 20%, concert report 15%

Topic I - historical, theoretical and practical study of the stylistic characteristics of Jazz; inma studies. Topic II - a survey of the main stylistic characteristics of Western 'art' music in historical and cultural context, including particular reference to contemporary Australian music; inma studies.

MUSIC 2003A/B Theory of Music II MS

4 units - full year

3 x 1 hour lectures or equivalent per week

Restriction: Aboriginal and Torres Strait Islander students only

Prerequisite: MUSIC 1010 A/B or, in exceptional circumstance, Distinction [or higher] in MUSIC 1020 A/B

Assessment: Assignments and class tests 60%, semester exams 40%

Consolidation and application of theoretical knowledge learned in Level I of the Associate Diploma in Aboriginal Studies in Music (New), and extension of this knowledge primarily through analysis and composition in the context of style.

MUSIC 2004A/B Performance II MS

4 units - full year

2 x 2 hour rehearsals per week

Restriction: Aboriginal and Torres Strait Islander students only

Prerequisite: MUSIC 1013 A/B or, in exceptional circumstances, Distinction (or higher) in MUSIC 1014 A/B

Assessment: Attendance, participation 20%, rehearsals 30%, in-house performance workshop/public performances/school or community workshops, determined and approved by department 20%, recording project 10%, field studies trip 10%, performance workbook 10%

The development of ensemble and performance skills through group rehearsals, in-house performance workshops, performance activities which may include public performances/school or community workshops/tours as determined and approved by the Department, a recording project and a field studies trip to the Anangu Pitjantjatjara Lands. Includes the application of learning skills/behaviours; the development of repertoire, arranging skills and rehearsal techniques; and the application of music literacy as appropriate.

MUSIC 2005A/B Practical Extension II

2 units - full year

1 hour lecture or equivalent per week

Restriction: Aboriginal and Torres Strait Islander students only

Prerequisite: MUSIC 1018 A/B

Assessment: Attendance, participation 20%, assignments 80%

Further development of practical aspects related to music-making. Topics are music business and management skills; introduction to recording techniques; music networks and organisations; music industry skills - publishing, copyright, funding.

MUSIC 2006A/B Practical Music Study II CM

4 units - full year

1 hour individual lesson per week

Restriction: Aboriginal and Torres Strait Islander students only

Prerequisite: MUSIC 1002 A/B or MUSIC 1009 A/B

Assessment: Continuous progress 60%, semester exams 40%

One to one individual tuition on the student's selected instrument (or voice). Includes technical development, musical literacy, musicianship, repertoire and the use, care and maintenance of the instrument (or voice). Includes participation in master classes.

MUSIC 2009A/B Performance II CM

4 units - full year

2 x 2 hour rehearsals per week

Restriction: Aboriginal and Torres Strait Islander students only

Prerequisite: MUSIC 1014 A/B or MUSIC 1013 A/B

Assessment: Attendance, participation 20%, rehearsals 30%, in-house performance workshops/public performances/school or community workshops, determined and approved by department 20%, recording project 10%, field studies trip 10%, performance workbook 10%

The development of ensemble and performance skills through group rehearsals, in-house performance workshops, performance activities which may include

public performances/school or community workshops/ tours as determined and approved by the Department, a recording project and a field studies trip to the Anangu Pitjantjatjara Lands. Includes the application of learning skills/behaviours; the development of repertoire, arranging skills and rehearsal techniques; and the application of music literacy as appropriate.

MUSIC 2011A/B **Aural Development (New) II**

1 units - full year

1 hour lecture per week

Restriction: Aboriginal and Torres Strait Islander students only

Prerequisite: MUSIC 1024 A/B

Assessment: Attendance, participation 20%, assignments and tests 40%, semester exams 40%

The continued development of musical literacy, aural awareness and analytical listening skills through practical application. Includes the recognition and reproduction of rhythmic, melodic and harmonic structures.

MUSIC 2016A/B **Studies in Community and Culture II**

3 units - full year

1.5 hour lecture per week

Restriction: Aboriginal and Torres Strait Islander students only

Prerequisite(s): MUSIC 1007 A/B

Assessment: attendance/participation 10%, project portfolio 70%, verbal report 10%, field studies analysis 10%

Students undertake a negotiated project approved by the course lecturer and Academic Coordinator. Projects will focus on issues of the arts and society and will include direct engagement with the community. Continuous project development with assistance from the course lecturer as required, including written and verbal reporting will form the core of the course. This course also requires participation in the field studies to the Anangu Pitjantjatjara Lands.

MUSIC 2017A/B **General Studies (New) II**

3 units - full year

Contact hours vary according to the topic/s chosen

Restriction: Aboriginal and Torres Strait Islander students only

Prerequisite: MUSIC 1015 A/B

Assessment: Determined by the lecturer in charge, in consultation with the academic coordinator

A range of elective topics such as CASM Choir; Torres Strait Islander dance; computing for musicians - an introduction to the use of synthesisers, MIDI, sequencers; computer notation and educational software; studio techniques - an introduction to the function and use of equipment used in the live performance and recording of music; songwriting - an introduction to the various techniques used in developing ideas and turning them into songs. All topics will not necessarily be offered in any one year and others may be offered from time to time. At the discretion of the Academic Coordinator a student may be credited with external units; in such cases the

Academic Coordinator will also determine the appropriate weighting. Students will be encouraged to undertake projects which relate to their areas of special interest, where possible.

MUSIC 2019A/B **Research Studies (CASM) II MS**

4 units - full year

1.5 hour lecture per week

Restriction: Aboriginal and Torres Strait Islander students only

Prerequisite: MUSIC 1011 A/B or, in exceptional circumstances, a Distinction (or higher) in MUSIC 1016 A/B

Assessment: Attendance/participation 10%, assignments 20%, Field Studies Workbook 10%, research journal 20%, class report 15%, final report 25%

Students conduct supervised research projects based upon research proposal completed in MUSIC 1011 A/B Research Studies (CASM) IMS. The course also explores issues, directions and applications for research in music and society. The Field Studies trip to the Anangu Pitjantjatjara lands also provides an opportunity for students to further their critical exploration and reflection on possible applications of research.

The course includes classes presented by Visiting Lecturers from the Pitjantjatjara communities and may include some visits to prominent Kurna events and places.

MUSIC 2020A/B **Practical Music Study II MS**

4 units - full year

1 hour individual lesson per week

Restriction: Aboriginal and Torres Strait Islander students only

Prerequisite: MUSIC 1009 A/B or, in exceptional circumstances, a Distinction (or higher) in MUSIC 1002 A/B

Assessment: Continuous progress 60%, semester exams 40%

One to one individual tuition on the student's selected instrument (or voice). Includes technical development, musical literacy, musicianship, repertoire and the use, care and maintenance of the instrument (or voice). Includes participation in master classes.

MUSIC 2023A/B **Research Studies (CASM) II CM**

4 units - full year

1.5 lecture per week

Restriction: Aboriginal and Torres Strait Islander students only

Prerequisite: MUSIC 1016 A/B or MUSIC 1011 A/B

Students to undertake supervised research projects of personal cultural significance in relation to music. The specific learning expectations and assessment requirements will be determined through consultation between the individual student, the course lecturer and the Academic Coordinator, and formalised through Individual Learning Contracts. In addition the Field Studies trip to the Anangu Pitjantjatjara Lands provides an opportunity for students to critically explore and reflect on the possible applications for their research.

Accounting

LEVEL I

ACCTING 1002

Accounting for Decision Makers I

3 units - semester 1 or semester 2

3.5 hours + 8.5 hours self-directed study per week

Restriction: B.Com. students only in semester 1

Available for Non-Award Study

Quota applies for semester 1

Incompatible: ACCTING 1011

Assessment: Exam/assignments/tests/tutorial work as prescribed at first lecture

This course considers the use of accounting information by external users and management. Topics include: accounting information in its decision making context; external financial reports; financing and business structures; financial statement analysis; the time value of money; capital budgeting; cost-volume-profit analysis; management accounting tools of analysis; and budgeting.

ACCTING 1005

Accounting Method I

3 units - semester 1 or semester 2

4 hours + 8 hours self-directed study per week

Restriction: Eligibility criteria will apply for non-BCom students

Incompatible: ACCTING 1010

Assessment: Exam/assignments/tests/tutorial work as prescribed at first lecture

Introduction to financial accounting including the principles of double-entry accounting and preparation of financial statements. Topics include worksheets, perpetual and periodic inventory systems, LIFO and FIFO, specialised journals and ledgers, subsidiary ledgers, bills receivable and payable, bad debts, and non-current assets.

LEVEL II

ACCTING 2500

Management Accounting II

3 units - semester 1 or semester 2

3 hours + 9 hours self-directed study per week

Prerequisite(s): ACCTING 1002

Assumed Knowledge: Basic computer literacy using MS Office software

Assessment: Exam/assignments/tests/tutorial work as prescribed at first lecture

This course seeks to give an understanding of the ways in which management accountants can provide relevant information for a variety of decisions to be made in managing any organisation. On completion of this course, students should be able to identify, use and interpret the results of costing techniques appropriate to different activities and decisions; formulate and use standards and

budgets for planning and control purposes; understand the role of responsibility accounting and performance measurement; understand the behavioural implications of performance measurement and transfer pricing systems in divisionalised businesses; appreciate the need to relate management accounting systems to contemporary thinking about organisational planning and control.

ACCTING 2501

Financial Accounting II

3 units - semester 1 or semester 2

4 hours + 8 hours self-directed study per week

Prerequisite(s): ACCTING 1005

Assessment: Exam/assignments/tests/tutorial work as prescribed at first lecture

The aim of this course is to guide students in their acquisition of technical and problem solving skills in the area of corporate external financial reporting. Corporate external financial reporting comprises financial reporting by reporting entities to external stakeholders. It is mandatory for reporting entities to report in accordance with Australian accounting standards. Students in this course will gain skills in reading, interpreting and applying accounting standards. This course builds on introductory financial accounting. The course is essential for all individuals exposed to financial information in the workplace including accountants, auditors, financial analysts, managers, bankers and oversight bodies involved in the preparation or use of company financial statements. It would also be useful for those not wishing to become accountants but who plan to specialise in areas where accounting knowledge would be an advantage such as bankers and finance professionals, journalists, lawyers, and those interested in management positions including engineers and scientists.

LEVEL III

ACCTING 3500

Accounting Theory III

3 units - semester 1 or semester 2

3 hours + 9 hours self-directed study per week

Available for Non-Award Study

Assumed Knowledge: ACCTING 2010 or ACCTING 2501

Assessment: Exam/assignments/tests/tutorial work as prescribed at first lecture

Topics may include accounting history, theory development in accounting, normative accounting theories, positive accounting theory, standard setting in a theoretical and political framework, ethics in accounting, behavioural accounting, and social and environmental accounting issues.

ACCTING 3501

Corporate Accounting III

3 units - semester 1 or semester 2

4 hours + 8 hours self-directed study per week

Available for Non-Award Study

Prerequisite(s): ACCTING 1005

Assumed Knowledge: CORPFIN 2006/2500, ECOMMRCE 1000, ACCTING 2010/2501 - or similar syllabus content

Assessment: Exam/assignments/tests/tutorial work as prescribed at first lecture

Topics may include issue of shares, debentures, company reconstructions, accounts of liquidators and receivers; amalgamations and takeovers; inter-corporate investments and consolidated accounts; and joint ventures, foreign currency transactions and translation.

ACCTING 3502 Auditing III

3 units - semester 1 or semester 2

3 hours + 9 hours self-directed study per week

Available for Non-Award Study

Prerequisite(s): ACCTING 2010/2501

Assumed Knowledge: Level I & II courses in relevant degree program

Assessment: Exam/assignments/tests/tutorial work as prescribed at first lecture

Audit comprises a fundamental component of the recurrent and strategic activities of nearly all professional occupations. While a small group of jobs focus exclusively on internal and external audit tasks, the majority of commerce graduates will utilise the principles and practices of risk assessment, internal control, systems evaluation and forensic accountability in their professional lives. This course thus aims to provide an introduction to the principles and practices of auditing. In this context, it will also outline and critically examine contemporary audit issues and challenges.

ACCTING 3503 Advanced Management Accounting III

3 units - semester 2

3 hours + 9 hours self-directed study per week

Assessment: Exam/assignments/tests/tutorial work as prescribed at first lecture

Syllabus details to be advised.

Agricultural Business

LEVEL I

AGRIBUS 1009RW Rural Business Planning I

3 units - semester 2

3 hour lecture, 2 hour tutorial per week

Assessment: Weekly tutorial exercises, case study, exam

The concepts involved in planning a farm business and determining options for land use and enterprise selection are presented and the financial tools for measuring farm performance including gross margins and cash flow budgets introduced. Topics include the farm as a system, perspectives of agriculture, management and business planning, options for land use, enterprise selection,

production management, sustainability and capability of land for production, resource constraints, marketing in the business plan, physical and financial records, farm business administration, ethics and decision-making.

LEVEL II

AGRIBUS 2009WT Issues in Australian Agribusiness II

3 units - semester 2

2 hour lecture, 1 hour tutorial per week

Assumed Knowledge: General marketing concepts

The course focuses on current agribusiness issues in Australia. Of particular importance are inter-relationships between businesses and the macro environment. Topics will include world food balances, market failure, WTO, globalisation, value adding, diversification, quality and quality management, value chains and other developments in strategic marketing. Student seminar presentations are a critical component of this course.

AGRIBUS 2500EX Introduction to Business Management II

3 units - semester 1

None: External

Available for Non-Award Study

Assessment: Assignments, Exam

Introduction to management, evolution of management, management environments, decision making, planning, strategic management, organising, organisational structure, human resource management, managing change and innovation, behaviour, motivation, leadership, communication, control, operations management, international management.

AGRIBUS 2501RW Agricultural Markets and Policy II

3 units - semester 1

2 hour lecture, 1 hour tutorial per week

Assessment: Essay/s, oral presentation/s & exam

This course provides a basic understanding of the nature, function and structure of agricultural markets, including the economics of commodity markets and of market failure, the role of international trade policy, and how governmental policy, at home and abroad, impacts on producers in Australia.

AGRIBUS 2502RW Rural Finance II

3 units - semester 2

2 hour lecture, 1 hour tutorial per week

Assumed Knowledge: AGRIBUS 1009RW

Assessment: Exam, assignments

Financial decision making: measuring business growth, assets, liabilities and equity, financial tools including profit and loss statements and balance sheets; comparative

analysis and benchmarking; investment appraisal tools and investment decision-making including machinery; taxation and tax management; legal issues including land purchase and succession planning.

LEVEL III

AGRIBUS 3012RW **Rural Business Management III**

3 units - semester 1

3 hour lecture, 2 hour tutorial per week

Assumed Knowledge: AGRIBUS 2033RW

Assessment: Case studies, tutorial exercises

A case study approach incorporating financial, marketing and production and human resource management tools will be used and emphasis given to decision making techniques, technology adoption and management of risk, along with monitoring and evaluating the farm business. Topics include: agriculture in the economy, introduction to production economics, forward selling, futures and options, alternative enterprises/new industries and management of human capital.

AGRIBUS 3015WT **Special Project (Research Paper) B**

3 units - semester 1 or 2

Independent work with supervisor/co-supervisor

Assessment: Seminar presentation, dissertation

Each student is to undertake an individual project of significant size which exhibits original investigation, analysis and interpretation, and which results in the production of a well-written and well-presented report. The project may comprise a major literature review (at least 10000 words), research project, case study of a business or related enterprise, or some other approved study.

AGRIBUS 3017WT **Business Management for Applied Sciences III**

3 units - semester 2

1 x 2 hour lecture, 1 x 1 hour tutorial per week

Assessment: Assignments, tutorial exercises, business plan, exam

The aim of this course is to provide perspective and understanding of the overall role of business and its place in the agricultural industry and the economy and to demonstrate linkages between various management functions. Aspects covered include what is business, business management, business planning, accounting management, marketing management, strategic planning, budgeting, decision making, organisation design, human resources management and monitoring.

AGRIBUS 3044RW **Individual Studies Rural Enterprise Management III**

3 units - semester 2

Assessment: written report, seminar

A guided study program approved by the Course Adviser

in an area applicable to the student and on a defined situation or problem.

Agriculture

LEVEL I

AGRIC 1000RW **Perspectives on Modern Agriculture I**

3 units - semester 1

3 hour lecture, 1 hour tutorial, 2 hour practical per week

Incompatible: PLANT SC 1000, PLANT SC 1000RW and AGRONOMY 1010RW

Assessment: Assignments, written exam

The course examines important concepts and issues of modern agriculture in Australia and internationally. Perspectives on Modern Agriculture will provide an overview of the development of present-day agricultural systems, the successes and problems associated with this development and examine the opportunities for agricultural science to contribute to sustainable improvements in productivity and quality and to the development of new products and markets. The course will examine technological, economic and social drivers of change in modern agriculture and the response of the agricultural industries to these influences.

AGRIC 1510WT **Agricultural Systems IA**

3 units - semester 1

3 x 1 hour Lectures, 1 x 1 hour Tutorial, 1 x 2 hour Practical per week

Incompatible: AGRIC 1000RW

Assessment: Essay, Tutorial Assignments, Practical Reports & Examination

The need to develop sustainable and profitable agricultural systems to meet the demands of a burgeoning global population and during a time of major changes in the environment is a major challenge for agricultural science. This course provides a general introduction to Australian agricultural systems within this global context. It will examine the physical, biological and economic characteristics of Australian agricultural systems. The course will examine climatology and meteorology, characteristics of sustainable production systems, Australian agriculture in a global context and an overview of the major Australian industries.

AGRIC 1520WT **Agricultural Systems IB**

3 units - semester 2

3 x 1 hour Lectures, 1 x 1 hour Tutorial, 1 x 2 hour Practical per week, 4 day field camp in conjunction with the Level I course Soils and Landscapes

Incompatible: AGRIC 1000RW

Assessment: Final examination, Tutorial & practical assignments, Consultant's report, Plant collection

This course will examine the specific characteristics of the cropping, livestock and horticultural industries in Australia. It will describe the structural characteristics of the industries, outline current best practice and the recent trends in production, marketing and trade. This course will complement the semester 1 course Agricultural Systems IA.

LEVEL II

AGRIC 2500RW/WT Animal and Plant Biochemistry II

3 units - semester 1

1 x 2 hour lecture per week, 1 x 2 hour tutorial, 1 x 3 hour practical per fortnight

Available for Non-Award Study

Prerequisite(s): CHEM 1100 or CHEM 1101 and CHEM 1200 or CHEM 1201

Assumed Knowledge: 6 units of level 1 Biology

This course provides an advanced introduction to the fundamental processes of plant, animal and microbial metabolism. Topics will include protein structure and function, mechanisms and control of enzyme action, the biochemistry of carbohydrate, fat and protein metabolism, energy generation, and the fundamentals of nucleic acid biochemistry. Examples of the application and context of key biochemical concepts to areas of science including plant and animal science, viticulture and oenology, veterinary medicine and food technology will be used to highlight the importance of biochemistry to all sectors of these sciences.

AGRIC 2501RW Animal and Plant Biochemistry (Pre-Vet) II

3 units - semester 1

3 hour lecture, 3 hour practical / tutorial per week

Restriction: BSc (Pre-Veterinary)

Prerequisite(s): CHEM 1510 or CHEM 1511 and CHEM 1520 or CHEM 1521

Assumed Knowledge: BIOLOGY 1510, BIOLOGY 1520

This course provides an advanced introduction to the fundamental processes of plant, animal and microbial metabolism. Topics will include protein structure and function, mechanisms and control of enzyme action, the biochemistry of carbohydrate, fat and protein metabolism, energy generation, and the fundamentals of nucleic acid biochemistry. Examples of the application and context of key biochemical concepts to areas of science including plant and animal science, viticulture and oenology, veterinary medicine and food technology will be used to highlight the importance of biochemistry to all sectors of these sciences.

HONOURS

AGRIC 4001ARW/BRW/AWT/BWT Honours Agricultural Science

24 units - full year

This course comprises a substantial research project of the student's choosing on a topic acceptable to the Head of School of Agriculture, Food and Wine, two seminars on that topic, and coursework, essays or other assignments deemed appropriate to the individual student's honours program.

AGRIC 4003ARW/AWT/BRW/BWT Honours in Agricultural Science (Two-Year)

24 units - full year

20 hours per week for 40 weeks over a 2 year period

Restriction: Graduate

Prerequisite(s): Credit or higher in at least two relevant Level III courses as approved by the Head of Discipline

Assessment: Thesis, seminar, remainder as deemed appropriate to the student's program

This course comprises a substantial research project of the student's choosing on a topic acceptable to the Head of School of Agriculture, Food and Wine, two seminars on the topic, and coursework, essays or other assignments deemed appropriate to the individual student's honours program.

Agronomy

LEVEL II

AGRONOMY 2500RW Agricultural Experience II

3 units - semester 2

8 hour practical per week

Restriction: BAgriculture

Assessment: Reports, seminars, practical experience

Students are rostered on agricultural enterprises where skills and knowledge in the practice of agriculture are developed. Students are involved in the management of the farm enterprise and are required to undertake a problem solving contract which addresses the issues and provides practical recommendations. Students are required to undertake 35 days off campus work experience on an approved farm, which will provide them with the opportunity to evaluate forms of agricultural productivity and management practices.

AGRONOMY 2501RW Introduction to Engineering in Agriculture II

3 units - semester 1

2 hour lecture, 1 hour tutorial, 2 hour practical per week

Restriction: BAgriculture, BSc (Agricultural Science)

Incompatible: CHEM ENG 1001

Assessment: Exam, assignments, practical exercises

Engineering has made modern agriculture possible and knowledge of some aspects of this discipline may be used in the improved management of many enterprises. This course uses practical agricultural applications of engineering to illustrate engineering principles and assist

managers. Topics in the course include tractor safety and performance, oil hydraulics, pumps, water supply systems, building materials, structural components, surveying, electrical supply systems and equipment and tension and electric fencing to illustrate the basic principles of engineering applied to machinery, fluids, structures and electricity.

AGRONOMY 2502RW **Production Agronomy II**

3 units - semester 2

3 hour lecture, 3 hour practical per week

Assumed Knowledge: AGRIC 1000RW, BIOLOGY 1101 and BIOLOGY 1201 or BIOLOGY 1202

Assessment: Exam, practical, tutorial

This course delivers practical understanding of selection, establishment, management and utilisation of crops and pastures in the main rainfall and soil environments encountered in southern Australia. Topics include: weed, pest and disease management; species and cultivar identification; selection and use of crops and pastures; rotations and planning; tillage, nutrition and fertilisers; irrigated agriculture.

LEVEL III

AGRONOMY 3000RW **Agroforestry III**

3 units - semester 2

2 hour lecture, 4 hour practical per week

Assessment: Written exam, planning assignment, practical

Topics include: Agroforestry for functional mimicry of natural ecosystems; Landuse systems with balanced water use; Trees for shelter, shade and soil conservation; Biodiversity and habitat management; Farm sawlog, firewood and pulpwood production systems; Trees in grazing and fodder systems; Specialty tree products; Integrated production systems; Design and evaluation of agroforestry; Establishing trees on farms; Socio-economic evaluation of agroforestry for the management of dryland salinity; Adoption of agroforestry in Australia; Institutions supporting the implementation of agroforestry.

AGRONOMY 3004RW **Land Management Systems for the Future III**

3 units - semester 2

2 hour lecture, 1 hour tutorial, 3 hour practical per week

Assumed Knowledge: AGRIC 1000RW

Assessment: Assignments, reports

Australia faces a number of constraints and uncertainties in achieving an effectively integrated approach to agricultural and natural resource management, including the biophysical environment, political/economic pressures, problems of scale and social/cultural factors. This capstone course in integrated, regional, environmental and land-use planning and management allows students to explore these issues, and any others they identify

as relevant to their future. Topics include: natural resource accounting and the emergence of ecological economics, land ownership evaluation and legislative influences; current and future options for alternative land management systems; holistic management of on and off site impacts for intensive and extensive agri-industries; environmental management systems; alternative energy sources.

AGRONOMY 3008RW **Individual Studies (Agriculture) III**

3 units - semester 1 or 2

Formal contact between student & supervisor during project by mutual agreement

Assumed Knowledge: AGRONOMY 1006ARW/BRW and AGRONOMY 2008RW

Assessment: Contract/project

Either an individual project/case study of significant size which exhibits original investigation, analysis and interpretation, and results in the production of a well-written, well-presented report. The project may comprise a major literature review, research project or some other approved study; or a self-directed consultancy/contact which involves the identification of a management issue on either a campus or external commercial enterprise.

AGRONOMY 3012RW **Advanced Agronomy III**

3 units - semester 1

2 hour lecture, 4 hour practical per week

Assumed Knowledge: AGRONOMY 2013RW or PLANT SC 2001WT or ENV BIOL 2006

Assessment: Exam, essays/practical report

This course aims to provide students with an understanding of some of the important physiological principles to crop and pasture production and how these principles can be applied to agricultural systems. The course has three modules: physiological bases of crop and pasture growth and resource utilisation, the use of simulation modelling to understand and explore the function of production systems and a series of case studies on topical issues related to crop and pasture production. Specific topics covered include water use and water use efficiency, dry matter production and partitioning, the dynamics of water and nitrogen balances in agricultural systems, competitive crops, abiotic stress and its management and high performance pastures.

AGRONOMY 3016RW **Crop and Pasture Ecology III**

3 units - semester 2

2 hour lecture, 4 hour practical per week

Assumed Knowledge: PLANT SCI 2001WT or ENV BIOL 2006 or AGRONOMY 2013RW

Assessment: Exam, assignments

Crops and pastures are plant communities that are managed mainly for the production of food and fibre. Those used in agriculture range from natural vegetation to specialised, sown annual monocultures.

It is important to understand how these communities function if they are to be productive. This course examines the structure and functioning of agricultural plant communities. Topics that will be covered include an examination of the similarities to, and differences between sown and natural communities, the effects of climate on the distribution and productivity of crops and pastures, interaction between a crop or pasture and its environment, competition, the impact of the grazing animal and the importance of genetic diversity among plants to adaptation to the environment and to agricultural productivity.

AGRONOMY 3020RW **Principles and Practice of Communications III**

3 units - semester 1

2 hour lecture, 1 hour tutorial, 3 hour practical per week

Assessment: Exam, assignments, practical exercises

This course develops the communication skills and knowledge necessary for all levels of professional activity in rural resource management. Communication theory and context is discussed through topics of: extension science and technology transfer; adult and action learning theory; how groups work and facilitating community participation; gender and diversity; community-based natural resource management. Invited speakers from agribusiness, government, rural community and research sectors provide current and practical perspectives to this theory. Specific skills are developed in: oral presentation, selection and preparation of information and its presentation medium for a variety of audiences and purposes; interpersonal communication; conflict resolution and negotiation; leadership; the process of the planning and evaluation of communication programs; and job search and interview techniques.

AGRONOMY 3026RW **Ecology and Management of Rangelands III**

3 units - semester 2

Part semester, winter vacation - includes 9 day field camp

Assessment: Project reports, theory exam

This course involves teaching sessions that may be attended by both Undergraduate and Postgraduate students

A course in ecology emphasising the study of interactions between grazing animals and the vegetation in arid areas, the principles involved and their application to management practices. Particular attention is paid to the impact of domestic, feral and native herbivores on the population dynamics of the dominant woody perennials, and the maintenance of their stabilising influence on the landscape. The bulk of the teaching is done at Middleback, a working sheep station set in the western myall woodlands on the southern margins of the north-west pastoral district of South Australia. The main focus on ecology of these arid woodlands and their highly productive saltbush-bluebush understorey, is taught in the context of the history of land use, subsequent research, the ensuing legislation, and its administration, with input from pastoralists and government officers where appropriate.

AGRONOMY 3130WT **Viticultural Engineering and Irrigation III**

3 units - semester 1

2 hour lecture, 1 hour tutorial, 3 hour practical per week

Assumed Knowledge: CHEM ENG 1001, PHYSICS 1008 and SOIL&WAT 2013RW/AGRONOMY 2120RW or equiv

Incompatible: AGRONOMY 3005WT

Assessment: May include practical reports, assignments, trip reports, individual projects, exam

Students will be introduced to the concepts and techniques used in the engineering aspects of trellis design, tractor operation and maintenance, oil hydraulic systems and irrigation systems.

HONOURS

AGRONOMY 4001ARW/BRW **Honours Agronomy & Farming Systems**

24 units - full year

Prerequisite: Credit or higher in at least 2 Level III courses approved by Head of Discipline

Assessment: Research thesis, associated seminars - remainder as deemed appropriate to student's program

Intending students should consult the Head of Discipline and potential academic supervisors during the final year of their degree.

This course comprises a substantial research project chosen by the student on a topic suitable to the Discipline. The results of the project will be presented in a written thesis and the presentation of a seminar. In addition, coursework, essays or other assignments deemed appropriate will be completed by the student after consultation with the Honours coordinator and approved by the Head of Discipline.

AGRONOMY 4005ARW/BRW **Honours in Agronomy & Farming Systems (Two Year)**

24 units - full year

20 hours per week for 40 weeks over a 2 year period

Restriction: Graduate

Prerequisite(s): Credit or higher in at least two relevant Level III courses as approved by the Head of Discipline

Assessment: Thesis, seminar, remainder as deemed appropriate to the student's program

This course comprises a substantial research project of the student's choosing on a topic acceptable to the Head of School of Agriculture, Food and Wine, two seminars on that topic, and coursework, essays or other assignments deemed appropriate to the individual student's honours program.

Anatomical Science

LEVEL I

ANAT SC 1102 Human Biology IA

3 units - semester 1

3 lectures, 3 hours tutorial/laboratory work per week

Restriction: B.Hlth.Sc. & B.Psych (Hons) students only or by permission of course coordinator

Available for Non-Award Study

Assessment: Literature & laboratory based RSD - task, tutorial participation, written exam

Human Biology is the study of human life. As such, Human Biology incorporates a variety of disciplines and focuses on issues that affect humans at the individual, populations and species levels. As well as introducing students to content, emphasis is placed on developing skills in researching, critically analysing and communicating scientific information relevant to the study of humans. Human Biology IA investigates the relationships between normal structure and function in human cells, tissues and organs, along with mechanisms that maintain homeostasis within an individual. It also introduces infectious agents and their implications for human health

ANAT SC 1103 Human Biology IB

3 units - semester 2

3 lectures, 3 hours tutorial/laboratory work per week

Restriction: B.Hlth.Sc., B. Psych.(Hons) students only or by permission of course coordinator

Available for Non-Award Study

Assumed Knowledge: Human Biology IA

Assessment: Laboratory & tutorial activities, scientific report, poster and power point presentation, written exam

Human Biology is the study of human life. As such, Human Biology incorporates a variety of disciplines and focuses on issues that affect humans at the individual, population and species levels. As well as introducing students to content, emphasis is placed on developing skills in researching, critically analysing and communicating scientific information relevant to the study of humans. In Human Biology IB, the focus is primarily on factors that influence and shape human populations and the human species. Topics include human evolution, genetics and diversity, defence systems against disease, and interactions between humans and their environment.

LEVEL II

ANAT SC 2003B Bridging Studies in Anatomy I/II Part 2

3 units - full year

Syllabus details to be advised.

ANAT SC 2109 Cells, Tissues & Development II

3 units - semester 1

3 lectures, 1 tutorial, 1, two-hour practical

Restriction: B.Hlth.Sc.; B.Psych. (Hons), BPsychSc

Assumed Knowledge: Human Biology IA & IB (ANAT SC 1102 & 1103)

Incompatible: Cells and Tissues II (ANAT SC 2500)

Assessment: final written & practical exams 60%, mid-semester test, tutorial papers, seminars, slide description 40% - details provided at commencement of course

Cells, Tissues and Development investigates the microscopic structure-function relationships of cells and tissues in the major organs and the development of gametes, fertilisation, implantation, and early embryonic and placental development. The course builds upon knowledge of basic tissues gained in Human Biology I. Topics include blood and haemopoiesis, the respiratory, cardiovascular, lymphoid, renal, digestive, endocrine and reproductive systems. The course also considers the role of structural cell biology in biomedical research, including reproduction. Practical and tutorial sessions provide opportunities for visual investigation of material and expansion of concepts presented in the lectures as well as developing student skills in oral and written scientific presentations.

ANAT SC 2200 Functional Human Anatomy II

3 units - semester 2

2 or 3 lectures (1 hour) and 1 practical (2 hours) per week, plus 10-20 hours project

Restriction: B.Hlth.Sc., B. Psych. (Hons) students only or by permission

Available for Non-Award Study

Assumed Knowledge: Human Biology I or equivalent

Assessment: Theory exam, practical exams, dissection project and multiple choice question tests

Students will be introduced to the basic principles of anatomy as well as study in detail the clinical and functional anatomy of the human musculoskeletal system. Teaching sessions will include lectures and practicals, which make use of both prosections and dissection. In addition to formal teaching sessions, students must undertake a research project, the results of which will be reported as a spoken presentation. The content will include detailed information on the anatomy of the lower limb, upper limb, vertebral column, pelvis and head with emphasis on the musculoskeletal and nervous system. In addition, students will study the more advanced functional aspects of muscle and joint anatomy.

ANAT SC 2500 Cells and Tissues II

3 units - semester 1

3 x 1 hour lectures, 1 hour tutorial, 2 hour practical per week

Assumed Knowledge: BIOLOGY 1101, BIOLOGY 1201 or 1202

Assessment: Exam, test, tutorial and practical assignments

Cells and Tissues II considers the structure and function of cells and tissues of the mammalian body. Study of

ultrastructural characteristics of the typical mammalian cell is followed by consideration of the structure of tissues, organs and systems. The features of the cells, their arrangement and their intercellular products are considered with emphasis on the relationship between microscopic structure and function. Human examples are mainly used with some material from other mammalian species. Routine techniques used for the study of cells and tissues at the light and electron microscopic levels as well as the principles of microscopy are presented early in the course. Practicals have a problem-solving approach and illustrate topics covered in lectures. Tutorials form a large component of the continuous assessment and give students ongoing feedback information on their progress in the course. Students also participate in an oral presentation and written, referenced summary on a topic in structural cell biology.

ANAT SC 2501 Comparative Anatomy of Body Systems II

3 units - semester 2

3 x 1 hour lectures, 3 hour practical per week

Restriction: BScience

Assumed Knowledge: BIOLOGY 1202 or equiv

Incompatible: ANAT SC 2008

Assessment: Written exam, practical tests

This course studies function associated evolutionary modifications of the vertebrate body systems taking human as the standard mammal. Lectures and practicals are integrated. In practicals, bones, human prosections and vertebrate dissections are used as learning resources.

LEVEL III

ANAT SC 3102 Comparative Reproductive Biology of Mammals III

3 units - semester 1

2 lectures, 4 hours practical/tutorial work per week

Assumed Knowledge: ANAT SC 2102 or ANAT SC 2104 or ANAT SC 2103 or ANAT SC 2105 or equiv

Assessment: Mid semester test 10%, written exam 70%, project/essay 20%

In this course the reproductive biology of various marsupial and eutherian mammalian species is covered with emphasis on the cell biology of various reproductive biological processes. The first few lectures cover sex determination and sex differentiation together with the development of the gonads, gonadal ducts and external genitalia. The differentiation and dynamics of production, of the male and female gametes are then considered together with changes that occur to the spermatozoon during transit of the male and female genital ducts. The cell and molecular biology of sperm-egg interactions and fertilisation are then given, followed by the processes involved in egg activation and differentiation of the early embryo. An account of macromorphological and cellular changes associated with implantation, placentation and lactation in various groups of mammals are then covered. This is followed by an overview of the causation

of, and ways of overcoming, sub- and infertility in the human species followed by an outline of the biological principles underlying contraceptive technology. Finally the application of assisted reproductive technology to the conservation of rare and endangered species of mammals is considered. During the course students have to either to carry out a research project using a variety of microscopical procedures or write an in depth essay on a specialised topic of reproductive biology.

ANAT SC 3103 Integrative and Comparative Neuroanatomy III

3 units - semester 1

2 lectures, 4 hours practical work a week

Available for Non-Award Study

Assumed Knowledge: ANAT SC 2102 or ANAT SC 2104 or ANAT 2103 or ANAT SC 2105 or equiv

Incompatible: Head and Neck and Neuroanatomy, Neuroanatomy and Neuroendocrinology, Special Sense Organs

Assessment: project (including seminar) 20%, practical exam 20%, written exam 60%

This course has as its base the functional anatomy of the human nervous system. It also deals with (i) the comparative morphology and evolution of the vertebrate central nervous system and (ii) the structure and function of sense organs and how sensory information is processed and integrated by the central nervous system. The human neuroanatomy component focuses on the main subdivisions of the brain and spinal cord, sensory and motor pathways, pain and thermoregulatory mechanisms and neural degeneration and regeneration. The comparative component will cover the functional morphology and evolution of visual and auditory reception and processing in different environments, extra-retinal photoreceptors and their role in circadian rhythms, and chemo-receptive mechanisms. Some lesser known sensory systems will be examined such as infrared receptors of snakes. Practicals will include a study of human and other vertebrate brains as well as a small dissection or analytical research project.

ANAT SC 3104 Structural Cell Biology III

3 units - semester 2

2 lectures, 4 hours tutorial/practical work per week

Assumed Knowledge: ANAT SC 2104 or ANAT SC 2105 or ANAT SC 2103 or ANAT SC 2102 or equiv

Incompatible: 7997

Assessment: written 60%, practical/project/ presentation 40%

This course presents a wide coverage of the techniques used in morphological studies of cells. The course considers how specific techniques and methods such as different types of electron and light microscopy, tissue preparation and (immuno) histochemistry, autoradiography and stereology are used to study structural cell biology. Principles, theory and application are emphasised rather than acquisition of technical expertise. A number of special topics in structural cell biology are studied and used as practical examples of some current research trends in research in structural cell biology.

ANAT SC 3105 **Limb Dissection**

3 units - semester 2

3 hour practical session per week

Restriction: MBBS level 2 students only

Assessment: Dissection 30%; knowledge - 2 hour written paper & oral assessment 70%

This course will involve a study of the functional anatomy of the limbs through dissection and the study of prosected specimens, radiographs and bones. Students will dissect upper and lower limbs. Students will work in groups of four and will be expected to do appropriate reading and preparation prior to the beginning of the dissection.

ANAT SC 3108 **Applied Anatomy of Cranial Nerves by Dissection**

3 units - semester 1

3 hours (1 hour lecture, 2 hours dissection) per week

Restriction: year 3 MBBS students only

Prerequisite: Year 1 & 2 MBBS successful completion

Assessment: monitoring & evaluation of the quality of the dissection 20%, a practical mid-semester test 10% & practical 20%, written exam at end of semester 50%

The course aims to study the structure and function of the cranial nerves by dissection. It involves the study of the deep cranial nerve nuclei, intracerebral course of the nerves, superficial attachments to the brain surface, intracranial course, relations to the dura and foramina of the skull, extracranial course, distribution to structures in the head and neck, function of each nerve, the basis of clinical examination of various nerves and interpretation of deficits. The principal mode of learning is by dissection of the human body supported by a week overview lecture.

ANAT SC 3500 **Ethics, Science and Society**

3 units - semester 1 (Not offered until 2010)

Restriction: No previous enrolment in Ethics Sciences & Society 2106 or 3106

Prerequisite: Level I courses to the value of 12 units

Assessment: case study assessment (written), paper/journal article critique, tutorial participation and presentation (tutor allocated), essay (written)

Enrolments in this course can be at either Level II or III - this is an advanced course for BA programs

This course aims to develop students' awareness of the ethical and social challenges in the health sciences. It is suitable for health science, science, and humanities and social science students. Topic areas may include ethical analysis of the following: research practice; reproduction and reproductive technologies; genetics; animal and human experimentation; death and dying. The focus on these topical issues in modern science will be underpinned by an introduction to the philosophy of science and methods in bioethics.

HONOURS

ANAT SC 4000A/B **Honours Anatomical Sciences**

24 units - full year

Prerequisite: credit standard in appropriate level III courses in Anatomical Sciences or other comparable biological courses - subject to discipline approval

Assessment: research project - research grant proposal, thesis/journal article, seminar and thesis defence 65%, components non related to the research project - essay & seminar 35%

The research project will be carried out under the guidance of an academic staff member, the supervisor. In addition, each student will also have an academic mentor. The Honours program is of 40 weeks duration and enrolments are in December/January for the February program. Prospective candidates should consult the Honours coordinator and the potential supervisor towards the end of their final year of the degree program in order to secure a place in the Honours program. More information can be found at www.adelaide.edu.au/health/anat/students/honours.html

ANAT SC 4100B **Honours Anatomical Sciences (Two Year) Final**

24 units - full year

Prerequisite(s): Credit standard in appropriate level III courses in Anatomical Sciences or other comparable biological courses - subject to discipline approval

Assessment: Research project - research grant proposal, thesis/journal article, seminar and thesis defence 65%, components non related to the research project - essay & seminar 35%

The research project will be carried out under the guidance of an academic staff member, the supervisor. In addition, each student will also have an academic mentor. The Honours program is of 40 weeks duration and enrolments are in December/January for the February program. Prospective candidates should consult the Honours coordinator and the potential supervisor towards the end of their final year of the degree program in order to secure a place in the Honours program. More information can be found at www.adelaide.edu.au/health/anat/students/honours.html

Ancient Greek

AGRE 4401A/B **Honours Ancient Greek**

36 units - full year plus semester 1 or semester 2

Prerequisite(s): Bachelors degree, credit average in courses contributing to major in Ancient Greek (or approved equiv)

Assessment: 4 x texts each assessed by 1hr exam 10%, 2 x 3000 word written assignments on texts 15%; 2 x 3000 word seminar papers in Common Course & seminar-discussion contributions 20%; proses, exam on unseen & prose translation 13%; 12500-15000 word dissertation

Students wishing to take Honours Ancient Greek should consult the Honours Coordinator prior to commencing level II to ensure that appropriate course choices are made in preparation for Honours. The exact arrangement of the course may be varied by the Head of the Discipline in accordance with the interests of the students and the availability of specialised teaching. In some circumstances, Honours Ancient Greek can be studied part-time over two years or can be combined with Honours in Latin or courses in another discipline.

Animal Science

LEVEL I

ANIML SC 1015RW **Perspectives in Animal Science I**

3 units - semester 1

3 hour lecture, 1 hour tutorial, 2 hour practical per week

Restriction: BSc (Animal Science)

Assessment: Exam, tutorials, practical reports, group project

The course will provide students with a basic understanding of production animals and horses and the respective industries in Australia and overseas. A general overview of agricultural production will also be covered. Themes to be studied include agricultural systems; the equine industry; ovine, bovine and equine physical examination; agricultural economics; livestock industries; alternative animal industries; animal production and welfare. There will be tutorials covering library and computer based information retrieval skills and specific animal handling topics. Practical exercises will include instruction on the handling of sheep, cattle, horses, and wildlife.

ANIML SC 1016RW **Principles in Animal Behaviour Welfare Ethics I**

3 units - semester 2

3 hour lecture, 2 hour practical, 1 hour tutorial per week

Restriction: BSc (Animal Science)

Assessment: Exam, written assignment

The course will provide the students with an introduction to the principles of animal ethics, behaviour and welfare. Subject areas which will be covered include introduction to animal welfare; animal welfare issues and current developments; animal welfare legislation; introduction to animal ethics; the history of animal behaviour; introduction to animal behaviour in the wild and domesticated species. Knowledge gained in the lecture material will be put into practice in the practical exercises.

ANIML SC 1017RW **Perspectives in Animal Science I (Pre-Vet)**

3 units - semester 1

3 hour lecture, 1 hour tutorial, 2 hour practical per week

Restriction: BSc (Pre-Veterinary)

Assessment: Exam, tutorials, practical reports, group project

The course will provide students with a basic

understanding of production animals and horses and the respective industries in Australia and overseas. A general overview of agricultural production will also be covered. Themes to be studied include agricultural systems; the equine industry; ovine, bovine and equine physical examination; agricultural economics; livestock industries; alternative animal industries; animal production and welfare. There will be tutorials covering library and computer based information retrieval skills and specific animal handling topics. Practical exercises will include instruction on the handling of sheep, cattle, horses, and wildlife. In addition there will be instruction on the physical examination of these animals from the veterinary perspective.

ANIML SC 1018RW **Principles in Animal Behaviour Welfare Ethics I (Pre-Vet)**

3 units - semester 2

3 hour lecture, 2 hour practical, 1 hour tutorial per week

Restriction: BSc (Pre-Veterinary)

Assessment: Exam, written assignment

The course will provide the students with an introduction to the principles of animal ethics, behaviour and welfare and how these relate to the veterinary profession. Subject areas which will be covered include introduction to animal welfare; animal welfare issues and current developments; animal welfare legislation; introduction to animal ethics; the history of animal behaviour; introduction to animal behaviour in the wild and domesticated species. Knowledge gained in the lecture material will be put into practice in the practical exercises.

LEVEL II

ANIML SC 2500RW **Companion Animal and Equine Studies II**

3 units - semester 1

2 hour lecture, 1 hour tutorial, 3 hour practical per week

Restriction: BSc (Animal Science)

Assessment: Exam, other written and oral assignments

The course will provide students with an overview of the origins and husbandry of companion animals, including horses, dogs, cats, birds, reptiles and pocket pets. The roles of companion animals in society will also be covered. Students will learn the common breeds and terminology relating to companion animal species. There will be opportunities for students to learn the correct handling of some of these species.

ANIML SC 2501RW/WT **Genes and Inheritance II**

3 units - semester 2

1 x 2 hour Lecture, 1 x 2 hour Tutorial, 1 x 2 hour Practical per week

Restriction: B.Sc (Agricultural Sciences), B.Viticulture & Oenology

Prerequisite(s): BIOLOGY 1101 and BIOLOGY 1202

Assessment: Tests, practical reports, presentations, participation, exercises, exam

The nature and structure of genetic material and the role of genes in determining the characteristics of organisms. The basis of inheritance and utilisation of variation in breeding programs and natural selection. The relationship between genetics and the composition of natural and managed populations. The role of new technologies in genetic improvement will be discussed.

ANIML SC 2502RW Wildlife Management II

3 units - semester 1

Presented online, 5 Day Field Trip

Available for Non-Award Study

Assumed Knowledge: BIOLOGY 1101, BIOLOGY 1201 or BIOLOGY 1202

Assessment: Discussion contributions, assignments, field trip, exam

The course deals with the survey & management of captive and wild populations of vertebrate animals. Topics covered include: the reasons for management; conflicts between humans & wildlife; the philosophical rationale for maintaining captive collections; development of ecologically based management strategies for the purpose of conservation; management of endangered species; management of harvested and pest populations; legal & administrative framework; the impact of diseases on wild animal populations. The course is structured as a guided reading course focussing on scientific papers dealing with populations of wild animals. A vacation field camp demonstrates some of the wildlife survey & handling techniques that provide some of the data on which wildlife management programs are based.

ANIML SC 2503RW Livestock Production Science II

3 units - semester 2

1 x 3 hour Lecture, 1 x 3 hour Practical per week

Assumed Knowledge: BIOLOGY 1103RW or BIOLOGY 1101, BIOLOGY 1201 or BIOLOGY 1202 and AGRIC 1000RW or ANIML SC 1015RW

Assessment: Practical reports, tests, essays, exam

Livestock Production Science deals with the application of science to animal production systems. The primary species are sheep and cattle but with reference to other species. Topics include on-farm management to maximise profit and quality, animal welfare and handling, meat, milk and wool processing. A major focus is grazing management and supplementary feeding common to all systems. The course also includes anatomy and physiology of muscles, skin, and the mammary system. Practicals include modelling production systems, assessing product quality, assessing live animals, and field trips.

ANIML SC 2505RW Animal Nutrition & Metabolism II (Pre-Vet)

3 units - semester 2

3 hour lecture, 3 hour practical per week

Restriction: BSc (Pre-Veterinary)

Prerequisite(s): BIOLOGY 1510 and BIOLOGY 1520 and CHEM 1510 or CHEM 1511 and CHEM 1520 or CHEM 1521 or equiv

Incompatible: ANIML SC 3015RW

Assessment: Written exam, practical exam, oral presentation, group work, formative tests

This course will discuss the principles and application of animal nutrition across a range of species, focusing mostly, although not exclusively, on livestock species. Students will develop an understanding of the nutritional components of feedstuffs and nutrient requirements, including requirements for energy, protein, carbohydrate, fat, minerals and vitamins. The effects of nutrient supply on growth, reproduction, body composition (eg, fatness), health and welfare and product quality (for agricultural animals) are considered. The hormonal regulation of nutrient partitioning is also discussed, with particular reference to the changing requirements associated with growth, pregnancy and lactation. The role of nutritionists in animal-based enterprises, including the use of least-cost ration formulation is discussed. The course includes lectures and practicals, including hands-on animal trials.

ANIML SC 2506RW Comparative Animal Anatomy & Physiology IIA

3 units - semester 1

3 hour lecture, 4 hour practical per week

Prerequisite(s): BIOLOGY 1101 and BIOLOGY 1202

Assumed Knowledge: 6 units of level 1 Chemistry

Incompatible: ANIML SC 3017RW, ENV BIOL 3003, PHYSIOL 2003, PHYSIOL 2004, VET SC 2510RW or VET SC 2520RW

Assessment: Practical reports, case study, exam

The course deals with the physiology and anatomy in a wide variety of animals; specifically, the tissues, physiology and anatomy of the major systems including skeletal, muscular, circulatory, nervous, and endocrine. The focus is comparative and demonstrates how different animal species have developed anatomical and physiological variation to cope with different environments.

ANIML SC 2507RW Comparative Animal Anatomy & Physiology IIB

3 units - semester 2

3 hour lecture, 4 hour practical per week

Prerequisite(s): BIOLOGY 1101 and BIOLOGY 1202

Assumed Knowledge: 6 units of level I Chemistry

Incompatible: ANIML SC 3017RW, ENV BIOL 3003, PHYSIOL 2003, PHYSIOL 2004, VET SC 2510RW or VET SC 2520RW

Assessment: Practical reports, case study, exam

The course deals with the physiology and anatomy in a wide variety of animals; specifically, the tissues, physiology and anatomy of the major systems including skeletal, muscular, circulatory, nervous, and endocrine. The focus is comparative and demonstrates how different animal species have developed anatomical and physiological variation to cope with different environments.

ANIML SC 2508RW **Genes and Inheritance II (Pre-Vet)**

3 units - semester 2

1 x 2 hour Lecture, 1 x 2 hour Tutorial, 1 x 2 hour Practical per week

Restriction: BSc (Pre-Veterinary)

Prerequisite(s): BIOLOGY 1510 and BIOLOGY 1520

Assessment: Tests, practical reports, presentations, participation, exam

The nature and structure of genetic material and the role of genes in determining the characteristics of organisms. The basis of inheritance and utilisation of variation in breeding programs and natural selection. The relationship between genetics and the composition of natural and managed populations. The role of new technologies in genetic improvement will be discussed.

LEVEL III

ANIML SC 3015RW **Animal Nutrition and Metabolism III**

3 units - semester 2

3 hour lecture, 3 hour practical per week

Assumed Knowledge: ANIML SC 2503RW and ANIML SC 2506RW and ANIML SC 2507RW

Incompatible: ANIML SC 2505RW

Assessment: Exam, practicals, assignments

This course will discuss the principles and application of animal nutrition across a range of species, focusing mostly, although not exclusively, on livestock species. Students will develop an understanding of the nutritional components of feedstuffs and nutrient requirements, including requirements for energy, protein, carbohydrate, fat, minerals and vitamins. The effects of nutrient supply on growth, reproduction, body composition (eg, fatness), health and welfare and product quality (for agricultural animals) are considered. The hormonal regulation of nutrient partitioning is also discussed, with particular reference to the changing requirements associated with growth, pregnancy and lactation. The role of nutritionists in animal-based enterprises, including the use of least-cost ration formulation is discussed. The course includes lectures and practicals, including hands-on animal trials.

ANIML SC 3016RW **Animal Health III**

3 units - semester 2

3 hour lecture, 3 hour practical per week

Assumed Knowledge: ANIML SC 2503RW and ANIML SC 2506RW and ANIML SC 2507RW

Incompatible: ANIML SC 3010RW and ANIML SC 3016RW

Assessment: Exam, essay, practical reports

Basic pathology, immunology, and epidemiology. Common diseases of Australian native animals and farm animals caused by viral, bacterial, fungal and parasitic infections. Non-infectious diseases including metabolic disturbances, trace element deficiencies and genetic diseases.

ANIML SC 3018RW **Pig Production - Science into Management III**

3 units - summer semester

Assumed Knowledge: ANIML SC 2503RW

Incompatible: ANIML SC 3001RW

Pork is the most consumed meat in the world and the second largest agricultural commodity. The management of modern pork production systems is based on detailed information on all aspects of the enterprise, including genetics and breeding, animal nutrition and growth performance, environmental and welfare requirements, health status, reproductive efficiency and product (meat) quality. This course will consider the advantages and disadvantages of various modern pork production systems (including welfare considerations, economic factors, the demand for product consistency, food safety issues, and other consumer expectations). The main factors that are required for the successful management of pigs are discussed, focusing on the management of suckling piglet, the weaner/grower pig and the breeding sow. This course is offered by the National Centre for Pork Industry Training and Education, based at Roseworthy Campus. It includes lectures, site visits to commercial operations, and other practical sessions. It is intended that students completing the course will understand both commercial pork production and the science that underlies it.

ANIML SC 3019RW **Ecology and Management of Vertebrate Pests III**

3 units - summer semester

10 contact days during summer vacation + 5 non-contact days which include the exam day

Available for Non-Award Study

Quota will apply

Assumed Knowledge: BIOLOGY 1202 or BIOLOGY 1203RW

Assessment: Exam, written assignments

This course strongly emphasises the field application of vertebrate pest control techniques and provides the theoretical bases for these techniques. Topics covered are the biology and ecology of vertebrate pests; the damage caused by pest animals; the legislative and administrative aspects of vertebrate pest control; district organisations; extension; vertebrate pest control practice.

ANIML SC 3020RW **Animal Microbiology & Invertebrates III**

3 units - semester 1

3 hours lectures, 1 hr tutorial, 3 hr practical per week

Restriction: BSc (Animal Science)

Prerequisite(s): BIOLOGY 1101 and BIOLOGY 1202

Assumed Knowledge: 6 Units of level 1 Chemistry

Incompatible: PLANT SC 2003RW, PLANT SC 2500RW, MICRO 2500

Assessment: Examination, test, practical reports, case study reports

An introduction to the biology of microorganisms and invertebrates of importance in and to animals. Topics to be considered include: form and function of major groups of microorganisms (including bacteria, viruses, fungi and protozoans); classification and identification; features

of pathogenic, symbiotic and commensal lifestyles; basic concepts of invertebrate arthropod and helminth taxonomy, physiology and function; reproduction and life cycles; practical skills for manipulating microorganisms and invertebrates and studying their activities.

ANIML SC 3043RW **Animal Biotechnology III**

3 units - summer semester

35 hours x 2 weeks

Assumed Knowledge: BIOLOGY 1101 and BIOLOGY 1202 and ANIML SC 2503RW

Assessment: Written assignment, practical report

The application of biotechnology to animals will be examined. Challenges facing the intensive and extensive livestock industries, as well as wildlife management and conservation, will be discussed and debated in the context of biotechnologies that may be applied. Problems specific to horses and companion animals will be also considered. In addition, the use of biotechnology for animal related issues such as food safety, disease control and biosecurity will be addressed.

A range of genetic, immunological and reproductive technologies will be introduced with some practical exposure. The integration of these technologies to improve animal production, health and welfare will be explored. Lastly, biotechnological animal models will be examined for potential application to human and veterinarian medicine.

ANIML SC 3045RW **Animal Breeding and Genetics III**

3 units - semester 1

3 hour lecture, 3 hour practical per week

Assumed Knowledge: ANIML SC 2501WT/RW and ANIML SC 2503RW

Incompatible: ANIML SC 2504RW, PLANT SC 3007WT and PLANT SC 3018WT

The application of scientific methods to animal breeding has led to major improvements in the output, cost and quality of meat, milk and fibre. In addition, animal breeding plans are important for continued improvement of companion animals and management of endangered species. Topics include an introduction to quantitative genetics, maximising response to selection, crossbreeding, estimation of genetic parameters and breeding values, mode of inheritance, mating systems, fitness and quality traits, animal diversity, development of breeding programs, use of biotechnology in breeding programs including gene mapping and parentage testing. Examples will be drawn from Australia's livestock industries as well as wildlife and companion animals.

ANIML SC 3046RW **Animal Reproduction and Development III**

3 units - semester 1

2 hour Lecture, 1 hour Tutorial, 3 hour Practical per week

Assumed Knowledge: BIOLOGY 1101 and BIOLOGY 1202 or ANIML SC 2503RW

Incompatible: ANIML SC 3043RW (prior to 2008) and ANAT SC 3102

Assessment: Exam, written assignment, presentations, practical reports

This course will provide students with an understanding of reproductive and developmental biology in animals. The physiological basis for reproduction in animals, including livestock, companion and wildlife species will be studied. Topics covered will include comparative structure and function of male and female reproductive systems; endocrine, neuroendocrine and environmental control of reproduction; development of the gametes, embryo, foetus and placenta; and pregnancy and parturition. How the understanding of reproductive physiology informs the management of reproduction and fertility in animals and provides the basis for reproductive technologies including artificial insemination and embryo transfer will be considered.

ANIML SC 3100RW **Laboratory Animal Science III**

3 units - semester 2

2 hour lecture, 1 hour tutorial, 3 hour practical per week

Assumed Knowledge: BIOLOGY 1101 and AGRIC 2500WT/RW

This course aims to instil the major principles of the study of laboratory animals and their utilisation for teaching, research and commercial purposes. This will include developing a scientific understanding of the applications and limitations of various laboratory animal species in addition to practical experience in animal handling and other procedures.

Topics will include animal handling, breeding, feeding, maintenance, minor interceptions and minor surgical procedures. Students will be involved with a research project in which relevant aspects of laboratory animal science will be undertaken. Species studied will include mice, rats, guinea pigs and rabbits. The student will become familiar with processes associated with induction of gastrointestinal diseases and disorders which affect humans, in rats and mice. These disorders could include chemotherapy-induced mucositis, gastric ulceration and inflammatory bowel disease. Students will also be exposed to the ways in which the animal models can be utilised, for example, in the testing of new treatment modalities.

HONOURS

ANIML SC 4004ARW/BRW **Honours Animal Science**

24 units - full year

Prerequisite(s): Credit or higher in at least 2 Level III courses approved by Head of Discipline

Assessment: Research thesis, associated seminars - remainder as deemed appropriate to student's program

This course comprises a substantial research project of the students choosing on a topic acceptable to the Discipline of Agricultural and Animal Science, as well as coursework, essays or other assignments deemed appropriate to each student's Honours program.

Intending candidates should consult the Head of Discipline and potential supervisors during the final year

of the degree and be prepared to begin studies in early February, or other vacations.

ANIML SC 4006ARW/BRW Honours Animal Science (Two-Year)

24 units - full year

20 hours per week for 40 weeks over a 2 year period

Restriction: Graduate

Prerequisite(s): Credit or higher in at least two relevant Level III courses as approved by the Head of Discipline

Assessment: Thesis, seminar & remainder as deemed appropriate to the student's program

This course comprises a substantial research project of the student's choosing on a topic acceptable to the Head of School of Agriculture, Food and Wine, two seminars on that topic, and coursework, essays or other assignments deemed appropriate to the individual student's honours program.

Anthropology

LEVEL I

ANTH 1104 Culture & Society: Foundations of Anthropology

3 units - semester 2

3 contact hours per week

Available for Non-Award Study

Assessment: Essays, tutorial papers, tutorial presentation/participation

This course provides an introduction to fundamental areas of inquiry in social anthropology. It examines essential aspects of human social life from a cross-cultural perspective, which is one of the defining characteristics of anthropology. It provides an introduction to the historical emergence of anthropology as a distinctive social scientific discipline and takes as its central theme the interaction between human cultural action and social relations. The course is organised around the study of a number of issues in which anthropological debate and analysis has been most intensively focused, including: primary social relations, political and economic relations, religious and ideological relations, and debates about cultural creativity within the context of social structure.

The course aims to show how anthropologists came to analyse human social life in the way they did, and how we can make use of this knowledge to inform the critical analysis of contemporary society, including present-day Australia.

ANTH 1105 Anthropology of Everyday Life

3 units - semester 1

3 contact hours per week

Available for Non-Award Study

Assessment: Tutorial participation 10%, tutorial presentation 25%, 1,000 word minor essay 25%, 2,000 word major essay 40%

This course is an introduction to the discipline of anthropology as the study of everyday social life for understanding, whether in our own or other cultural worlds. The course introduces the major themes of anthropology: the concept of culture, how we get along with other people, the way our everyday lives are made meaningful and the tacit dimensions of social life. These themes are presented through case studies of everyday actions and social relations by anthropologists: the different ways people in other societies see colours, cockfights in Bali, gifts and making friends, how and why social relations split up, understanding asylums, smoking cigarettes in Australia, driving cars in Asia and Los Angeles, rituals in Africa, and Generation X in America.

ADVANCED LEVEL

ANTH 2036 Anthropology of Conflict and Crisis

3 units - semester 2

3 contact hours per week

Available for Non-Award Study

Prerequisite(s): 12 units Level I Humanities/Social Sciences

Incompatible: ANTH 2024/3024

Assessment: Attendance, seminar presentations, minor essay, major essay

The course addresses the issues of conflict and complex political and ecological emergencies from a comparative anthropological perspective. Case studies are drawn from countries such as Afghanistan, Sierra Leone, Zimbabwe, Guatemala and Northern Ireland. This course introduces students to some of the methodological issues surrounding doing fieldwork in dangerous locations and addresses a number of core themes that include: food and famine; violence and evil; terror, fear and suffering; war and visual culture, media culture and spiritualism; and conflict, global governance and the global economy.

ANTH 2037 Anthropology of Emotion, Mind and Person

3 units - semester 1

3 contact hours per week

Available for Non-Award Study

Prerequisite(s): 12 units Level I Humanities/Social Sciences

Incompatible: ANTH 2023/3023

Assessment: Workshop participation, presentation, essays

Issues of what it is to be a thinking, feeling, knowing person are central to anthropology. Anthropology has, throughout its history, provided a unique and powerful focus on the mind, body and person in their total social and cultural context. This course explores different disciplinary perspectives on emotion, mind and person, while highlighting the distinctive methodological and theoretical tasks of anthropological explanation. Specific topics covered will include cross-cultural understandings of emotion, grief and mental illness; debates on the

role of language in perception; and altered states of consciousness such as dreaming, trance and possession. The course culminates in an exploration of anthropological perspectives on what it is to be a person, using ethnographic and cross-cultural comparisons to reflect upon individuality, agency and power.

ANTH 2038 **Anthropology of Health and Medicine**

3 units - semester 2

3 contact hours per week

Available for Non-Award Study

Prerequisite(s): 12 units Level I Humanities/Social Sciences

Incompatible: ANTH 2003/3003

Assessment: Workshop participation, presentation, essays

This course develops a cross-cultural understanding of health, healing, beliefs about the body, and theories of illness - cultural, social and bio-medical. It critically examines the way in which medical beliefs and practices are socially constructed. Specific topics covered will include: cultural understandings of the mind/body, illness as symbol and metaphor, healers and their roles, institutional responses to disease, and the interaction between different health systems. Through the lens of medical anthropology the course asks students to contemplate their own assumptions about health and illness, and how each of these are 'treated' in a range of social and cultural settings.

ANTH 2040 **Ethnography: Engaged Social Research**

3 units - semester 1

3 contact hours per week

Available for Non-Award Study

Prerequisite(s): 12 units Level I Humanities/Social Sciences

Incompatible: ANTH 2030

Assessment: Workshop participation, research portfolio, 2500 word research essay or research proposal

Ethnography is engaged social research. Ethnographers explore social life as social beings in social contexts. Ethnography can be single or multi-sited, local and global. Ethnographers document visually, audibly, literally and virtually. They employ an ensemble of techniques including participant-observation, interviews, surveys, photography, social mapping and genealogy. Ethnographic analysis frequently draws on substantive material from statistical, media and archival sources in a search for insight into contemporary conundrums.

The course develops social research skills in workshops and bring them to bear in designing your own engaged research project. Lectures explore ethnography's place in the social sciences. How and why has ethnographic research inspired critical reflection on methodology, epistemology, and the nature of the human condition? How significant are shifts in the ethnographic gaze from distant and exotic societies from the 1920s to ethnography at home, in institutions and 'studying up' (from the 1970s) to the contemporary challenges of virtual communities and global practices?

For students training as a social scientist, anthropologist, or qualitative researcher this course provides an important foundation for professional development.

ANTH 2041 **Popular Culture: Passion, Style, Vibe**

3 units - semester 2

3 contact hours per week

Available for Non-Award Study

Prerequisite: 12 units Level I Humanities/Social Sciences

Incompatible: ANTH 2022/3022

Assessment: Attendance, presentations, essays

Popular culture today constitutes a vital arena in which people derive great pleasure and make meaning in their lives. Through the myriad forms of popular culture in everyday life people define, explore and experiment with their identity and the identity of their society. Through music, shopping, soap operas, fashion and fandom people participate in contrasting strategies of living, building relations with others and society. The course investigates how theorists from a number of distinct academic disciplines have approached the issue of popular culture and mass consumption, and highlights what anthropology offers in terms of providing context-derived insights into distinct and discursive arenas of popular consumption and identity.

ANTH 2042 **Consuming Passions: Anthropology of Food and Drink**

3 units - semester 1

3 contact hours per week

Prerequisite(s): 12 units Level I Humanities/Social Sciences

Assumed Knowledge: Level I Anthropology

Incompatible: ANTH 2026/3026

Assessment: Essay, field reports, workshop contributions

Why is food usually shared? Why is drinking alone considered deviant? What is the connection between food and sex? Why is eating together integral to courtship? How do we decide what is ethnic food, and what isn't? Why do we consume so much information on diet and dieting? Why is our appetite for TV cookery programs insatiable? What makes fast food so appealing? Why is eating out taking the place of eating in? Where are we headed with genetically modified food?

Food and drink are imperative to the reproduction of all social life. Their consumption is therefore integral to the construction of social identity. This course aims to address a number of challenging and topical questions about the place of food and drink in contemporary society. It will introduce students to the work of those social anthropologists who have made significant contributions to the study of food and drink, as well as facilitating group research into particular topics of current concern.

ANTH 2044 **ICT for Development**

3 units - semester 1

3 contact hours per week

Available for Non-Award Study

Prerequisite(s): 12 units Level I Humanities/Social Sciences

Incompatible: ANTH 2028/3028

Assessment: Attendance, seminar presentations, minor essay, major essay

Media and Information Communication Technologies (ICTs) are rapidly changing the face of the developing world. Their application and use in processes of poverty reduction are numerous and cover areas such as conflict mitigation, the provision of humanitarian information, health information, and the strengthening of civil society through media deregulation and the proliferation of citizen or community media. This course examines: (i) the varied effects of information inclusion and exclusion; (ii) the information needs of poor people; (iii) the practical methods (such as Ethnographic Action Research and Communications for Social Change) and debates associated with media and ICT for Development (such as the digital divide); (iv) sectoral issues such as those relating to the communication of HIV/AIDS, informal education provision, and distance education; (v) the uses and applications of new technologies in poor countries; (vi) international and national ICT policy; and (vii) some of the popular genres associated with media and ICT for Development such as edutainment soap operas, street theatre, and participatory video. The course will encourage students to develop a geographical and thematic focus in their research essay work.

ANTH 2050 Anthropology of Globalisation

3 units - semester 1

3 contact hours per week

Available for Non-Award Study

Prerequisite(s): 12 units level I Humanities/Social Sciences

Assessment: Seminar participation (10%), two reading summaries (20%) of 1000 words x 2, and a major research essay (50%) of 3000-3500 words

This course explores current debates about globalisation as a process of intensified culture change, examining various modalities of globalisation as these impact on everyday life. Everything, it seems, is on the move where real and imagined boundaries are ever more permeable, fluid, temporal and contested. This is all part of globalisation that affects every one of us to some extent. How can anthropology make sense of the worldwide intensification of people, product and image flows; these complex transnational processes which we have come to know simply as globalisation?

In this course we trace globalisation as an early historic movement and influence and then examine grounded ethnographic analyses of contemporary global processes. We will examine anthropological concerns with articulations of local-global; how these globalising processes exist in the context of the realities of particular societies, historical-cultures, and ways of life. Themes for consideration include: local-global, space and place making, global flows, itinerant capital and commodities,

new identities, social transformations, mobile subjects and nomadic ideologies. We will come to see how the term "globalisation" has become prominent in critical thinking since the 1990s to be a neo-liberal mantra and a central paradigm in the contemporary human sciences.

ANTH 2051 Culture and Human Rights

3 units - semester 1

3 contact hours per week

Available for Non-Award Study

Prerequisite(s): 12 units level I Humanities/Social Sciences

Assessment: Workshop attendance and participation (10%), workshop paper and presentation (20%) of 1000 words, journal (20%) of 200 words x 10, essay (50%) of 3000 words

Since the Second World War, the concept of human rights has attained global prominence primarily through the work of the United Nations which was also responsible for promulgating the Universal Declaration of Human Rights in 1948. Whether it is considered legal, moral, political or idolatrous, the language of human rights has now become popular with governments and policy makers, non-government organisations, academics, media and the general public. Its global prominence has generated a lively intellectual debate over perennial questions such as universalism and relativism as well as individual and collective rights.

Anthropology's preoccupation with culture made anthropology become synonymous with cultural relativism which provided a powerful criticism against the notion of universal human rights. But cultural relativism is not immune to criticisms. This debate continues and is made complicated through the process of globalisation, the proliferation of rights discourse and sensitivities towards the rights of minorities, women and children and various articulations of both cosmopolitanism and multiculturalism.

This course introduces students to the origins of human rights discourse and traces some of the debates that come off at the intersection between culture and human rights. The course looks into the way in which particular concepts of culture and rights are employed both at the level of global production and circulation as well as in the way in which it becomes localised. The course covers both case studies and theoretical aspects of human rights.

CAPSTONE

ANTH 3100 Anthropology Today: Culture, Agency, Experience

3 units - semester 2

3 contact hours per week

Available for Non-Award Study

Prerequisite(s): 12 units level 1 Humanities/Social Sciences

Incompatible: ANTH 3029

Assessment: Participation 10%, seminar presentations 2 x 20%, major essay 50%

Ethnography is the principle way that anthropology conveys its insights to others. Anthropological knowledge is principally developed in the full-length monographs, articles in professional journals, book chapters, film and media presentations. The aim of this course is to understand the way in which anthropologists deploy specific theoretical perspectives in the organisation and analysis of ethnographic material to produce critical knowledge and understanding of the social world. Through a critical reading of ethnography, students have the opportunity to develop an understanding of both the process and product of the dialectic of fieldwork material and theoretical perspective as it is carried out in significant ethnographic monographs that exemplify the use of three major perspectives: discourse and power, practice and experience. The goal is for students to be able to understand and begin to engage in the production of critical ethnographic works.

HONOURS

ANTH 4401A/B Honours Anthropology

24 units - full year

Prerequisite: UG degree & distinction average in courses contributing to major in Anthropology or equiv approved by Head of Discipline - candidates without prerequisite may apply to Honours Coordinator

Assessment: coursework (2 topics), 15,000-20,000 word thesis

Students wishing to take Honours Anthropology should consult the Honours Coordinator prior to commencing Advanced Level studies to ensure that appropriate course choices are made in preparation for Honours.

Honours Anthropology is a full year program, involving weekly seminars, essays and a final dissertation. In some circumstances Honours Anthropology can be studied part-time over two years or can be combined with Honours in another discipline.

Students are encouraged to complete ANTH 3100 before proceeding to Honours.

Arts

ADVANCED LEVEL

ARTS 2001 Arts Internship

6 units - semester 2

2 hour seminar per week and placement

Quota will apply

Prerequisite(s): 24 units advanced Level Humanities/Social Sciences

Incompatible: ANTH 2048, GEST 2200, MDIA 3302/3311, POLI 2112/3083

Assessment: Oral presentation 20%, 5000-7000 word major research project 80%

As a central part of this course students will have the opportunity to spend a short time as 'interns' working within specified areas of either the private or public sector in South Australia, while completing an agreed research task. Students will be allocated placements from among a range of offerings which include members of State parliament, public service departments, statutory authorities and other non-government organisations as well as a range of private industries.

Final placement will depend upon availability of a host organisation, the application of an internal quota and assessment of a formal application taking into consideration academic merit (a minimum credit average GPA). In order to complete the process of placement allocation, students should finalise their enrolment by the completion of the normal enrolment period.

Asian Studies

LEVEL I

ASIA 1101 Introduction to Chinese Society and Culture

3 units - semester 2

3 contact hours per week

Available for Non-Award Study

Assessment: term quizzes, tutorial papers and presentation, major essay

This course introduces both Chinese language and non-language students to aspects of Chinese culture and society through the use of lectures and videos and which may include newspaper articles, scholarly papers and stories etc. We learn about some key aspects of Chinese society and some ways in which China's past influences the present. The course takes an interdisciplinary approach, making it an excellent introduction to students of Chinese, Asian Studies and those majoring in International Studies, History, Politics or Anthropology. It will also help any student doing commerce or trade-related subjects. With China's political and economic importance increasing every day, this is a course that no student can afford to miss if only to find out what you should go on to find out about.

ASIA 1102 Introduction to Japanese Society and Culture

3 units - semester 1

3 contact hours per week

Available for Non-Award Study

Assessment: essay, tutorial papers, participation, exam

This course provides an introduction to the study of Japanese society and culture, both as background knowledge for language students and as preparation for later-year subjects, especially in BA courses in Asian, Cultural or International Studies. Knowledge of the Japanese language is not required to enrol in the subject.

However, students of Japanese language are strongly encouraged to take this course. The primary focus is modern Japan and its historical heritage. Aspects of society, culture, economics and politics will be presented both in traditional as well as modern contexts. By the end of the semester students will be familiar with some of the central concerns of Japanese society and culture and with some of the main approaches to study them. Teaching will combine lectures, tutorials and video presentations.

ASIA 1103
Asia and the World

3 units - semester 1

3 contact hours per week

Available for Non-Award Study

Assessment: Writing exercises, tutorial presentation and paper, two term quizzes, major essay

Asia's immense impact on the world over the last 2,000-3,000 years has often been obscured and is rarely part of Australian common knowledge. Asia and the World provides all students, but especially those doing International Studies and Asian Studies, with a basic introduction to notions of Asia. Many things which are taken for granted as key Western ones, often have their origins in the East in some way. This influence extends to language, hamburgers, philosophical ideas and ways of illustrating what we see. This influence is not limited to the ancient past. Today Asian pop culture is reshaping Western pop culture and ideas and products from Asia are changing our lives in fundamental ways even if the origins are not obvious. Asia and the World highlights the irony of how reactions to Asia shaped Europe's destiny and how its inventions were adapted by Western states and used to then dominate Asia in the colonial period. The contemporary rise of independent Asian nation states is reviewed and contextualised and the processes which obscure Asian influence are explained. Your view of why Australian/Western history and culture are the way they are may well change the way you see the world.

ADVANCED LEVEL

ASIA 2018
Australia and the Asia-Pacific

3 units - semester 2

3 contact hours per week

Available for Non-Award Study

Prerequisite: 12 units Level I Humanities and Social Sciences

Incompatible: ASIA 2003/3003

Assessment: Participation 10%, reflection papers 15%, presentation 15%, 2 short tests 20%, research paper 40%

The course will examine Australia's relations with Asia in global and regional perspective. Some of the enduring concerns of Australian and Asian policy makers such as the search for regional order, the resolution of political and trade disputes and management of political and economic interdependence will be addressed throughout the course. While some historical aspects of Australia's links

with Asia will be considered to provide a backdrop to the relationship, the major part of the course's focus is placed on contemporary and current issues. The course will examine selected thematic issues concerning Australia's ties with Asia as well as regional and bilateral relations. While the course is designed to provide students of Asian and international studies some of the essential conceptual and analytical tools to understand Australia's Asian context, it also serves as an introduction to Australia's relations with Asia which will be of interest to a wide range of students, especially those whose future jobs might be related to a particular Asian country or to the Asia Pacific region.

ASIA 2020
Cultures and Identities in Contemporary Japan

3 units - semester 2

3 contact hours per week

Available for Non-Award Study

Prerequisite: 12 units Level I Humanities and Social Sciences

Incompatible: ASIA 2012/3012

Assessment: Tutorial paper 20%, reflection papers 20%, 2 tutorial presentations 15%, participation 5%, semester essay 40%

This course is designed as a sociological examination of the cultural aspects of contemporary Japanese society. Emphasis is on examining the character of the social and cultural order and identities in contemporary Japan. Basic themes examined include: perspectives on identity formation, perspectives on Japanese identity, the individual and community, authority, work and identity, gender identity, ethnic identity, minorities, nationalism, youth culture, popular culture, food culture, and mass media. The themes covered may vary year to year.

ASIA 2021
Culture & Identities in Contemporary China

3 units - semester 1

1 lecture, 1 tutorial and 1 workshop per week

Check with School for Non-Award Study

Prerequisite: 12 units Level I Humanities/Social Sciences or equivalent as approved by the coordinator

Incompatible: Religions of China ASIA 2016/3016

Assessment: 3 reflection papers 30%, presentation 10%, minor paper 20%, major paper 40%

Cultures & Identities in Contemporary China gives students an insight into the complexity of China's past and present and highlights analytical principles that can be applied more or less universally. Key socio-political and cultural ideas, together with institutions underpinning the bases of the myriad of Chinese identities, particularly those with religious beliefs, are examined with an eye to emphasising China's diversity and revealing underlying belief systems. We examine some of the key ideas shaping Chinese identities, including ('Han') Chineseness, ethnic and other minorities and how ideas of 'Confucianism' distorted Western analysis. Chinese cultural variety is highlighted by showing how important Buddhism, Daoism, and folk religion concepts including beliefs in fate, ghosts, fengshui and divination shape much Chinese thinking.

More recent influences such as Christianity and Islam, Communism under Mao Zedong, nationalism and modern syncretic movements such as Falun Gong may be scrutinised to show how divisions between politics and religions can become blurred. Many of these ideas remain relevant both in China and in international relations when governments or others appeal to or against them.

ASIA 2022

China Today: Politics & Governance

3 units - semester 2

1 lecture, 1 tutorial, and 1 workshop per week

Prerequisite(s): 3 units Humanities/Social Sciences as approved by coordinator

Assumed Knowledge: Understanding of essay writing conventions

Incompatible: ASIA 2008

Assessment: writing exercises, tutorial presentation and paper, major essay

By the conclusion of China Today students will be able to understand much of the politics underlying developments and crises in China.

China Today focuses on themes and principles underlying the evolution of Chinese politics, economy and society in the People's Republic. In the first half we examine the nature of China's communist party-state political system, the aims, rise and fall of Maoism, and the reasons behind and the nature of the 1978 post-Mao Zedong economic reforms. These changes have allowed China to develop into the rapidly rising economic power it is today while the reforms have also allowed China to be increasingly influential on the world stage.

In the second half, we discuss some of the current key issues and problems arising from the success of China's development strategies, such as growing social inequality, gender and age imbalances, problems with continuing political reform, China's place in international trade and political systems, the environmental costs and the like.

Throughout China Today, the relevance of historical, theoretical and ideological issues for understanding current developments in China and applying critical thinking are stressed. Where possible, the relevant underlying principles are related to Australia.

ASIA 2023

Japan Today: Politics & Governance

3 units - semester 1

1 Lecture, 1 workshop per week

Prerequisite(s): 3 units Humanities/Social Sciences

Assessment: Participation 10%, reflection papers 15%, 2 short tests 20% research paper 40%

Japan Today focuses on post-war Japanese political development. It provides students with an appreciation of the workings of the Japanese political and policy making system and some key societal issues with which political leaders in Japan need to grapple and find solutions. Additionally, it aims at assisting students to apply concepts and methods (especially those of political science) to an industrialised and democratic country in Asia. While Japan Today is designed to provide students

of Asian and international studies some of the essential conceptual and analytical tools to understand politics in a foreign country, it also serves as an introduction to contemporary Japan which will be of interest to a wide range of students, especially those whose future jobs might be related to Japan. The course covers political developments since the end of war and tackles the issues of who governs Japan and how transparent and liberal its institutions are. The course may also cover some topical political concerns such as education, environment, population and migration and their implications for Japanese society.

ASIA 2025

Re-Orienting Asia: Towards a Sustainable Future

3 units - semester 1

3 contact hours per week

Prerequisite(s): 12 units Level I Humanities/Social Sciences or equivalent as approved by the Coordinator

Incompatible: ASIA 2014/3014

Assessment: Participation (10%), workshop presentation (10%), reflection papers (20%), bibliographical exercise (10%), research presentation (10%), research essay (40%)

The course explores the possibility of constructing a paradigm for a sustainable society with reference to Asia. While addressing broad issues such as climate change and the financial crisis, the course primarily draws upon examples in Japan which, implicitly or explicitly, have constituted a model of development for the region. As the post-industrial superpower shows signs of unsustainability in key aspects of its society, witnesses from within various social movements that now proliferate, are critically addressing the negative legacies of the existing model of development, and attempting to build a better future. The course analyses these movements through the lens of participant experience. Thus the voices of people often silenced are included, such as victims of industrial pollution, farmers and fishermen, people displaced due to development, 'educational refugees', the urban poor, the elderly, the sick, etc. The course examines the possibility that a holistic sense of humans being connected with each other; with nature and other species; with ancestors and descendants; with their cultural and spiritual heritages, may constitute a key concept in the new paradigm. While the Japanese perspective provides the backbone, Japanese cases will then be matched, where possible, with examples in other parts of Asia, especially China.

HONOURS

ASIA 4401A/B

Honours Asian Studies

24 units - full year

Prerequisite: UG degree, Credit average in courses contributing to major in Asian Studies or equiv. approved by Head of Discipline

Assessment: 2 coursework topics with written work of approx 7,200-9,000 words 25% each, 15,000-20,000 word thesis 50%

Students wishing to take Honours Asian Studies are encouraged to consult the Honours Coordinator prior to commencing Advanced level studies to ensure that

appropriate course choices are made in preparation for Honours. Entry to Honours is subject to the approval of the Head of Discipline on advice from the Honours Committee. The Honours program consists of three elements: a research thesis and 2 coursework topics which normally include theory and methodology in Asian Studies. Unlike Honours Chinese Studies (CHIN 4401) and Honours Japanese Studies (JAPN 4401), Honours Asian Studies (ASIA 4401) does not require an Asian Language (Chinese or Japanese). We encourage students who are eligible for Honours in more than one discipline to consider a Joint Honours program with the approval of the Heads of Discipline on advice from their respective Honours Coordinators. Students wishing to take Honours but who are without prerequisites are advised to consult the Honours Coordinator as soon as possible.

Biochemistry

LEVEL II

BIOCHEM 2500 Biochemistry II: Molecular and Cell Biology

3 units - semester 1

5 x 1 hour lectures, 4 hour practical, 1 hour tutorial per fortnight

Available for Non-Award Study

Prerequisite: CHEM 1100 and CHEM 1200, BIOLOGY 1101 and BIOLOGY 1201 or BIOLOGY 1202

Incompatible: BIOCHEM 2502 and BIOCHEM 2504

Assessment: Exam, tutorial assessments, continuous assessments in the form of tests, and practical component assessments

This Biochemistry course aims to provide students with an understanding and an appreciation of Molecular Biology and Metabolic Biochemistry concepts. The topics covered include: DNA structure, synthesis and repair, RNA and protein synthesis and the control of gene expression, recombinant DNA technology, cell structure and organisation and signal transduction pathways.

The practical component for this course draws from the MBS Practical series: Prac A, Prac B and Prac C. Students should be referred to Current Students Online information at www.sciences.adelaide.edu.au for information about enrolling in these practicals.

BIOCHEM 2501 Biochemistry II: Metabolism

3 units - semester 2

5 x 1 hour lectures, 4 hour practical, 1 hour tutorial per fortnight

Available for Non-Award Study

Prerequisite: CHEM 1100 and CHEM 1200, BIOLOGY 1101 and BIOLOGY 1201 or BIOLOGY 1202

Incompatible: BIOCHEM 2503 and BIOCHEM 2505

Assessment: Exam, tutorial assessments, continuous assessments in the form of tests and practical reports

This Biochemistry course aims to provide students with an understanding and an appreciation of Molecular Biology and Metabolic Biochemistry concepts. The topics

covered include: specialised proteins, enzyme specificity and regulation, tissue specific metabolism and its control, some disease states that illustrate this control, how the body adjusts to variations in the demand for energy, mechanisms of hormone action and extensions of the signal transduction pathways covered in semester 1.

The practical component for this course draws from the MBS Practical series: Prac A, Prac B and Prac C. Students should be referred to Current Students Online information at www.sciences.adelaide.edu.au for information about enrolling in these practicals.

BIOCHEM 2502 Biochem II (Biotech): Molecular and Cell Biology

3 units - semester 1

5 x 1 hour lectures, 4 hour practical, 1 hour tutorial per fortnight

Restriction: B.Sc (Biotechnology)

Prerequisite: CHEM 1100 and CHEM 1200, BIOLOGY 1101 and BIOLOGY 1201 or BIOLOGY 1202

Incompatible: BIOCHEM 2500 and BIOCHEM 2504

Assessment: Exam, tutorial assessments, continuous assessments in the form of tests and practical reports

This Biochemistry course aims to provide students with an understanding and an appreciation of Molecular Biology and Metabolic Biochemistry concepts. The topics covered include: DNA structure, synthesis and repair, RNA and protein synthesis and the control of gene expression, recombinant DNA technology, cell structure and organisation and signal transduction pathways.

The practical component for this course draws from the MBS Practical series: Prac A, Prac B and Prac C. Students should be referred to Current Students Online information at www.sciences.adelaide.edu.au for information about enrolling in these practicals.

BIOCHEM 2503 Biochemistry II (Biotechnology): Metabolism

3 units - semester 2

5 x 1 hour lectures, 4 hour practical, 1 hour tutorial per fortnight

Restriction: B.Sc (Biotechnology)

Prerequisite: CHEM 1100 and CHEM 1200, BIOLOGY 1101 and BIOLOGY 1201 or BIOLOGY 1202

Incompatible: BIOCHEM 2501 and BIOCHEM 2505

Assessment: Exam, tutorial assessments, continuous assessments in the form of tests and practical reports

This Biochemistry course aims to provide students with an understanding and an appreciation of Molecular Biology and Metabolic Biochemistry concepts. The topics covered include: specialised proteins, enzyme specificity and regulation, tissue specific metabolism and its control, some disease states that illustrate this control, how the body adjusts to variations in the demand for energy, mechanisms of hormone action and extensions of the signal transduction pathways covered in semester 1.

The practical component for this course draws from the MBS Practical series: Prac A, Prac B and Prac C. Students should be referred to Current Students Online information at www.sciences.adelaide.edu.au for information about enrolling in these practicals.

BIOCHEM 2504

Biochem II (Mol Biol): Molecular and Cell Biology

3 units - semester 1

5 x 1 hour lectures, 4 hour practical, 1 hour tutorial per fortnight

Restriction: B.Sc (Molecular Biology)

Prerequisite: CHEM 1100 and CHEM 1200, BIOLOGY 1101 and BIOLOGY 1201 or BIOLOGY 1202

Corequisite: BIOCHEM 2510

Incompatible: BIOCHEM 2500 and BIOCHEM 2502

Assessment: Exam, tutorial assessments, continuous assessments in the form of tests and practical reports

Biochemistry provides an understanding and an appreciation of Molecular Biology, Cell Biology and Metabolic Biochemistry. The topics covered include: DNA structure and synthesis, mutation and repair, RNA and protein synthesis and the control of gene expression, recombinant DNA technology, cell structure and organisation, and signal transduction pathways.

BIOCHEM 2505

Biochemistry II (Mol Biol): Metabolism

3 units - semester 2

5 x 1 hour lectures, 4 hour practical, 1 hour tutorial per fortnight

Restriction: B.Sc (Molecular Biology)

Prerequisite: CHEM 1100 and CHEM 1200, BIOLOGY 1101 and BIOLOGY 1201 or BIOLOGY 1202

Corequisite: BIOCHEM 2520

Incompatible: BIOCHEM 2501 and BIOCHEM 2503

Assessment: Exam, tutorial assessments, continuous assessments in the form of tests and practical reports

Biochemistry provides an understanding and an appreciation of Molecular Biology, Cell Biology and Metabolic Biochemistry. The topics covered include: specialised proteins, enzyme specificity and regulation, tissue specific metabolism and its control, how the body adjusts to variations in the demand for energy, mechanisms of hormone action and signal transduction pathways including some disease states.

BIOCHEM 2506

Biochem II (Med Surg): Molecular & Cell Biology

3 units - semester 1

5 x 1 hour lectures per fortnight, 1 hour tutorial per week

Restriction: Bachelor of Medicine and Bachelor of Surgery

Assessment: Exam, tutorial assessments, continuous assessments in the form of tests, and practical component assessments

This Biochemistry course aims to provide students with an understanding and an appreciation of Molecular Biology and Metabolic Biochemistry concepts. The topics covered include: DNA structure, synthesis and repair, RNA and protein synthesis and the control of gene expression, recombinant DNA technology, cell structure and organisation and signal transduction pathways. The practical component for this course draws from the MBS Practical series: Prac A, Prac B and Prac C. Students should be referred to Current Students Online information at www.sciences.adelaide.edu.au for information about enrolling in these practicals.

BIOCHEM 2507

Biochemistry II (Med Surg): Metabolism

3 units - semester 2

5 x 1 hour lectures per fortnight, 1 hour tutorial per week

Restriction: Bachelor of Medicine and Bachelor of Surgery

Assessment: Exam, tutorial assessments, continuous assessments in the form of tests and practical reports

This Biochemistry course aims to provide students with an understanding and an appreciation of Molecular Biology and Metabolic Biochemistry concepts. The topics covered include: specialised proteins, enzyme specificity and regulation, tissue specific metabolism and its control, some disease states that illustrate this control, how the body adjusts to variations in the demand for energy, mechanisms of hormone action and extensions of the signal transduction pathways covered in semester 1. The practical component for this course draws from the MBS Practical series: Prac A, Prac B and Prac C. Students should be referred to Current Students Online information at www.sciences.adelaide.edu.au for information about enrolling in these practicals.

BIOCHEM 2510

Advanced Molecular Biology IIA

3 units - semester 1

2 hour tutorial, 4 hour practical per fortnight

Restriction: B.Sc (Molecular Biology)

Prerequisite: BIOLOGY 1101 & 1201, 6 units of Level I Chemistry

Corequisite: CHEM 2510 or CHEM 2101

Assessment: Tutorial, practical assessments

This course combines special set of tutorials centred around research activities in molecular biology with practical exercises and/or laboratory placements. The content is designed to provide students with a perspective of how cutting edge molecular biology principles and techniques are applied to major research questions. The tutorial segment of the course will include aspects of biochemistry, genetics, microbiology/immunology and chemistry. This course will illustrate that cross disciplinary approaches are essential in modern research.

BIOCHEM 2520

Advanced Molecular Biology IIB

3 units - semester 2

2 hour tutorial, 4 hour practical per fortnight

Restriction: B.Sc (Molecular Biology)

Prerequisite: BIOLOGY 1101 & 1201, 6 units of Level I Chemistry

Corequisite: CHEM 2520 or CHEM 2201

Assessment: Tutorial, practical assessments

This course combines special set of tutorials centred around research activities in molecular biology with practical exercises and/or laboratory placements. The content is designed to provide students with a perspective of how cutting edge molecular biology principles and techniques are applied to major research questions. The tutorial segment of the course will

include aspects of biochemistry, genetics, microbiology/immunology and chemistry. This course will illustrate that cross disciplinary approaches are essential in modern research.

LEVEL III

BIOCHEM 3000 **Molecular and Structural Biology III**

6 units - semester 1

3 x 1 hour lectures, 1 hour tutorial per week, 3 x 5 hour practicals per fortnight

Available for Non-Award Study

Prerequisite: BIOCHEM 2500 and BIOCHEM 2501 or equiv

Incompatible: BIOCHEM 3110

Assessment: Exam on lecture material, practical component

This course has two major aims - to extend the discussions presented in Biochemistry II of molecular biology, and structure and function of proteins. Topics include - structure and function of different classes of proteins, protein folding, molecular recognition, chromatin structure and its remodelling during transcription, RNA synthesis, processing, modification, stability, translation, and manipulation of these to effect selective gene expression.

BIOCHEM 3001 **Cell and Developmental Biology III**

6 units - semester 2

3 x 1 hour lectures, 1 hour tutorial per week, 3 x 5 hour practicals per fortnight

Available for Non-Award Study

Prerequisite: BIOCHEM 2500 and BIOCHEM 2501 or equiv

Assumed Knowledge: BIOCHEM 3000

Assessment: Exam on lecture material, practical component

This course will focus on molecular aspects of cell and developmental biology. Over the last few years major advances have been made towards a complete understanding of cell behaviour, how cells respond to intracellular and extracellular signalling pathways and how this plays a central role in control of cell proliferation, development and disease states such as cancer. Topics include - intracellular compartments, trafficking of proteins and other molecules; the cytoskeleton and its role in determining cell shape; cell adhesion and cell migration. The course also examines molecular mechanisms underlying cell-cell communication, signal transduction pathways, control of cell proliferation, cell fate decisions and differentiation. Specific topics include cell cycle control, chromosomal DNA replication, programmed cell death/apoptosis and molecular control of cell lineage. All of these concepts are finally integrated to discuss the role of oncogenes and tumour suppressor genes in the molecular basis of cancer. The molecular basis of animal development in both simple systems and vertebrates will be discussed, including limb regeneration, differentiation and morphogenesis, the molecular basis of segmentation and body plan, cellular events during embryogenesis, the role of growth factors in developmental decisions and

medical applications. Animal transgenesis will also be discussed.

BIOCHEM 3125 **Advanced Molecular Biology IIIA (Biochemistry)**

6 units - semester 1

3 x 1 hour lectures, 1 hour tutorial per week, 3 x 4 hour practicals per fortnight

Restriction: BSc (Molecular Biology)

Prerequisite: BIOCHEM 2510, 2520, 2102 and 2202

Incompatible: BIOCHEM 3000 and GENETICS 3110

Assessment: Written exam on lecture material, written & oral reports on practicals & tutorials

This course combines lectures from Molecular and Structural Biology 3 with practical exercises and/or laboratory placements in professional research laboratories. It includes a special set of tutorial/Problem Based Learning (PBL) exercises, not offered in any other course, which are designed to provide students with a perspective of how cutting edge molecular biology principles and techniques are applied to major research questions. The PBL segment of course will include aspects of biochemistry, genetics, microbiology/immunology and chemistry. This course will illustrate that cross-disciplinary approaches are essential in modern research.

BIOCHEM 3225 **Advanced Molecular Biology IIIB (Biochemistry)**

6 units - semester 2

3 x 1 hour lectures, 1 hour tutorial per week, 3 x 4 hour practicals per fortnight

Restriction: BSc (Molecular Biology)

Prerequisite: BIOCHEM 2510, 2520, 2102 and 2202

Assumed Knowledge: BIOCHEM 3125

Incompatible: BIOCHEM 3001 and GENETICS 3210

Assessment: Written exam on lecture material, written and oral reports on practicals and tutorials

This course combines lectures from Cell and Developmental Biology 3 with practical exercises and/or laboratory placements in professional research laboratories. It includes a special set of tutorial/Problem Based Learning (PBL) exercises, not offered in any other course, which are designed to provide students with a perspective of how cutting edge molecular biology principles and techniques are applied to major research questions. The PBL segment of the course will include aspects of biochemistry, genetics, microbiology/immunology and chemistry. This course will illustrate that cross-disciplinary approaches are essential in modern research.

HONOURS

BIOCHEM 4000A/B **Honours Biochemistry**

24 units - full year

Prerequisite: Satisfactory performance in Level III courses offered by School of Molecular and Biomedical Science - students from other Departments/Institutions who have passed suitable Level III courses may be considered

Intending Honours candidates should consult the Head of Biochemistry during the final year of the BSc

Candidates are required to give their full time to a special program of study and experimental work. Candidates will normally be expected to start the program on the first Monday of February, but this can be altered in special circumstances by arrangement with the Discipline Leader for Biochemistry.

The work includes participation in a series of lecture-symposia on topics of modern biochemistry; participation in research seminars, and importantly, the performance of research work under the supervision of one or more members of the Biochemistry staff. Early in the year students will report on the aim, significance and approach of their research topic. During the program candidates may present and defend an original proposition on science and submit the results of their research in the form of a thesis, which will also contain a literature review surrounding their research topic.

Biology

LEVEL I

BIOLOGY 1101

Biology I: Molecules, Genes and Cells

3 units - semester 1

3 x 1 hour lectures, 1 hour tutorial per week, 3 hour practical per fortnight

Available for Non-Award Study

Incompatible: BIOLOGY 1101MED, BIOLOGY 1102MED, ENV B101 1000A/B and GENETICS 1000A/B

Assessment: Exams, practical work/workshops, tutorial assessment

The study of biology covers an incredibly wide range of themes; from simple molecules, cells, organelles and tissues to whole organisms and their interaction with the environment and their ability to evolve. The aim of this course is to introduce many of these concepts, thereby providing the foundation for further studies in semester 2 courses and more specialist level II/III courses. Topics to be covered include the chemicals of life, macromolecules, the role of nucleic acids in genetic information transfer, protein synthesis, lipid membranes and the structure of cells, storage and utilisation of energy, meiosis and mitosis.

BIOLOGY 1101MED

Biology I: Molecules, Genes and Cells

3 units - semester 1

3 x 1 hour lectures, 1 hour tutorial per week, 2 x 1 hour & 1 x 2 hour workshop per semester

Restriction: Bachelor of Medicine and Bachelor of Surgery

The study of biology covers an incredibly wide range of themes; from simple molecules, cells, organelles and tissues to whole organisms and their interaction with the environment and their ability to evolve. The aim of this course is to introduce many of these concepts, thereby providing the foundation for further studies in semester 2

courses and more specialist level II/III courses. Topics to be covered include the chemicals of life, macromolecules, the role of nucleic acids in genetic information transfer, protein synthesis, lipid membranes and the structure of cells, storage and utilisation of energy, meiosis and mitosis.

BIOLOGY 1201

Biology I: Human Perspectives

3 units - semester 2

3 x 1 hour lectures, 2 hour tutorial per week, 2 x 2 hour practical per semester

Available for Non-Award Study

Assumed Knowledge: BIOLOGY 1101

Incompatible: ENV B101 1000A/B, GENETICS 1000A/B and BIOLOGY 1202

Assessment: Exams, practical work/tutorial assessment

This course builds on fundamentals of biology that have been developed in Molecules, Genes and Cells. The course takes molecular, cellular, whole body, population and evolutionary approaches to understanding biology as it pertains to human function and the interactions of the body with the environment. In many cases, our understanding of human function is best derived for studies of mammalian and non-mammalian organisms, and where appropriate, such models will be discussed. The themes that will be covered include: the organisation of the body, evolution, inheritance, regulation of gene expression, communication and control systems in the body; developmental biology and defence systems. Sessions, which provide opportunities to integrate the information and demonstrate how it provides an understanding of normal human function and of disease, will be a regular feature of the course.

BIOLOGY 1201MED

Biology I: Human Perspectives

3 units - semester 2

3 x 1 hour lecture per week, 1 x 2 hour tutorial per week, 2 x 2 hour practical per semester

Restriction: Bachelor of Medicine and Bachelor of Surgery

Assumed Knowledge: BIOLOGY 1101

Incompatible: Medical students only

This course builds on fundamentals of biology that have been developed in Molecules, Genes and Cells. The course takes molecular, cellular, whole body, population and evolutionary approaches to understanding biology as it pertains to human function and the interactions of the body with the environment. In many cases, our understanding of human function is best derived for studies of mammalian and non-mammalian organisms, and where appropriate, such models will be discussed. The themes that will be covered include: the organisation of the body, evolution, inheritance, regulation of gene expression, communication and control systems in the body; developmental biology and defence systems. Sessions, which provide opportunities to integrate the information and demonstrate how it provides an understanding of normal human function and of disease, will be a regular feature of the course.

BIOLOGY 1202 **Biology I: Organisms**

3 units - semester 2

3 x 1 hour lectures, 1 hour tutorial, 3 hour practical per week

Assumed Knowledge: BIOLOGY 1101 or BIOLOGY 1102

Incompatible: ENV BIOL 1000A/B, GENETICS 1000A/B, BIOLOGY 1201 and ENV BIOL 1003

Assessment: Exam, assignment, practical reports

This course focuses on the biology and diversity of multicellular organisms, with evolution as the central theme. It addresses key questions in biology: What are plants and animals? How do they evolve? How do they function? How do they interact with other organisms and the environment? These questions are answered by analysing the scientific evidence that supports current theory.

BIOLOGY 1203RW **Biology of Plants and Animals I**

3 units - semester 2

1 x 2 hour lectures, 1 hour tutorial, 3 hour practical per week

Assumed Knowledge: BIOLOGY 1103RW or equiv

Incompatible: BIOLOGY 1202 and BIOLOGY 1203RW

Assessment: Exam, tutorial exercises, practical reports

This course is an introduction to the diversity of form and function in higher plants and animals. Examples of both native and agricultural species are used to illustrate the structure and function of flowering plants and vertebrate animals, their reproduction, growth, nutrition, control systems, and interactions with the environment.

BIOLOGY 1510 **Biology I: Molecules, Genes & Cells (Pre-Vet)**

3 units - semester 1

3 x 1 hour lectures 1 hour tutorial per week, 3 hour practical per fortnight

Restriction: BSc (Pre-Veterinary)

Assessment: Exams, practical work/workshops, tutorial assessment

The study of biology covers an incredibly wide range of themes; from simple molecules, cells, organelles and tissues to whole organisms and their interaction with the environment and their ability to evolve. The aim of this course is to introduce many of these concepts, thereby providing the foundation for further studies in semester 2 courses and more specialist level II/III courses. Topics to be covered include the chemicals of life, macromolecules, the role of nucleic acids in genetic information transfer, protein synthesis, lipid membranes and the structure of cells, storage and utilisation of energy, meiosis and mitosis.

BIOLOGY 1520 **Biology I: Organisms (Pre-Vet)**

3 units - semester 2

3 x 1 hour lectures, 1 hour tutorial, 3 hour practical per week

Restriction: BSc (Pre-Veterinary)

Assessment: Exam, assignment, practical reports

This course focuses on the biology and diversity of multicellular organisms, with evolution as the central theme. It addresses key questions in biology: What are plants and animals? How do they evolve? How do they function? How do they interact with other organisms and the environment? These questions are answered by analysing the scientific evidence that supports current theory.

Biometry

LEVEL II

BIOMET 2500RW/WT **Research Methodology II**

3 units - semester 2

2 x 1 hour lecture, 2 hour practical, 2 hour tutorial per week

Assumed Knowledge: STATS 1000 or STATS 1004

Assessment: Reports, assignments, exam

This course is concerned with understanding and application of the scientific method in biological research. The course has a foundation in the philosophy of science. Particular emphasis is given to the application of statistical hypothesis testing, which is explored in a series of case studies. In addition, research skills in project management, teamwork and presentations skills are developed in the context of scientific research.

LEVEL III

BIOMET 3000WT **Agricultural Experimentation III**

3 units - semester 1

2 x 1 hour lectures, 1 3 hour practical per week

Prerequisite: STATS 1004 or STATS 1000

Assessment: Individual assignment, written assignments, final exam

The philosophy of science via experimental design and data analysis. Topics covered include: Simple Linear Regression, Polynomial and Multiple Regression. Analysis of Variance including, One-way (without or with Blocking), Latin Squares, Factorial, and Split-Plot Designs. In addition, Analysis of Covariance, Linear Contrast (including Orthogonal Polynomials), advanced Regression and Generalised Linear Models may be covered. The statistical package GenStat will be used for the designing of experiments and the analysis of data sets.

Biotechnology

LEVEL I

BIOTECH 1000 **Introduction to Biotechnology I**

3 units - semester 1

2 x 1 hour lectures, 4 hour practical per week

Restriction: BSc (Biotechnology)

Assessment: Exam, assignments/group projects

Global significance of biotechnology, categories of biotechnology processes and products, "traditional" vs "modern" biotechnology processes; key developments in history of biotechnology, enabling technologies - fermentation, downstream processing; recombinant methods, antibody monoclonals, analysis and automation, PCR, genomics, proteomics, metabolomics; biotechnology enterprises in South Australia and Australia, global biotechnology enterprises/industries; biotechnology and society - perceived vs actual benefits and drawbacks, legal and ethical issues, regulations governing biotechnology research and industry; considerations in the genesis of the typical biotechnology process/product/enterprise: development costs, venture capital, patenting, product safety, legislation, marketing. Case studies on the interdisciplinary nature of biotechnology and factors favouring local/regional development of a biotechnology industry will also be included. Some field trips may be required.

LEVEL III

BIOTECH 3000 **Biotechnology Practice III**

6 units - semester 2

3 x 1 hour lectures, 1 x 1 hour tutorial, 1 x 5 hours project work per week

Restriction: BSc (Biotechnology)

Prerequisite(s): MICRO 2504, MICRO 2505, BIOCHEM 2502 and BIOCHEM 2503

Assessment: Written exam, project

The aim of this course is to add to the strong scientific focus of the degree by providing an introduction to aspects of technology, business and ethical issues relevant to the diverse nature of the biotechnology industry. Students completing this course should be well equipped to undertake further studies (e.g. Honours in Biotechnology or a Master of Business Administration), obtain employment in research laboratories, obtain employment in local, interstate and overseas biotechnology companies or create their own business. Topics include intellectual property and its commercialisation, basic business accounting, preparing a business plan, principles in bioprocess engineering and design, use of animal and plant cell culture systems,

validation and monitoring, food biotechnology, genetically modified organisms, food additives and byproducts. The group-based project involves preparation of a business plan to operate a model biotechnology business.

Business Studies

LEVEL I

EXCHANGE 1000BUS **Exchange Studies for Business Students**

12 units - semester 1 or semester 2

EXCHANGE 1001BUS **Exchange Studies for Business Students**

9 units - semester 1 or semester 2

EXCHANGE 1002BUS **Exchange Studies for Business Students**

6 units - semester 1 or semester 2

EXCHANGE 1003BUS **Exchange Studies for Business Students**

3 units - semester 1 or semester 2

Chemistry

LEVEL I

CHEM 1100 **Chemistry IA**

3 units - semester 1

3 x 1 hour lectures, 1 hour tutorial per week, 6 x 3 hour practicals per semester

Available for Non-Award Study

Prerequisite(s): SACE Stage 2 Chemistry with Subject Achievement score of at least 13 or equiv - in exceptional circumstances, consult Head of Chemistry

Incompatible: CHEM 1101 and CHEM 1201

Assessment: Exam, practical work, computer assessed tutorials

Atoms to Molecules - structure of the atom and molecular bonding. Periodicity and the Main Group - chemistry of the main group metals and non-metals. Energy and Equilibrium - the relevance of intermolecular forces, chemical equilibrium, energy considerations and chemical reactivity applied to aspects of chemistry and biochemistry. Transition Metal Chemistry - an introduction to bonding in transition (d-block) elements, coordination complexes, bioinorganic systems.

CHEM 1101 **Foundations of Chemistry IA**

3 units - semester 1

3 x 1 hour lectures, 1 hour tutorial per week, 5 x 3 hour practicals per semester

Restriction: SACE Stage 2 Chemistry Subject Achievement score of less than 13 or equiv or with no SACE Stage 2 Chemistry.

Available for Non-Award Study

Assumed Knowledge: SACE Stage 2 Chemistry or equivalent

Incompatible: CHEM 1100 and CHEM 1200

Assessment: Exam, practical work, computer assessed tutorials

Atoms, Molecules & Structure - an introduction to theories of molecule formation and structure including the importance of molecular shape; intermolecular forces. Chemistry of the Elements - an introduction to the chemistry of the elements, including redox processes, natural and biological element cycles, atmospheric chemistry and the crucial differences in the chemistries of the s-, p- and d-block elements.

CHEM 1200 Chemistry IB

3 units - semester 2

3 x 1 hour lectures, 1 hour tutorial per week, 6 x 3 hour practicals per semester

Available for Non-Award Study

Prerequisite(s): SACE Stage 2 Chemistry Subject Achievement score of at least 13 or equiv - in exceptional circumstances, consult Head of Chemistry

Assumed Knowledge: CHEM 1100

Incompatible: CHEM 1101 and CHEM 1201

Assessment: Exam, practical work, computer assessed tutorials

Acids, Bases and Electrochemistry - aspects of acid/base equilibria and electrochemical processes. Structure Determination - the importance of molecular shape and how chemists determine the structure of compounds using spectroscopic techniques including ultraviolet, infrared and nuclear magnetic resonance spectroscopy. Synthetic and Bio-organic Chemistry - an introduction to chemical synthesis with particular reference to addition and substitution reactions. Strategies for synthesis and properties of biologically significant molecules will also be addressed.

CHEM 1201 Foundations of Chemistry IB

3 units - semester 2

3 x 1 hour lectures, 1 hour tutorial per week, 5 x 3 hour practicals per semester

Restriction: SACE Stage 2 Chemistry Subject Achievement score of less than 13 or equiv or with no SACE Stage 2 Chemistry.

Available for Non-Award Study

Assumed Knowledge: CHEM 1101

Incompatible: CHEM 1100 and CHEM 1200

Assessment: Exam, practical work, computer assessed tutorials

Equilibrium & Energy - Introduction to chemical equilibrium - acids and bases, titrations, buffers. Energy considerations applied to aspects of chemistry and biochemistry. Bio-organic & Polymer Chemistry - introduction to spectroscopic identification of functional groups and molecular structure, chemistry of synthetic and biological polymers including polyalkenes, polyesters and polyamides; peptides and proteins.

CHEM 1510 Chemistry IA (Pre-Vet)

3 units - semester 1

3 x 1 hour lectures, 1 hour tutorial per week, 6 x 3 hour practicals per semester

Restriction: BSc (Pre-Veterinary)

Prerequisite(s): SACE Stage 2 Chemistry with Subject Achievement score of at least 13 or equiv - in exceptional circumstances, consult Head of Chemistry

Incompatible: CHEM 1511 and CHEM 1521

Assessment: Exam, practical work, computer assessed tutorials

Atoms to Molecules - structure of the atom and molecular bonding. Periodicity and the Main Group - chemistry of the main group metals and non-metals. Energy and Equilibrium - the relevance of intermolecular forces, chemical equilibrium, energy considerations and chemical reactivity applied to aspects of chemistry and biochemistry. Transition Metal Chemistry - an introduction to bonding in transition (d-block) elements, coordination complexes, bioinorganic systems.

CHEM 1511 Foundations of Chemistry IA (Pre-Vet)

3 units - semester 1

3 x 1 hour lectures, 1 hour tutorial per week, 5 x 3 hour practicals per semester

Restriction: BSc (Pre-Veterinary) with SACE Stage 2 Chemistry Subject Achievement score of less than 13 or equiv or with no SACE Stage 2 Chemistry.

Assumed Knowledge: SACE Stage 2 Chemistry or equivalent

Incompatible: CHEM 1510 and CHEM 1520

Assessment: Exam, practical work, computer assessed tutorials

Atoms, Molecules & Structure - an introduction to theories of molecule formation and structure including the importance of molecular shape; intermolecular forces. Chemistry of the Elements - an introduction to the chemistry of the elements, including redox processes, natural and biological element cycles, atmospheric chemistry and the crucial differences in the chemistries of the s-, p- and d-block elements.

CHEM 1520 Chemistry IB (Pre-Vet)

3 units - semester 2

3 x 1 hour lectures, 1 hour tutorial per week, 6 x 3 hour practicals per semester

Restriction: BSc (Pre-Veterinary)

Prerequisite(s): SACE Stage 2 Chemistry Subject Achievement score of at least 13 or equiv - in exceptional circumstances, consult Head of Chemistry

Assumed Knowledge: CHEM 1510

Incompatible: CHEM 1511 and CHEM 1521

Assessment: exam, practical work, computer assessed tutorials

Matter and Energy - the relevance of intermolecular forces, chemical equilibrium, energy considerations and chemical reactivity applied to aspects of chemistry and biochemistry. Synthetic and Bioorganic Chemistry - an introduction to chemical synthesis with particular reference to addition and substitution reactions.

Strategies for synthesis and properties of biologically significant molecules will also be addressed.

CHEM 1521 **Foundations of Chemistry IB (Pre-Vet)**

3 units - semester 2

3 x 1 hour lectures, 1 hour tutorial per week, 5 x 3 hour practicals per semester

Restriction: BSc (Pre-Veterinary) with SACE Stage 2 Chemistry Subject Achievement score of less than 13 or equiv or with no SACE Stage 2 Chemistry.

Assumed Knowledge: CHEM 1511

Incompatible: CHEM 1510 and CHEM 1520

Assessment: Exam, practical work, computer assessed tutorials

Equilibrium & Energy - Introduction to chemical equilibrium - acids and bases, titrations, buffers. Energy considerations applied to aspects of chemistry and biochemistry. Bio-organic & Polymer Chemistry - introduction to spectroscopic identification of functional groups and molecular structure, chemistry of synthetic and biological polymers including polyalkenes, polyesters and polyamides; peptides and proteins.

LEVEL II

CHEM 2510 **Chemistry IIA**

3 units - semester 1

3 x 1 hour lectures, 1 hour tutorial per week, 8 x 5 hour practicals per semester

Available for Non-Award Study

Prerequisite: CHEM 1100 and CHEM 1200 or Credit in CHEM 1101 and CHEM 1201. Other students may apply to Head of Chemistry for exemption

Incompatible: CHEM 2512, 2514, 2516, 2100, 2105, 2106 & 2107

Assessment: Exam, practical work, tutorials

Studies in Chemistry at Level II deal with a range of fundamental concepts that can be used to explain various phenomena in chemistry, biology and materials science. The courses have been designed to provide students who have an interest in chemistry with the necessary knowledge and skills to undertake further studies in chemistry or pursue alternative pathways in the biological, environmental, earth and physical sciences.

Chemistry IIA focuses on chemical reactivity and illustrates how reactions occur and how structure influences the properties of molecules. The examples used to illustrate these points draw on expertise in the areas of stereochemistry, synthesis, properties and reactions of molecules, thermodynamics, kinetics and the principles of metal ligand chemistry.

CHEM 2512 **Chemistry IIA (Ecochemistry)**

3 units - semester 1

3 x 1 hour lectures, 1 hour tutorial per week, 8 x 5 hour practicals per semester

Restriction: BSc (Ecochemistry)

Prerequisite: CHEM 1100 & 1200 or Credit in CHEM 1101 & 1201 - other students apply to Head of Chemistry for exemption

Incompatible: CHEM 2510, 2514, 2516, 2100, 2105, 2106 & 2107

Assessment: Exam, practical work, tutorials

Studies in Chemistry at Level II deal with a range of fundamental concepts that can be used to explain various phenomena in chemistry, biology and materials science. The courses have been designed to provide students who have an interest in chemistry with the necessary knowledge and skills to undertake further studies in chemistry or pursue alternative pathways in the biological, environmental, earth and physical sciences.

Chemistry IIA (Ecochemistry) focuses on chemical reactivity and illustrates how reactions occur and how structure influences the properties of molecules. The examples used to illustrate these points draw on expertise in the areas of stereochemistry, synthesis, properties and reactions of molecules, thermodynamics, kinetics and the principles of metal ligand chemistry.

CHEM 2514 **Chemistry IIA (Molecular and Drug Design)**

3 units - semester 1

3 x 1 hour lectures, 1 hour tutorial per week, 8 x 5 hour practicals per semester

Restriction: BSc (Molecular and Drug Design)

Prerequisite: CHEM 1100 & 1200 or Credit in CHEM 1101 & 1201 - other students apply to Head of Chemistry for exemption

Incompatible: CHEM 2510, 2514, 2516, 2100, 2105, 2106 & 2107

Assessment: Exam, practical work, tutorials

Studies in Chemistry at Level II deal with a range of fundamental concepts that can be used to explain various phenomena in chemistry, biology and materials science. The courses have been designed to provide students who have an interest in chemistry with the necessary knowledge and skills to undertake further studies in chemistry or pursue alternative pathways in the biological, environmental, earth and physical sciences.

Chemistry IIA (Molecular and Drug Design) focuses on chemical reactivity and illustrates how reactions occur and how structure influences the properties of molecules. The examples used to illustrate these points draw on expertise in the areas of stereochemistry, synthesis, properties and reactions of molecules, thermodynamics, kinetics and the principles of metal ligand chemistry.

CHEM 2516 **Chemistry IIA (Nanoscience and Materials)**

3 units - semester 1

3 x 1 hour lectures, 1 hour tutorial per week, 8 x 5 hour practicals per semester

Restriction: BSc (Nanoscience and Materials)

Prerequisite: CHEM 1100 & 1200 or Credit in CHEM 1101 & 1201 - other students apply to Head of Chemistry for exemption

Incompatible: CHEM 2510, 2514, 2516, 2100, 2105, 2106 & 2107

Assessment: Exam, practical work, tutorials

Studies in Chemistry at Level II deal with a range of fundamental concepts that can be used to explain various phenomena in chemistry, biology and materials science.

The courses have been designed to provide students who have an interest in chemistry with the necessary knowledge and skills to undertake further studies in chemistry or pursue alternative pathways in the biological, environmental, earth and physical sciences.

Chemistry IIA (Nanoscience and Materials) focuses on chemical reactivity and illustrates how reactions occur and how structure influences the properties of molecules. The examples used to illustrate these points draw on expertise in the areas of stereochemistry, synthesis, properties and reactions of molecules, thermodynamics, kinetics and the principles of metal ligand chemistry.

CHEM 2520 Chemistry IIB

3 units - semester 2

3 x 1 hour lectures, 1 hour tutorial per week, 8 x 5 hour practicals per semester

Available for Non-Award Study

Prerequisite(s): CHEM 1100 & 1200 or Credit in CHEM 1101 & 1200 - other students may apply to Head of Chemistry for exemption

Assumed Knowledge: CHEM 2510

Incompatible: CHEM 2522, CHEM 2524, CHEM 2526, CHEM 2200, CHEM 2205, CHEM 2206 and CHEM 2210

Assessment: Exam, practical work, tutorials

Studies in Chemistry at Level II deal with a range of fundamental concepts that can be used to explain various phenomena in chemistry, biology and materials science. The courses have been designed to provide students who have an interest in chemistry with the necessary knowledge and skills to undertake further studies in chemistry or pursue alternative pathways in the biological, environmental, earth and physical sciences.

Chemistry IIB focuses on structure determination and the spectroscopic and geometric properties of molecules, and how these influence reactivity. The examples used to illustrate these points draw on expertise in atomic and molecular spectroscopy, symmetry, and organic synthesis.

CHEM 2522 Chemistry IIB (Ecochemistry)

3 units - semester 2

3 x 1 hour lectures, 1 hour tutorial per week, 8 x 5 hour practicals per semester

Restriction: BSc (Ecochemistry)

Prerequisite(s): CHEM 1100 and CHEM 1200 or Credit in CHEM 1101 and CHEM 1201. Other students may apply to Head of Chemistry for exemption

Assumed Knowledge: CHEM 2512

Incompatible: CHEM 2520, CHEM 2524, CHEM 2526, CHEM 2200, CHEM 2205, CHEM 2206 and CHEM 2210

Assessment: Exam, practical work, tutorials

Studies in Chemistry at Level II deal with a range of fundamental concepts that can be used to explain various phenomena in chemistry, biology and materials science. The courses have been designed to provide students who have an interest in chemistry with the necessary knowledge and skills to undertake further studies in chemistry or pursue alternative pathways in the biological, environmental, earth and physical sciences.

Chemistry IIB focuses on structure determination and the spectroscopic and geometric properties of molecules, and how these influence reactivity. The examples used to illustrate these points draw on expertise in atomic and molecular spectroscopy, symmetry, and organic synthesis.

CHEM 2524 Chemistry IIB (Molecular and Drug Design)

3 units - semester 2

3 x 1 hour lectures, 1 hour tutorial per week, 8 x 5 hour practicals per semester

Restriction: BSc (Molecular and Drug Design)

Prerequisite(s): CHEM 1100 & 1200 or Credit in CHEM 1101 & CHEM 1201. Other students may apply to Head of Chemistry for exemption

Assumed Knowledge: CHEM 2514

Incompatible: CHEM 2520, CHEM 2522, CHEM 2526, CHEM 2200, CHEM 2205, CHEM 2206 and CHEM 2210

Assessment: Exam, practical work, tutorials

Studies in Chemistry at Level II deal with a range of fundamental concepts that can be used to explain various phenomena in chemistry, biology and materials science. The courses have been designed to provide students who have an interest in chemistry with the necessary knowledge and skills to undertake further studies in chemistry or pursue alternative pathways in the biological, environmental, earth and physical sciences.

Chemistry IIB focuses on structure determination and the spectroscopic and geometric properties of molecules, and how these influence reactivity. The examples used to illustrate these points draw on expertise in atomic and molecular spectroscopy, symmetry, and organic synthesis.

CHEM 2526 Chemistry IIB (Nanoscience and Materials)

3 units - semester 2

3 x 1 hour lectures, 1 x 1 hour tutorial per week, 8 x 5 hour practicals per semester

Restriction: BSc (Nanoscience and Materials)

Prerequisite(s): CHEM 1100 and CHEM 1200 or Credit in CHEM 1101 and CHEM 1201. Other students may apply to Head of Chemistry for exemption

Assumed Knowledge: CHEM 2516

Incompatible: CHEM 2520, CHEM 2522, CHEM 2524, CHEM 2200, CHEM 2205, CHEM 2206 and CHEM 2210

Assessment: Exam, practical work, tutorials

Studies in Chemistry at Level II deal with a range of fundamental concepts that can be used to explain various phenomena in chemistry, biology and materials science. The courses have been designed to provide students who have an interest in chemistry with the necessary knowledge and skills to undertake further studies in chemistry or pursue alternative pathways in the biological, environmental, earth and physical sciences.

Chemistry IIB focuses on structure determination and the spectroscopic and geometric properties of molecules, and how these influence reactivity. The examples used to illustrate these points draw on expertise in atomic and molecular spectroscopy, symmetry, and organic synthesis.

CHEM 2530 Environmental & Analytical Chemistry II

3 units - semester 1

3 x 1 hour lectures, 1 hour tutorial per week, 8 x 5 hour practicals per semester

Available for Non-Award Study

Prerequisite: CHEM 1100 & 1200 or CHEM 1101 & 1201

Incompatible: CHEM 2003, 2207, 2208 and 2209

Assessment: Exam, practical work, assignment & presentation

This course aims to establish a sound understanding of the chemistry of the biosphere and the impact of natural and human induced events on local and global environments. The atmospheric, terrestrial, riverine and oceanic chemical compositions and their interactions to produce climate and other environmental variations are also examined. Students are trained in the application of techniques used by professional chemists to determine chemical composition and analyse for trace compounds, which is central to the aforementioned discussions. These techniques include chromatography, electrochemical and optical spectroscopies, statistical analysis of data and use of advanced instrumentation and data logging devices. The environmental impact of human activities, such as farming, mining and other industries is examined in general terms and by use of case studies, as are the issues surrounding the ethical practice of chemistry and science in general.

CHEM 2540 Medicinal & Biological Chemistry II

3 units - semester 2

3 x 1 hour lectures, 1 hour tutorial per week, 8 x 5 hour practicals per semester

Available for Non-Award Study

Prerequisite: CHEM 1100 & 1200 or CHEM 1101 & 1201

Assumed Knowledge: CHEM 2510

Assessment: Exam, practical work, assignment & presentation

An introduction to the principles and methods of medicinal chemistry including natural product and biopolymer isolation, lead generation, lead optimisation and quantitative structure-activity relationships will be presented. An introduction to the principles of biophysical chemistry will be presented, which will include techniques focused on enzyme activity and inhibition. The different classes of biologically important molecules will be introduced, including discussion on their biosynthesis. An introduction to metalloprotein and bioinorganic chemistry will be presented, including discussion of the structure and function of metalloenzymes and metalloproteins.

LEVEL III

CHEM 3005 Topics in Chemistry IIIA

6 units - semester 1

4 x 1 hour lectures, 1 hour tutorial, 2 x 5 hour practicals per week

Available for Non-Award Study

Prerequisite: CHEM 2510 and CHEM 2520 or Equiv

Course content by arrangement with the Head of Chemistry.

CHEM 3006 Topics in Chemistry IIIB

6 units - semester 2

4 x 1 hour lectures, 1 hour tutorial, 2 x 5 hour practicals per week

Available for Non-Award Study

Prerequisite: CHEM 2510 and CHEM 2520 or Equiv

Course content by arrangement with the Head of Chemistry.

CHEM 3111 Chemistry III

6 units - semester 1

4 x 1 hour lectures, 2 x 1 hour tutorial, 2 x 6 hour practicals per week

Available for Non-Award Study

Prerequisite(s): CHEM 2510 and CHEM 2520 or Equiv

Assessment: Exam, practical work

This course is foundational to all Level 3 studies in Chemistry. It will commence with a review of molecular symmetry with applications to molecular orbitals and spectroscopy. The spectroscopic interaction of matter with varying forms of radiation will be examined, including the phenomena of absorption, fluorescence and phosphorescence. A variety of spectroscopies will be explored in detail. The use of spectroscopic techniques, particularly IR & NMR, and mass spectrometry for the determination of chemical structures will be described. Strategies for solving problems related to chemical composition and structure will be emphasised. Introduction to metal mediated reactions and catalytic cycles relevant to synthesis will be explored, particularly chemistry based around Group 10 metals. This includes an introduction to fundamental aspects of organometallic chemistry. Strategy and tactics used in the synthesis of new molecular architectures will be introduced. There will be an emphasis on developing a logical approach to planning a synthesis. Finally, aspects relating to electron and redox chemistry will be undertaken.

CHEM 3211 Heterocyclic Chemistry and Molecular Devices III

3 units - semester 2

2 x 1 hour lectures, 1 hour tutorial, 6 hour practicals per week

Available for Non-Award Study

Prerequisite(s): CHEM 2510 and CHEM 2520 or equivalents

Assumed Knowledge: CHEM 3111

Incompatible: CHEM 3109, CHEM 3110, CHEM 3209 and CHEM 3210

Assessment: Exam, practical work

This course will begin with a survey of the common heterocyclic ring systems including their distribution and importance. A discussion of the chemistry, synthesis and reactions of aromatic heterocyclic compounds with emphasis on their biological significance will then follow. Particular emphasis will be placed on reagents and mechanisms of these processes. This will be followed by a section on the synthesis and structures of metallo-supramolecular assemblies, which can be prepared from aromatic heterocyclic compounds. In addition to discussing the structures and approaches to synthesising

metallo-supramolecular assemblies, the properties of selected compounds will be discussed. Finally, the synthesis, properties and utility of a range of macrocycles including coronands and cryptands will then be presented. Recognition of metal ions by coronands and cryptands will be used as an introduction to the principles of host-guest chemistry. The recognition of hydrophobic species by cyclodextrins will then be presented. Aspects of the construction of molecular devices will be discussed.

CHEM 3212 Materials Chemistry III

3 units - semester 2

2 x 1 hour lectures, 1 hour tutorial, 6 hour practicals per week

Available for Non-Award Study

Prerequisite(s): CHEM 2510 and CHEM 2520 or equivalents

Assumed Knowledge: CHEM 3111

Incompatible: CHEM 3109, CHEM 3110, CHEM 3209 and CHEM 3210

Assessment: Exam, practical work

This course will consider the application of a number of chemical principles. An introduction to Frontier Molecular Orbital theory as a means of rationalising electrocyclic reactions, cycloaddition reactions and sigmatropic rearrangements will be presented. The Woodward-Hoffman rules will be introduced. The interaction of metals with unsaturated organic molecules will be discussed as a prelude to consideration of some processes used in industry, including the use of Group 4 based metallocenes. Understanding statistical methods and processes with application to chemical systems will be also addressed. Principles of synchrotron and free-electron laser sources will also be presented including and introduction to diffraction techniques (X-ray, neutron and electron).

CHEM 3214 Medicinal and Biological Chemistry III

3 units - semester 2

2 x 1 hour lectures, 1 hour tutorial, 6 hour practicals per week

Available for Non-Award Study

Prerequisite(s): CHEM 2510 and CHEM 2520 or equivalents

Assumed Knowledge: CHEM 3111

Incompatible: CHEM 3109, 3110, 3209 and 3210

Assessment: Exam, practical work

An introduction to the principles of medicinal chemistry including natural product isolation, lead generation, lead optimisation and quantitative structure-activity relationships will be presented. The principles of parallel and combinatorial synthesis will be presented in this context. Applications of mass spectrometry, NMR spectroscopy and other techniques to the structure determination of biologically important molecules (particularly proteins) will be presented. The chemistry of a number of key biological processes (e.g. enzyme chemistry, action of antibiotics on membranes etc.) will also be presented. An introduction to the arena of biomimetic inorganic chemistry will be presented,

including extensive discussion of the structure and function of metalloenzymes. The section will emphasise how the principles of nature can be applied to the rational design of metallic species capable of controlled small molecule activation.

CHEM 3214PE Medicinal and Biological Chemistry III

3 units - semester 2

1 x 2 hour lecture, 1 hour tutorial, 6 hour practicals per week

Restriction: Pharmaceutical Engineering

Prerequisite(s): CHEM 2510 Chemisty IIA and CHEM 2540 Medicinal & Biological Chem II

Assumed Knowledge: CHEM 3111

Incompatible: CHEM 3109, CHEM 3110, CHEM 3209 AND CHEM 3210

Assessment: exam, practical work

An introduction to the principles of medicinal chemistry including natural product isolation, lead generation, lead optimisation and quantitative structure-activity relationships will be presented. The principles of parallel and combinatorial synthesis will be presented in this context. Applications of mass spectrometry, NMR spectroscopy and other techniques to the structure determination of biologically important molecules (particularly proteins) will be presented. The chemistry of a number of key biological processes (e.g. enzyme chemistry, action of antibiotics on membranes etc.) will also be presented. An introduction to the arena of biomimetic inorganic chemistry will be presented, including extensive discussion of the structure and function of metalloenzymes. The section will emphasise how the principles of nature can be applied to the rational design of metallic species capable of controlled small molecule activation.

CHEM 3530 Environmental and Analytical Chemistry III

3 units - semester 1

2 x 1 hour Lectures, 1 x 6 hour Practical Work inc presentations per week, 1 x 1 hour Tutorials per fortnight

Available for Non-Award Study

Prerequisite(s): CHEM 2530 or CHEM 2510 and CHEM 2520 or equiv

Incompatible: CHEM 2003, CHEM 2207

Assessment: Exam, practical work, presentation

The course aims to apply environmental and analytical chemistry concepts and techniques to chemical variations in the environment. A sound physical understanding of the techniques used to determine chemical composition and analyse for trace compounds is core. Techniques introduced in the course include x-ray fluorescence, x-ray diffraction and photochemical methods. A central theme of the course is energy and fuels, e.g. fossil fuels, the hydrogen economy, solar power and nuclear power. Accordingly, the course content touches on the energy problems faced by Australia going forward into the 21st century.

CHEM 3540 Research Methods in Chemistry III

3 units - semester 1

1 x 2 hour Lectures, 1 x 1 hour Tutorial, 1 x 6 hour Practicals inc presentations per week.

Available for Non-Award Study

Prerequisite(s): CHEM 2510 and CHEM 2520

Corequisite(s): CHEM 3111

Incompatible: CHEM 3112

Assessment: Research laboratory projects, exam and verbal presentation

This course will consider the application of a number of principles as applied to chemical research. This will be achieved by placing students in active research groups in the Discipline of Chemistry and providing them with the opportunity to carry out research activities. Lecture material will be provided that supplements the research placements, providing students with the opportunity to develop skills in verbal and visual communication.

HONOURS

CHEM 4000A/B Honours Chemistry

24 units - full year

Prerequisite: Major in Chemistry, Organic Chemistry, Physical & Inorganic Chemistry, Chemical Synthesis, Chemistry of Materials or another appropriate program, at standard satisfactory to Head of Chemistry

Assessment: Coursework, research report, oral exam, seminar

Intending Honours students should consult the Head of Chemistry during the preceding year. The Discipline of Chemistry runs Honours programs commencing in February and August (mid year intake). Each student is required to devote their full time to a coursework program and a research project. The course work covers a range of advanced topics, the methods of presentation and assessment of which vary according to topic. Honours students are required to attend seminars and research colloquia. The research project, chosen after consultation with academic staff, is designed to broaden and deepen student's chemical understanding, experimental skills, independent thought and communication skills. Each student will be required to present a seminar and a research report on their project at the end of the Honours year.

Chinese

LEVEL I

CHIN 1001 Chinese IA

3 units - semester 1

4 contact hours per week, plus 1 hour language lab (unsupervised)

Available for Non-Award Study

Assumed Knowledge: no previous knowledge of Chinese required

Assessment: continuous assignments and tests, oral tests, mid-term test and final exams

Chinese IA is a subject for beginners in the language, followed by Chinese IB in semester 2 to build up basic knowledge and skills in Chinese. Students who have studied Chinese before should contact the lecturers concerned to decide the best level at which to place them. Chinese IA teaches the fundamental grammar and vocabulary of modern standard Chinese (formerly known as Mandarin). This is the educated speech of North China which is now the official national language. Simplified characters are taught. The vocabulary reflects usage in contemporary China. It is expected that at the end of the course students should be able to master Chinese phonetic system (Hanyu Pinyin), and should have an active vocabulary of around 200 Chinese characters and associated compounds concentrating on vocabulary that relates to contemporary China.

CHIN 1002 Chinese IB

3 units - semester 2

4 contact hours, 1 hour in language lab (unsupervised) per week

Available for Non-Award Study

Prerequisite: CHIN 1001 (or equivalent)

Assessment: assignments, tests, oral tests, mid-term test, final exams

Chinese IB is a continuation of Chinese IA. It continues instruction and practice in the speaking, understanding, writing and reading of modern standard Chinese. Throughout the course, mastery of conversational skills will be reinforced through oral-aural practice and at the same time, increased emphasis will be placed on contemporary texts. By the end of the semester students will know around 400 Chinese characters and associated compounds.

CHIN 1013 Classical Chinese Texts for Chinese Speakers

3 units - semester 1

3 contact hours per week

Available for Non-Award Study

Assumed Knowledge: Native or near native Chinese language proficiency. Students who have completed Chinese I/II SB or equivalent may enrol only after consultation, and at discretion of course coordinator

Incompatible: CHIN 1001, CHIN 1011, CHIN 2001/2201, CHIN 2011, CHIN 3001/3201, CHIN 3011/3211 and students who have completed CHIN 2003, CHIN 2004, CHIN 3002/3202, CHIN 3003, CHIN 3004

Assessment: translation assignments 20%, quizzes 20%, oral presentation 10%, written exam 40%, class participation 10%

This course will introduce students to the basics of classical Chinese grammar and familiarise students with representative examples of classical texts including poetry and literary essays in different periods of the Chinese history. It aims to develop a higher elementary/intermediate reading ability in classical Chinese texts. Students will read a selection of philosophical, historical and literary classical texts and discuss their language and content, and do unseen translations of texts for classroom discussion and correction.

LEVEL II

CHIN 2006 Chinese Literature & Media for Chinese Speakers

3 units - semester 2

3 contact hours per week

Available for Non-Award Study

Assumed Knowledge: Native or near native Chinese language proficiency.

Incompatible: CHIN 1014

Assessment: Assignments and quizzes (20%), essay (20%) oral presentation (10%), written exam (40%), class participation (10%)

The course introduces a wide range of writings in Chinese literature and thought. The texts of diverse styles and genres are derived from Chinese literature and media sources including newspapers, journals, novels and other written or audio-video materials. The lectures will be arranged thematically with the topics such as ethics and literary values, imagination and literary reflections of the changing society, and the Chinese vernacular stories and Magic Realism. Methods of comparative literature will be applied in analysing and exploring the original texts and/or translations.

By the end of the course students will have acquired a further knowledge of literature, media and Chinese thought. It is anticipated that the students will have had their communication skills consolidated, their writing styles, analytical and critical abilities significantly improved.

CHIN 2201 Chinese IIA

3 units - semester 1

4 contact hours per week

Available for Non-Award Study

Prerequisite(s): CHIN 1002, or SACE Stage 2 Continuers Chinese (score of 14 or better), or equivalent, with approval of Head of Discipline

Assumed Knowledge: At least 400 Chinese characters and basic Chinese grammar patterns

Incompatible: CHIN 2001

Assessment: Weekly dictation quiz, translation exercises, oral and written tests, class participation, final written exam*

This course is for students who have completed Chinese 1B. It consists of tuition in speaking, listening to, writing and reading modern standard Chinese. This course extends students' knowledge of basic grammar, vocabulary and structures found in the spoken and written forms of Contemporary Chinese. The emphasis is on building up students' communicative skills in both speaking and reading through learning activities in class. It is anticipated that by the end of the course the students will know about 650 Chinese characters and associated compounds related to contemporary China.

*Note: It is strongly recommended that students without Chinese I take ASIA 1101, and students with Chinese IA & IB take ASIA 2021

CHIN 2202 Chinese IIB

3 units - semester 2

4 contact hours per week

Available for Non-Award Study

Prerequisite(s): CHIN 2001/2201 or approval of Head of Discipline

Assumed Knowledge: At least 650 Chinese characters and basic Chinese grammar patterns

Incompatible: CHIN 2002

Assessment: Weekly dictation quiz, translation exercises, oral and written tests, class participation, final written exam

This course is a continuation of Chinese IIA. It consists of tuition in the speaking, listening to, writing and reading of modern standard Chinese. This course further extends students' knowledge of basic grammar, vocabulary and structures found in the spoken and written forms of Contemporary Chinese. The main emphasis is on building up vocabulary and reading experience as a basis for studying contemporary Chinese society and culture. It is anticipated that by the end of the course, the student will know around 900 Chinese characters and most commonly used Chinese grammar patterns.

LEVEL III

CHIN 3211 Chinese IIISA

3 units - semester 1

3 contact hours per week

Available for Non-Award Study

Prerequisite(s): CHIN 2012/2212 or CHIN 3002/3202 or equivalent

Incompatible: CHIN 3011

Assessment: Three tests in grammar and translation 15%, 1,000 word essay in target language 20%, oral presentation 15%, participation 10%, written examination 40%

This course is an advanced program in Chinese language studies. Students will read a selection of modern Chinese documents and literature. Students will also be expected to study the social and cultural background to the readings. By the end of the course, students will be familiar with a range of contemporary written styles. Throughout the course, emphasis will also be placed on oral/aural skills and the ability to analyse the materials studied using oral Chinese.

CHIN 3212 Chinese IIISB

3 units - semester 2

3 contact hours per week

Available for Non-Award Study

Prerequisite: CHIN 3011/3211 or equivalent

Incompatible: CHIN 3012

Assessment: Tests in grammar and translation, 1,500 word essay in target language, oral presentation, participation, written exam

This course is a continuation of Chinese IIISA. Students will read a selection of modern Chinese documents and

literature. Students will also be expected to study the social and cultural background to the readings. In addition, there will be an introduction to the basic features of Classical Chinese. By the end of the course, students will be familiar with a range of contemporary written styles. Throughout the course, emphasis will also be placed on oral/aural skills and the ability to analyse the materials studied using oral Chinese.

CHIN 3213 **Chinese IIISA: Project**

3 units - semester 1

2 contact hours per week

Available for Non-Award Study

Prerequisite: CHIN 3002/3202 or equivalent

Corequisite: CHIN 3211

Assessment: Research project essay, seminar presentation, participation

As an extended program related to Chinese IIISA, the course will introduce a range of writings in Chinese literature and history. The original texts, of which most are accompanied with English translations, include Chinese fiction, poetry and history documents. The Chinese grammar, syntactic structure, the writing styles as well as the historical and social backgrounds of the works will be discussed. By the end of the course students will achieve a better understanding of Chinese literature, history and society; and have developed knowledge and skills in research in Chinese language.

CHIN 3221 **Translation for Chinese Speakers**

3 units - semester 1

3 contact hours per week

Available for Non-Award Study

Prerequisite(s): Native or near native Chinese language proficiency (including Chinese dialects).

Assumed Knowledge: Completion of junior secondary school or above in China, other Chinese speaking countries or regions, or equiv

Assessment: Translation exercises, 2 x translation tests, final exam, classroom participation

The course is designed to further develop students' linguistic skills and knowledge of modern standard Mandarin Chinese through translation exercises. It consists of tuition in Chinese and English syntax and semantics as well as translation practice. Methods of comparative study and analysis of Chinese and English grammatical features and characteristics will be applied in classroom and students' exercise.

CHIN 3222 **Translation for Chinese Speakers: Project**

3 units - semester 1

3 contact hours per week

Available for Non-Award Study

Prerequisite: Native or near native Chinese language proficiency (including Chinese dialects)

Corequisite: CHIN 3221

Assumed Knowledge: Completion of junior secondary school or

above in China, other Chinese speaking countries or regions or equiv

Incompatible: Chinese IA & B, Chinese IIA & B, Chinese IIIA, IIIB & IIIB: Project, Chinese IIISA, IIISB & IIISA: Project

Assessment: One translation project of 4,000–5,000 words, seminar participation

This course is an extension of Chinese Translation. It is a practical project that engages students to apply the translation knowledge and skills learned from the Chinese Translation course in practice. Each student will conduct a translation project on a topic agreed by the lecturer. The translation text will be of 4,000–5,000 words.

CHIN 3231 **Issues in Chinese Culture for Chinese Speakers**

3 units - semester 2

3 contact hours per week

Available for Non-Award Study

Prerequisite(s): 12 units of Level I courses

Assumed Knowledge: Native or near native Chinese language proficiency.

Incompatible: Chinese IB, Chinese ISB, Chinese IIB, Chinese IISB, Chinese IIIB, Chinese IIISB, Chinese IIISA: Project

Assessment: Tutorial participation, tutorial presentation and paper, research essay

This course introduces major issues in the study of Chinese society and culture. It caters for the special needs of international students with native or near native Chinese language proficiency who are studying in an English language environment. The course is designed to help bridge the gaps between Chinese and Australian education system and improve students' learning experiences. It aims at providing Chinese-speaking international students with a fully formed, language rich and research rigorous alternative directly relevant to their experience and futures. It focuses on key social and cultural issues in modern China and examines the influence of traditional society on them. The instructing language will be in both Chinese and English. By the end of the semester students will be familiar with some of the central concerns of Chinese culture and with a different cultural perspective from which to view oneself, one's culture and society.

CHIN 3232 **Research Project for Chinese Speakers**

3 units - semester 2

3 contact hours per week

Available for Non-Award Study

Prerequisite(s): 12 units of Level I courses

Assumed Knowledge: Native or near native Chinese language proficiency

Assessment: Annotated bibliography, research paper, 5000 Chinese characters

This course is designed for students to build on the understandings learnt in 'Issues in Chinese Culture' where appropriate, in order to gain a deeper insight into the complexity of issues covered. It caters for the special needs of international students with native or near native Chinese language proficiency who are studying in an English language environment. The course aims to bridge

the gaps between Chinese and Australian education system and improve students' learning experiences; and to provide Chinese-speaking international students with a language rich and research rigorous alternative directly relevant to their experience and futures. They will learn how to frame a research problem and devise appropriate and effective ways of examining it. Students will further develop their writing, critical and analytical skills which prepare them for Honours studies. In the workshops the instructing language will be in both Chinese and English. By the end of the semester students will be familiar with some of the central concerns of Chinese culture and with a different cultural perspective from which to view oneself, one's culture and society; and student will complete a research project (5000 Chinese characters) on a topic agreed by the lecturer.

CHIN 3301 Chinese IIIA

6 units - semester 1

5 contact hours, plus 1 hour in language lab (unsupervised) per week

Available for Non-Award Study

Prerequisite(s): CHIN 2002, CHIN 2202 (or equivalent)

Incompatible: CHIN 3001, CHIN 3201

Assessment: Listening and written tests, oral test, composition/short essay, final exam

This course aims to consolidate and extend the language skills developed in Chinese IIB by means of further oral, reading, writing and translation practice. The emphasis is on the application of the student's language training to the study of Chinese source materials reflecting contemporary Chinese culture and society. It is expected that by the end of the semester students should have an active vocabulary of around 1200 Chinese characters and associate compounds, and should be able to read simple texts in modern Chinese using reference materials.

CHIN 3302 Chinese IIIB

6 units - semester 2

5 contact hours, plus 1 hour in language lab (unsupervised) per week

Prerequisite(s): CHIN 3301, CHIN 3201 (or equivalent)

Incompatible: CHIN 3002

Assessment: Tests on Chinese characters, written tests, composition/short essay, final exam

This course aims to consolidate and extend the language skills developed by means of further reading, writing and translation practice. The emphasis is on the application of the student's language training to the study of Chinese source materials reflecting contemporary Chinese culture and society. Students will continue their linguistics skills and gain further training in reading modern literary and journalistic styles. The texts studied will include: contemporary short stories, documentary materials and selected texts dealing with topics related to Chinese society and culture. By the end of the semester students should have an active vocabulary of around 1500 Chinese characters and associate compounds, should be able to

read simple original texts in modern Chinese with the aid of reference materials, and should be able to write short essays in Chinese on issues about Chinese culture and society.

HONOURS

CHIN 4401A/B Honours Chinese

24 units - full year

Prerequisite: UG degree, Credit average in courses contributing to major in Chinese or equiv. approved by Head of Discipline

Assessment: advanced level course in Chinese 25%, coursework topic in social science 25%, each with written work of approx. 7200-9000 words or equiv, 15000-17000 word thesis 50% (or 21000-24000 characters if written in Chinese).

Students wishing to take Honours in Chinese Studies are encouraged to consult the Honours Coordinator prior to commencing Advanced Level studies to ensure that appropriate course choices are made in preparation for Honours. In order to fulfil the prerequisites, it is necessary to combine the study of language courses with that of Asian studies courses. Entry to Honours is subject to the approval of the Head of Discipline on advice from the Honours Committee. The Honours program consists of three elements: a research thesis, and two coursework topics which normally are an advanced level Chinese course, and theory and methodology in Asian studies. Theses written in Chinese are accepted. In some circumstances Honours Asian Studies can be studied part-time over two years or combined with Honours in another discipline. Students wishing to take Honours but who are without prerequisites are advised to consult the Honours Coordinator as soon as possible.

Classical Studies

LEVEL I

CLAS 1003 Games, Festivals and Leisure in Greece and Rome

3 units - semester 1

3 contact hours per week

Available for Non-Award Study

Assumed Knowledge: Broad historical knowledge

Assessment: Bibliographical assignment (10%), 2 x 1200 word papers (2 x 20%), online quizzes (10%), 2 hour exam (40%)

This course surveys the different ways in which Greeks and Romans shaped their lives in the private and the public domain, exploring the ways in which cultural, philosophical and social views impacted on everyday life. The emphasis is on the rise of mass entertainment in fifth century Athens (Greece) and Republican and Imperial Rome. The first half of this course will look into the question of how the first mass forms of entertainment—the sporting competition and the theatrical festival—developed within the poleis of 6th and 5th century Greece and how this affected the

concept of citizenship, to be compared with the notions of the ideal citizen of philosophers. The second half of the course will explore both public and private life from the Late Republic into the Roman Empire. Here we examine the different values imposed by the elite upon the concept of dignitas (prestige through public office) in contrast to private otium (luxurious leisure). Other important aspects concern private banquets (social and political networking), and the public spectacle, such as gladiatorial combats and chariot races, which became highly politicised in the Empire and exploited by emperors.

CLAS 1004 The Ancient World in Film

3 units - semester 2
 3 contact hours per week
 Available for Non-Award Study
 Assumed Knowledge: Broad historical knowledge
 Assessment: Online review (10%), 1200 word tutorial paper (20%), 1200 word tutorial paper (30%), 2 hour exam (40%)

This course forms the second part of an introduction to the ancient world, but it can also be taken on its own, without having done the first part. It takes a selection of cinematic reconstructions of the ancient world, and uses them as a 'gateway' through which we introduce students to key themes in the literature and history of Greece and Rome. As films such as *Troy* (2004), *300* (2006), *Spartacus* (1964), and *Gladiator* (2000) clearly show, the ancient world continues to inspire modern film; we aim to take these examples of classical reception as a starting point for our exploration of major works and key themes.

Following a series of introductory lectures that outline key starting points for those students new to Classics (and those new to film theory and reception studies), the course will divide into four equal sections - one for each film and the key ancient themes associated with it. We will locate each film in its proper historical setting (both modern and ancient), before moving the discussion on to consider the relevant classical texts that inspired, informed, and shaped each production.

ADVANCED LEVEL

CLAS 2026 Eastern Mediterranean Archaeological Field School

3 units - summer semester
 Fieldwork of 4 weeks' duration on an excavation in Jordan
 Prerequisite(s): 12 units Level I Humanities/Social Sciences; at least one of CLAS 2005/3005, CLAS 2007/3007, CLAS 2013/3013. For cross-institutional students, subject to approval by the course co-ordinator.
 Incompatible: CLAS 2021/3021

Assessment: 3 practical tests 30%, individual site recording - ca 1,500 words 30%, written group report - ca 2,500 words per student 40%

Students will develop basic skills in trench recording, excavation and site-interpretation during a 4-week overseas archaeological field-school at a Roman to mediaeval site

in the Eastern Mediterranean region. Basic techniques in surveying, planning, section-drawing, site photography, context recording and the creation of a basic Harris matrix will all be taught and assessed. From a secure dig-house in the Hashemite Kingdom of Jordan, students will become familiar through first-hand experience of the range of material culture within this formerly wealthy and culturally-diverse Roman province, and will visit well-preserved cities such as Jarash or Gadara.

CLAS 2031 Afterlife and Underworld in Antiquity

3 units - semester 1
 3 contact hours per week
 Available for Non-Award Study
 Prerequisite(s): 12 units Level I Humanities/Social Sciences. It is recommended that CLAS 1001 and 1002 are included.
 Incompatible: CLAS 2020/3020
 Assessment: one 1000 word seminar paper, 20%, one 2000 word seminar paper, 30%, seminar participation and presentation 10%, two-hour exam or 2,500 word academic journal 40%

Myths and rituals dealing with process of death and the passage to the afterlife from Pharonic Egypt to Christian Rome, from mummification to resurrection. Popular ideas, stories and philosophical theories about the afterlife and the nature of the underworld. What sort of punishments and rewards applied? Some modern cinematic treatments of underworld adventures are also studied.

CLAS 2033 Archaeology of Rome

3 units - semester 2
 3 contact hours per week
 Available for Non-Award Study
 Prerequisite(s): 12 units Level I Humanities/Social Sciences. It is recommended CLAS 1001 and/or 1002 be included.
 Incompatible: CLAS 2007/3007

Assessment: 500 word tutorial summary 5%, 1000 word tutorial paper 10%, 2,500 word essay 35%, visual test 10%, two-hour exam 40%

How does archaeology contribute to our understanding of the development of Roman culture from its Iron Age origins until the 1st century A.D.? We will survey the trends of Roman art and architecture from the Etruscan period into the Early Empire, and also explore the major developments of Roman cities through the examples of the famous archaeological sites of Pompeii, Herculaneum and Ostia. Use will be made of material available in the Museum of Classical Archaeology. Attendance at all times is compulsory as all lectures and tutorials contain images which may be included in exams.

CLAS 2034 Alexander the Great and the Decline of Greece

3 units - semester 2
 3 contact hours per week
 Available for Non-Award Study
 Prerequisite(s): 12 units Level I Humanities/Social Sciences. It is recommended CLAS 1001 and/or 1002 be included.
 Incompatible: CLAS 2009/3009

Assessment: one 1500 word tutorial paper 20%, one 2000 word essay 30%, tutorial participation/discussion board 10%, two-hour exam 40%

This course explores the history of Greece and Macedonia from the end of the fifth century BC down to 323 BC. The defeat and occupation of Athens brought an end to the Peloponnesian War, and an end to the city's Golden Age, but it did not bring lasting peace to the Hellenic world. Consequently, Greek politics in the first half of the fourth century BC was characterised by a bitter contest for hegemony as successive powers sought to dominate. We shall review that struggle, and also present a detailed consideration of the careers of the two remarkable Macedonian kings who empathically settled matters and imposed their authority on the Hellenic world. Those monarchs were among the most remarkable men in ancient history: Philip II, who transformed his kingdom into the supreme power in the eastern Mediterranean, and the incomparable Alexander the Great, who built on his father's legacy to conquer the known world.

CLAS 2035 **The Glory of Athens and the Shadow of Sparta**

3 units - semester 1

3 contact hours per week

Available for Non-Award Study

Prerequisite(s): 12 units Level I Humanities/Social Sciences. It is recommended CLAS 1001 and/or 1002 be included.

Incompatible: CLAS 2010/3010

Assessment: one 1500 word tutorial paper 20%, one 2000 word essay 30%, tutorial participation/discussion board 10%, two-hour exam 40%

This course explores the history of Greek civilisation from the late Archaic age down to the end of the fifth century BC (ca. 750-404 BC). This was one of the key periods in Western history, an era that witnessed a truly extraordinary burst of creative activity in areas such as political theory, philosophical thought, drama, literature, sculpture and architecture. This course will consider the conditions that made that movement possible, and establish the proper historical context in which to consider the achievements of the ancient Greeks. Although mainly focussing on the city of Athens (on the evolution of that polis into 'the' city of Classical period), we must also consider the history of her great counterpart in this period - Sparta. We shall see how the fierce rivalry that developed between the democratic city of culture and an oligarchic military commune came to define an age.

CLAS 2101 **Beginner's Latin**

3 units - semester 1

3 contact hours

Available for Non-Award Study

Prerequisite(s): 12 units Level I Humanities/Social Sciences

Incompatible: not available to students who reached a satisfactory level of achievement in SACE Stage 2 Latin (or equiv), or LATN 1002/LATN 2010

Assessment: 3 semester tests 35%, end-of-semester exam 65%, weekly language assignments (formative assessment only)

The course introduces students to the rudiments of Latin grammar, syntax and vocabulary with a view to enabling them to read and comprehend (modified) texts in the original language. Students are required to complete a variety of language tasks including translation both into and from Latin and answering comprehension questions on passages in Latin. This course develops students' ability to identify and analyse fundamental grammatical constructions and improves their comprehension skills.

CLAS 2102 **Advanced Latin**

3 units - semester 2

3 contact hours per week

Available for Non-Award Study

Prerequisite: LATN 2004 Beginner's Latin or equivalent

Incompatible: LATN 2002/3011

Assessment: 3 semester tests 35%, end-of-semester exam 65%, weekly language assignments (formative assessment only)

This course aims to introduce students to the more complex and sophisticated grammatical constructions of the Latin language while familiarising them with the reading of (modified) texts written in the original language. Two hours per week will be devoted to the study of grammar and syntax in which students will be required to complete a variety of language tasks including translation both into and from Latin. One hour per week may be devoted to the reading of (modified) passages from Latin texts, including comprehension of previously unseen texts.

HONOURS

CLAS 4401A/B **Honours Classical Studies**

24 units - full year

Prerequisite: UG degree with credit average in Classics major; successful completion of 1 yr of ancient language; at least 4 courses from either Classics Group A or B - see below for full list - special exemption from any criteria may be considered by the Discipline

Assessment: common course - 2 x ca 4000 word seminar papers 25%, specialist courses - written work totalling 8000 words 25%, 15000-20000 word thesis 50%

Since not all the above courses are offered every year, students are strongly advised to consult with the Discipline Advisor or Honours Coordinator before commencing Advanced Level courses to ensure that appropriate choices are made.

Students wishing to take Honours Classical Studies should have successfully completed at least 4 courses from one of the following two groups:

Group A: CLAS 2005/3005, 2006/3006, 2007/3007, 2009/3009, 2010/3010, 2012/3012, 2013/3013, 2016/3016, 2021/3021

Group B: CLAS 2003/3003, 2004/3004, 2015/3015, 2020/3020, EUST 2014/3014.

Students wishing to take Honours Classical Studies should have successfully completed at least 4 courses from one of the following two Groups, but not from a selection from both Groups A and B:

Group A: CLAS 2005/3005, 2006/3006, 2007/3007, 2009/3009, 2010/3010, 2012/3012, 2013/3013, 2016/3016, 2021/3021.

Group B: CLAS 2003/3003, 2004/3004, 2015/3015, 2020/3020, EUST 2014/3014.

Since not all the above courses are offered every year, students are strongly advised to consult with the Discipline Advisor or Honours Coordinator before commencing Advanced Level courses to ensure that appropriate choices are made.

Students are also strongly advised that postgraduate studies in archaeology, ancient history, literature or cultural studies will require at least a basic expertise in one or more ancient languages, as well as a reading knowledge of French, German and/or Italian. It is in the student's own interests to incorporate one or more of these languages into his or her undergraduate degree.

In first semester, students take two seminar courses: Seminar A: Common Course and Seminar B: Specialist Courses.

For the two half-semester courses, choices of topics will vary from year to year - students will be advised at the start of semester as to the topics. The exact arrangement of the course may be varied by the Head of Discipline in accordance with the interests of the students and the availability of specialised teaching.

Research thesis: In second semester, students will complete a research thesis on a topic approved by the Discipline.

In some circumstances, Honours Classical Studies can be studied part-time over two years or can be combined with Honours in another discipline.

in the discipline area of the student's thesis topic and may include: Advanced Theory in Accounting; Advanced Theory in Finance; Advanced Theory in Management; Advanced Theory in Marketing Management.

COMMERCE 4002A/B Honours Commerce (Two Year)

24 units - full year

Restriction: Approved Commerce Honours students only

Assessment: Research project, presentation of thesis - thesis will form part of Honours examination

A supervisor will be allocated to each student based on the topic or research area of interest. Late in the first semester students will be expected to outline their dissertation objective and proposed approach to a meeting of a small number of staff. The thesis is to be completed and presented by the end of semester 2 lectures. Four copies, typed double spaced on A4 paper and bound must be presented. Students will be expected to present themselves for an oral examination on their thesis at a date towards the end of the University's November examination period. Each student is required to undertake four first semester modules based on their research area of choice, as follows: Research Methodology; Quantitative Methods or Qualitative Methods; Advanced Readings. The Fourth module will be an Advanced Theory course in the discipline area of the student's thesis topic and may include: Advanced Theory in Accounting; Advanced Theory in Finance; Advanced Theory in Management; Advanced Theory in Marketing Management.

Commerce

HONOURS

COMMERCE 4000A/B Honours Commerce

24 units - full year

Restriction: Approved Commerce Honours students only

Assessment: Research project, presentation of thesis - dissertation will form part of Honours exam

A supervisor will be allocated to each student based on the topic or research area of interest. Late in the first semester students will be expected to outline their dissertation objective and proposed approach to a meeting of a small number of staff. The thesis is to be completed and presented by the end of semester 2 lectures. Four copies, typed double spaced on A4 paper and bound must be presented. Students will be expected to present themselves for an oral examination on their thesis at a date towards the end of the University's November examination period. Each student is required to undertake four first semester modules based on their research area of choice, as follows: Research Methodology; Quantitative Methods or Qualitative Methods; Advanced Readings. The Fourth module will be an Advanced Theory course

Commercial Law

LEVEL I

COMMLAW 1004 Commercial Law I

3 units - semester 1 or semester 2

3 hours + 9 hours self-directed study per week

Available for Non-Award Study

Quota may apply

Assessment: Exam/assignments/tests/tutorial work as prescribed at first lecture

An introduction to the legal system including the roles of the Constitution, parliaments and courts. An introduction to the basic rules of commercial law including breach of contract, the tort of negligence, liability for unsafe products, misleading conduct and unconscionable conduct.

LEVEL II

COMMLAW 2500 Commercial Law II

3 units - semester 1 or semester 2

4 hours + 8 hours self-directed study per week

Assumed Knowledge: COMMLAW 1004

Assessment: Exam/assignments/tests/tutorial work as prescribed at first lecture

An examination of the law relating to business structures including sole traders, partnerships, joint ventures and trusts. The majority of the course is devoted to an examination of corporations law in Australia including the following topics: the constitutional background and history of companies legislation, the concept of corporate personality, the distinguishing features of different types of companies, authority of agents to bind the company, pre-registration contracts, company capital, management of the company, company financial reporting, auditors and directors duties, members' rights, voluntary administration, receivers, winding up of companies.

LEVEL III

COMMLAW 3500 Income Tax Law III

3 units - semester 1 or semester 2

4 hours + 8 hours self-directed study per week

Available for Non-Award Study

Prerequisite(s): COMMLAW 2000/2500

Assessment: Exam/assignments/tests/tutorial work as prescribed at first lecture

This course provides an introduction to, and overview of, fundamental concepts of income tax law. Topics include jurisdiction to tax; assessable income, including capital gains and losses; exempt income; deductions; tax accounting; tax entities; anti-avoidance; and tax administration.

COMMLAW 3501 Business Tax & GST III

3 units - summer semester or semester 2

3 hours + 9 hours self-directed study per week

Assumed Knowledge: COMMLAW 3010/3500

Assessment: Exam/assignments/tests/tutorial work as prescribed at first lecture

The objective of the course is to help students understand the law and application of key types of business taxes including the goods and services tax. The course aims to build upon the concepts covered in Income Tax Law III, and this subject is assumed knowledge. Topics to be covered include: an Introduction to Business Taxes, including a review of the taxation of business income and a review of recent business tax reforms; Business Tax Entity Issues, including taxation of entity distributions, treatment of losses and entity consolidations; Capital Gains Tax Special Topics, including roll-over relief and the application of the Small Business CGT concessions; Goods and Services Tax fundamental concepts; Remuneration Taxes, including fringe benefits tax and superannuation guarantee charge; State Business

Taxes, including land tax, payroll tax and stamp duties and International tax issues. The course will apply the concepts to facilitate Tax Planning, and in particular with respect to highlighting the various issues on the acquisition and disposal of a business.

COMMLAW 3502 Legal Aspects of International Business III

3 units - semester 1

3 hours + 9 hours self-directed study per week

Prerequisite(s): COMMLAW 1004

Assessment: Exam/assignments/tests/tutorial work as prescribed at first lecture

This course introduces students to the legal aspects of doing business abroad. Topics include: the different legal systems; tax and regulation of trade; the enforceability of contracts; and judgements and dispute management across borders. The course also introduces students to the issues of intellectual property protection and antidumping regulations

Computer Science

LEVEL I

COMP SCI 1003 Internet Computing

3 units - semester 2

30 hours lectures, 22 hours practicals, 5 hours tutorials

Available for Non-Award Study

Assessment: written exam, assignments

Internet Architecture: Decentralisation, Tolerance, End-to-end Argument, Unambiguous Human-readable Naming, Packet Switching. Web Architecture: Least Power, Independent Invention, Evolvability, REST. Protocols: TCP/IP, SMTP, FTP, HTTP. Naming: DNS and URLs. Data Formats: HTML, XML, XML-Schema. Meta-data and the Semantic Web. Trust. Practical: Web Programming using PHP.

COMP SCI 1007 Computer Science Concepts

3 units - semester 1 or semester 2

40 hours lectures and tutorials, 18 hours practicals—course runs in the first six weeks of the semester.

Restriction: approved students only

Available for Non-Award Study

Assessment: written exam, assignments

Programming in Java: variables, control structures, methods, classes, input/output; object orientation, interfaces, inheritance; introduction to graphical user interfaces. Introductory programming techniques in Java: recursion, artificial intelligence, finite state machines sorting and generics.

COMP SCI 1008 Computer Science IA

3 units - semester 1 or semester 2

30 hours lectures, 11 hours tutorials, 22 hours practical

Available for Non-Award Study

Assumed Knowledge: SACE Stage 2 Math. Studies

Assessment: written exam, assignments, practical exams, tutorials

Programming via the Java language: variables, types, control structures (selection, iteration), principles of data abstraction, objects (classes, methods, inheritance, interfaces), scope and visibility, input/output, program design, error detection and debugging, elementary data-structures.

COMP SCI 1009 Computer Science IB

3 units - semester 1 or semester 2

30 hours lectures, 22 hours practicals, 5 hours tutorials

Available for Non-Award Study

Prerequisite(s): COMP SCI 1008

Assessment: written exam, assignments, practical exams

Programming via the Java language: recursion, event handling, and graphical user interfaces. Introduction to computer science: numerics, computer architecture, finite state machines, graphics, artificial intelligence, sorting and searching, theory of computation, ethics for Information Technology, introduction to complexity

COMP SCI 1010 Puzzle Based Learning

3 units - semester 1

24 hours lectures, 11 hours tutorials

Available for Non-Award Study

Assumed Knowledge: SACE level 2 Maths Sciences

Assessment: Written exam, assignments

The focus of this course is on getting students to think about framing and solving unstructured problems (those that are not encountered at the end of some textbook chapter). The general objective is to increase the student's mathematical awareness and problem-solving skills by discussing a variety of puzzles. The puzzle-based learning approach has a long tradition as the first mathematical puzzles were found in Sumerian texts that date back to around 2,500 BC. The puzzles selected for the course satisfy most of the following criteria: a) Generality: educational puzzles explain some universal mathematical problem-solving principles; b) Simplicity: educational puzzles are easy to state and easy to remember; c) Eureka factor: educational puzzles often frustrate the problem-solver! Eventually a Eureka! moment is reached. The Eureka factor also implies that educational puzzles have often elementary solutions that are not obvious; d) Entertainment factor: educational puzzles are very entertaining!

Such educational puzzles are used to illustrate basic concepts of critical thinking, mathematics, and problem-solving. The course presents some problem-solving rules and covers issues of understanding the problem and the role of intuition in problem-solving activities. Further, some

mathematical problem-solving principles are discussed and elements of modeling, constraint-processing, optimisation, probability, statistics, simulation, pattern recognition, and strategy are introduced.

COMP SCI 1011 Communication & Study Skills

3 units - semester 1

30 hours lectures, 20 hours practicals, 6 hours tutorials

Prerequisite(s): SACE stage 2 Mathematical Studies or equivalent

Incompatible: Cannot be counted with APP MTH 1000, APP MTH 2106, ENG 2002, CHEM ENG 1002, APP MTH 2005

Assessment: written exam, assignments

This course provides an introduction to basic computer programming concepts and techniques useful for Scientists, Mathematicians and Engineers. The course takes exposes students to practical applications of computing and commonly used tools within these domains. Online content will be provided in MyUni (lecture recordings, discussion forums, online quizzes, grades, advanced topics).

Introduction and Motivation (approximately 2 lectures): Introduction to the use of computer programming and tools within Science, Mathematics and Engineering.

Algorithm Development (approximately 4 lectures): Problem solving and algorithm design; Program design and software development; Software testing and debugging.

MATLAB (approximately 18 lectures): Basic programming - introduction to the MATLAB environment and the MATLAB help system; data types and scalar variables; arithmetic and mathematical functions; input and output; Flow control: selection and iteration statements; Program design and algorithm development in MATLAB; Functions: user defined functions, function files, passing information to and from functions, function design and program decomposition; recursion; Arrays: vectors, arrays and matrices; addressing; vector, matrix and element-by-element operations; in-built and user-defined functions; Graphics: 2-D and 3-D plotting.

Spreadsheets (approximately 6 lectures): Spreadsheets as a tool for Scientific Computing; using in-built functions; optimisation using the Goal-Seek tool; finding roots using the Solver tool; data analysis.

LEVEL II

COMP SCI 2000 Computer Systems

3 units - semester 1 or semester 2

24 hours lectures, 5 hours tutorials

Available for Non-Award Study

Prerequisite(s): COMP SCI 1009 or COMP SCI 1007

Assumed Knowledge: MATHS1012 or MATHS 1008; COMP SCI 2004 should be studied prior to or concurrently with this course

Assessment: written exam, assignments

Information storage representation, Memory organisation and hierarchy, Processor fundamentals, assembler programming, assembler operation, subroutine calling mechanisms, linking/loading, Input-output and device controllers requirements for supporting an operating system and device drivers.

COMP SCI 2002 Database and Information Systems

3 units - semester 1

24 hours lectures, 5 hours tutorials

Available for Non-Award Study

Prerequisite(s): COMP SCI 1009 or COMP SCI 1007

Assumed Knowledge: Mathematics, as in MATHS 1012 or MATHS 1008

Assessment: written exam, assignments

Topics covered include: Data Models: E-R Model, relational model, SQL; Security and Integrity: Authorisation and views, constraints, normalisation; Database Connection: Java Database Connectivity, Web databases using PHP; Storage and Access: File organisation, indexing, query processing, optimisation; Transactions, Concurrency and Recovery: Transactions, ACID properties, locks, deadlock, logging, shadow paging.

COMP SCI 2004 Data Structures and Algorithms

3 units - semester 1 or semester 2

24 hours lectures, 6 hours tutorials

Available for Non-Award Study

Prerequisite(s): COMP SCI 1009 or COMP SCI 1007

Assumed Knowledge: Mathematics as in MATHS 1012 or MATHS 1008

Assessment: practical exams and/or written exam, assignments

Program development techniques including basic ideas of correctness and proof; Recursion. Approaches to Problem Solving. Notion of abstract data type, representation of lists, stacks, queues, sets, trees and hash tables. Notions of complexity and analysis; Choosing data structures.

COMP SCI 2005 Systems Programming in C and C++

3 units - semester 2

24 hours lectures, 5 hours tutorials

Available for Non-Award Study

Prerequisite(s): COMP SCI 1009 or COMP SCI 1007

Assumed Knowledge: COMP SCI 2004

Assessment: written exam, assignments

Introduction to C; syntax of functions and basic structure, keywords, expressions. Variables; scoping and lifetime, structures, arrays and pointers. Run time stack; function invocation, parameter passing, passing arrays. Memory; segmentation, dynamic allocation, leaks and buffer over-runs. Compilation process; preprocessor, compiling object code, static and dynamic linking. File I/O; streams, reading and writing files. UNIX tools; design philosophy, combining programs using pipes and I/O redirection. Profiling tools, binary tools, debugging. Basic shell

scripting. Build tools. Compiler flags. C++; class syntax, C++ object model, inheritance, virtual and pure virtual functions. Copy and assignment semantics and their consequences. Overloading operators. I/O using the C++ STL. Templates; syntax, use with the STL, default types, run time performance.

COMP SCI 2006 Introduction to Software Engineering

3 units - semester 2

24 hours lectures, 5 hours tutorials

Available for Non-Award Study

Prerequisite(s): COMP SCI 1009 or COMP SCI 1007

Assumed Knowledge: COMP SCI 2004, Mathematics such as in MATHS 1012 or MATHS 1008

Assessment: written exam, assignments

Design: software design, UML notation, static models - identifying classes and associations, dynamic models - identifying states, events, transitions, use cases, mapping designs into code. Specification: the scope, role and styles of software specification. Testing: modes of testing, organising test suites. Human issues: managing object-oriented projects, ethics, professional practice.

LEVEL III

COMP SCI 3001 Computer Networks and Applications

3 units - semester 1

24 hours lectures, 5 hours tutorials

Available for Non-Award Study

Prerequisite(s): COMP SCI 1009 or COMP SCI 1007

Assessment: written exam, assignments

Introduction to networks and digital communications with a focus on Internet protocols: Application layer architectures (client/server, peer-to-peer) and protocols (HTTP-web, SMTP-mail, etc), Transport layer operation: (reliable transport, congestion and flow control, UDP, TCP); Network layer operation - (routing, addressing, IPv4 and IPv6), Data Link layer operation (error detection/correction, access control, Ethernet, 802.11, PPP), Layer 2/3 protocols (ATM and MPLS); selected current topics such as: security, multimedia protocols, Quality of Service, mobility, wireless networking, emerging protocols, network management

COMP SCI 3002 Programming Techniques

3 units - semester 1

24 hours lectures, 5 hours tutorials

Available for Non-Award Study

Prerequisite(s): COMP SCI 1009 or COMP SCI 1007

Assumed Knowledge: COMP SCI 2004, COMP SCI 2000

Assessment: written exam, assignments

Program development: methods of specification, design, implementations, testing and debugging, case studies,

Graphs: construction, traversal, topological sorting, applications. Sorting and searching: internal and external algorithms, correctness and complexity analysis.

COMP SCI 3004 Operating Systems

3 units - semester 2

24 hours lectures, 5 hours tutorials

Available for Non-Award Study

Prerequisite(s): COMP SCI 1009 or COMP SCI 1007

Assumed Knowledge: COMP SCI 2000, COMP SCI 2004

Assessment: written exam, assignments

OS purposes: resource management and the extended virtual computer; historical development. Processes: critical sections and mutual exclusion, semaphores, monitors, classical problems, deadlock; process scheduling. Input and Output: hardware and software control. Memory management: multi-programming; swapping; virtual memory, paging and symbolic segmentation; File System: operations, implementation, performance. Protection mechanisms: protection domains, access lists, capability systems, principle of minimum privilege.

COMP SCI 3005 Computer Architecture

3 units - semester 1

24 hours lectures, 5 hours tutorials

Available for Non-Award Study

Prerequisite(s): COMP SCI 1009 or COMP SCI 1007

Assumed Knowledge: COMP SCI 2000, COMP SCI 2004

Assessment: written exam, assignments

Fundamentals of computer design; quantifying cost and performance; instruction set architecture; program behaviour and measurement of instruction set use; processor datapaths and control; pipelining, handling pipeline hazards; memory hierarchies and performance; I/O devices, controllers and drivers; I/O and system performance.

COMP SCI 3006 Software Engineering and Project

3 units - semester 2

24 hours lectures, weekly project meeting

Available for Non-Award Study

Prerequisite(s): COMP SCI 1009 or COMP SCI 1007

Assumed Knowledge: COMP SCI 3002, COMP SCI 2004

Assessment: written exam, compulsory group project

This course in software engineering provides an introduction to the production of high quality software solutions to large tasks. Among the topics covered in this course are the following: models of the software life-cycle, requirements analysis and specification, program design techniques and paradigms, software specification techniques, configuration management and version control, quality assurance, integration and testing, project management, risk analysis, case study of ethical considerations in Software Engineering.

COMP SCI 3007 Artificial Intelligence

3 units - semester 1

24 hours lectures, 5 hours tutorials

Available for Non-Award Study

Prerequisite(s): COMP SCI 1009 or COMP SCI 1007

Assumed Knowledge: COMP SCI 2004

Assessment: written exam, assignments

AI methodology and fundamentals: philosophy of AI, representation techniques, goal reduction. Search techniques: hill-climbing, beam, best-first, A*, game playing techniques with minimax and alpha-beta pruning. Learning: Neural networks. Rule based systems; forward and backward chaining methods. Fuzzy systems. Computer vision, Evolutionary computation: genetic algorithms, evolution strategies, genetic programming.

COMP SCI 3009 Advanced Programming Paradigms

3 units - semester 2

24 hours lectures, 5 hours tutorials

Available for Non-Award Study

Prerequisite(s): COMP SCI 1009 or COMP SCI 1007

Assumed Knowledge: COMP SCI 2004

Assessment: written exam, assignments

A selection of topics from the following: Fundamental models of computation, illustrated by the lambda calculus. Different approaches to programming: functional and logic paradigms. Fundamental concepts of programming languages, including abstraction, binding, parameter passing, scope, control abstractions. Programming models expressed via Scheme: substitution model; map/reduce programming; environment model; object oriented model; a compositional programming model. Introduction to parallel computing: data parallelism, Java threads, and relationship to distributed computing. Examples in application: map/reduce programming in Google; flow-oriented programming for composition of web-services. Ontologies in the semantic web..

COMP SCI 3012 Distributed Systems

3 units - semester 2

24 hours lectures, 5 hours tutorials

Available for Non-Award Study

Prerequisite(s): COMP SCI 1009 or COMP SCI 1007

Assumed Knowledge: COMP SCI 2000, COMP SCI 2004, COMP SCI 3001; exposure to SQL programming - eg, COMP SCI 2002

Assessment: written exam, assignments

A selection of topics from the following: the challenges faced in constructing client/server software: partial system failures, multiple address spaces, absence of a single clock, latency of communication, heterogeneity, absence of a trusted operating system, system management, binding and naming. Techniques for meeting these challenges: RPC and middleware, naming and directory services, distributed transaction processing, 'thin' clients, data replication, cryptographic security, mobile code. Introduction to Java RMI.

COMP SCI 3013 Event Driven Computing

3 units - semester 2

24 hours lectures, 5 hours tutorials

Available for Non-Award Study

Prerequisite(s): COMP SCI 1009, COMP SCI 1007

Assumed Knowledge: COMP SCI 2004, COMP SCI 2006

Assessment: written exam, assignments

Event driven paradigm: Finite State Automata, their behaviour and implementation. Correspondence with regular expressions. Examples of embedded systems. Introduction to interconnected state machines, Petri Nets, and concurrency. Concepts of state-space and relationship to testing. Building Graphical User Interfaces: model view controller paradigm. Introduction to design patterns for managing complexity in large systems. Building GUIs with the Java Swing library. Comparison/contrast with other GUI toolkits. Ease of use and human-computer interaction issues. Practical projects cover the use of FSAs for control logic and GUI design.

COMP SCI 3014 Computer Graphics

3 units - semester 1

24 hours lectures, 5 hours tutorials

Available for Non-Award Study

Prerequisite(s): COMP SCI 1009, COMP SCI 1007

Assumed Knowledge: MATHS 1012, COMP SCI 2005

Assessment: written exam, assignments

Selected topics from: Light and the human visual system. Colour. Images, quantisation and sampling. Image manipulations. Raster graphics. Coordinate systems and transformations. The viewing frustum. The graphics pipeline and toolkits. Clipping and culling. Visibility. Lighting and shadows. Transparency and blending. Texture mapping. Local shading models. Environment mapping techniques. Multi-pass rendering. Shaders. Animation and particles. Level of detail. Scene graphs and implementation efficiency.

COMP SCI 3015A/B Software Engineering Group Project 1

6 units - full year

Restriction: Available only to BE Software Engineering

Assessment: Written exam and compulsory group project

Students will undertake a group project that will further expose students to the practise of software development methodologies and techniques throughout various stages in the development lifecycle.

Regular weekly meetings will be held with teaching staff, in which students will be expected to: report on progress; demonstrate software prototypes; and present their software development methodologies and artefacts.

COMP SCI 3016 Computational Cognitive Science

3 units - semester 1

30 hours lectures, 6 hours tutorials

Available for Non-Award Study

Prerequisite(s): COMP SCI 1007, COMP SCI 1009, APP MTH 1000 or COMP SCI 1012

Assumed Knowledge: Basic probability as found in MATHS 2103 would be useful, Some familiarity with programming in MATLAB

Assessment: Written exam, assignments

This course provides an introduction to computational theories of human cognition. We use formal models from artificial intelligence and mathematical psychology to consider fundamental issues in human knowledge representation, inductive reasoning, learning, decision-making and language acquisition. What kind of informational structures describe the organisation of human knowledge, and what kinds of inferences do they license? How do humans make choices given time constraints, computational limitations, and external costs imposed by the world? What kinds of innate knowledge (if any) must people have? And how can formal models of human cognition inform our understanding of the design of intelligent machines? Representative modelling techniques include stochastic processes, Bayesian models, formal grammars, and random graph models.

LEVEL IV

COMP SCI 4001A/B Software Engineering Group Project 2

8 units - full year

Restriction: Available only to BE Software Engineering

Assessment: compulsory group project

Students will undertake a year long industry-based group project. The project will be conducted in groups of 3-5 students in collaboration with an industry partner. Students will have regular meetings with teaching staff and industry stakeholders in which they will be expected to: elicit requirements; conduct software demonstrations; and report on progress. Students will be expected to apply and demonstrate the use of rigorous software development methodologies and techniques in their project, including the areas of: configuration management; project planning; requirements capture and tracking; software quality management; and software verification and validation. Students will also be expected to assess and where appropriate, apply software tools to support rigorous software development.

COMP SCI 4002A/B Software Engineering Honours Project

8 units - full year

Restriction: Available only to BE Software Engineering

Assessment: Compulsory group project

Students will undertake a year long industry-based group project. The project will be conducted in groups of 3-5 students in collaboration with an industry partner. Students will have regular meetings with teaching staff and industry stakeholders in which they will be expected to: elicit requirements; conduct software demonstrations; and report on progress. Students will be

expected to apply and demonstrate the use of rigorous software development methodologies and techniques in their project, including the areas of: configuration management; project planning; requirements capture and tracking; software quality management; and software verification and validation. Students will also be expected to assess and where appropriate, apply software tools to support rigorous software development.

Students contemplating a higher degree by research pathway may undertake an alternative research based project.

COMP SCI 4022 Computer Vision

3 units - semester 2

24 hours lectures

Available for Non-Award Study

Assessment: Exams and/or assignments

Over the last 40 years, researchers in artificial intelligence have endeavoured to develop computers with the capacity to 'see' the world around them. This course aims to convey the nature of some of the fundamental problems in vision, and to explain a variety of techniques used to overcome them. Various vision problems are considered, including: feature detection in images; image mosaicing; recovery of 3D shape from images; image segmentation; recognising and classifying objects in images; detecting and tracking objects in video; and video surveillance. Vision is a rapidly evolving area of computer science, and new and emerging approaches to these problems are discussed along with more 'classical' techniques. Several assignments enable the student to gain practical experience in tackling some of these problems.

COMP SCI 4023 Software Process Improvement

3 units - semester 2

24 hours lectures, 36 hours practicals

Available for Non-Award Study

Assessment: exam and/or assignments

The course introduces students to elements of the Software Engineering Institute's Personal Software Process, PSP. The PSP is introduced in increasing levels of sophistication with the essential elements illustrated by programming assignments and report writing.

COMP SCI 4041 Language Translators

3 units - semester 2

24 hours lectures

Available for Non-Award Study

Incompatible: Cannot be counted with COMP SCI 3011

Assessment: Exams and/or assignments

The structure of compilers: lexical analysis, syntax analysis (top-down and bottom-up techniques), the handling of context-sensitive and context-free errors, type checking and code generation. BNF languages and

grammars. This course is closely coupled with the writing of a large, compulsory programming project

COMP SCI 4044 Computer System Security

3 units - semester 2

24 hours lectures

Available for Non-Award Study

Assessment: Exams and/or assignments

This course provides an introduction to computer system security at all levels. The course includes: computer security models, hardware systems, operating system mechanisms and policy, network security, and application security. The course will also cover some of the current security threats. Introduction to Computer Security: Threats, vulnerabilities, controls; risk; cost; method, opportunity, motive; technical, administrative, physical controls; prevention, detection, deterrence. Basic cryptography terms, symmetric and asymmetric cyphers; Cryptographic protocols: digital signatures, key exchange, certificates, cryptographic hash functions. Security Models: Introduction to Military Security; Bell La Padula models, BIPA. Security in programs: Flaws - Malicious code: viruses, Trojan horses, worms; Program flaws: buffer overflows, time-of-check to time-of-use flaws, incomplete mediation. Defenses - Software development controls, Testing techniques. Security in Operating Systems: Memory, time, file, object protection requirements and techniques; Protection in contemporary operating systems. Identification and authentication: Identification goals; Authentication requirements; human authentication, machine authentication, authentication technologies. Trusted operating systems: Assurance; trust; Design principles; Evaluation criteria; Evaluation process. Network security: Threats - Network technology; eavesdropping, spoofing, modification, denial of service attacks. Controls - architectural controls; cryptographic controls; technological controls; administrative and physical controls; overlapping controls. Technologies - Firewalls; Intrusion detection systems; Monitoring systems; Virtual private networking; Remote authentication systems. Management of security: Security policies; Risk analysis; Physical threats and controls.

COMP SCI 4054 High Integrity Software Engineering

3 units - semester 1

24 hours lectures

Available for Non-Award Study

Assessment: Exams and/or assignments

This course introduces students to high-integrity software engineering, with a focus on the development of safety-critical software. Lectures will cover hazard analysis, risk analysis, safety-critical software, formal methods, safety cases and safety management. Students will apply a variety of practical techniques in assignments.

COMP SCI 4077 System Modelling and Simulation

3 units - semester 1

24 hours lectures, 12 hours tutorials

Available for Non-Award Study

Assessment: Exams and/or assignments

This course concerns techniques for the modelling and simulation of complex systems using a variety of methods and software tools. Students are introduced to the packages Matlab and Simulink and are taken through a study of the techniques used in these and other sophisticated modelling packages to solve common engineering problems. The Matlab programming language is used extensively and students learn to program their own solutions for these problems. In addition to studying the equations for these models and their solutions, students study the stability, accuracy and reliability of the solution methods.

COMP SCI 4094 Distributed Databases and Data Mining

3 units - semester 1

24 hours lectures

Available for Non-Award Study

Assumed Knowledge: knowledge of database systems equivalent to that taught in Database & Information Systems

Assessment: exam and/or assignments

Topics covered in this course include: Distributed database system architecture, Distributed database system design, Distributed query processing and optimisation, Distributed transaction management, Data warehousing and OLAP technology, Association analysis, Classification and prediction, Cluster analysis, Mining complex types of data.

HONOURS

COMP SCI 4999A/B Honours Computer Science

24 units - full year

Prerequisite(s): degree & major in Comp.Sc; passes in Level II & III courses in Maths & Comp. Sciences approved by Head of School - students with adifferent background should apply to Head of School

Assumed Knowledge: various Level II/III Computer Science courses (or year 2 courses & year 3 options if completed before 1989) depending on composition of Honours program

Assessment: performance in six lecture courses 60%, major project 40%

Students intending to enrol in Honours Computer Science are advised to consult the Head of the School of Computer Science, preferably before enrolling for Level III courses.

The course will be determined from year to year and will consist mostly of lectures given in the School of Computer Science. Other courses may be included, subject to the approval of the Head of the School. Students will be required to undertake a major computing project, under the guidance of a supervisor.

Corporate Finance

LEVEL II

CORPFIN 2500 Business Finance II

3 units - semester 1 or semester 2

3 hours per week + 9 hours self-directed study per week

Assumed Knowledge: ECON 1008 or STATS 1000, ECON 1004 ACCTING 1002 or ACCTING 1005; or equiv

Assessment: Exam/assignments/tests/tutorial work as prescribed at first lecture

This course examines firm investment and distribution decisions in the context of a capital market structure and efficiency. Valuation methods are developed for valuing projects and securities. Basic portfolio theory is discussed to develop simple asset pricing models and used for determining the cost of capital for use in investment evaluation. The implications of alternative financing options (debt, equity (retained and new) and leasing) are considered, and elementary capital structure theorems are presented, in relation to which the dividend decisions are analysed. The question of market efficiency is considered, and the implications of this for trading strategies discussed.

CORPFIN 2501 Financial Institutions Management II

3 units - semester 1 or semester 2

3 hours + 9 hours self-directed study per week

Assumed Knowledge: ECON 1008, ECON 1000, ECON 1009

Assessment: Exam/assignments/tests/tutorial work as prescribed at first lecture

This course provides an introduction to the management of financial institutions and intermediaries. The course focuses on the importance of ensuring good organisational functioning within institutions to manage the varied types of risk that they may be exposed to. Students are first introduced to the construct of the firm as a legal entity, and how financial institutions have specific requirements that relate to this. The course then examines the principles of the theory and practice of effective organisational structure and policies for successful risk management and how to manage the inter-relationships that are inherent between departments. Students are also introduced to international standards of banking practice and how they impact the functioning of the institutions plus how to define and measure various types of risk these institutions can be exposed to.

CORPFIN 2502 Business Valuation II

3 units - semester 1 or semester 2

3 hours + 9 hours self-directed study per week

Corequisite(s): CORPFIN 2500

Assessment: Exam/assignments/tests/tutorial work as prescribed at first lecture

This course will provide the framework to price and value both securitised and non-securitised entities (whether that be specific assets or whole companies). This involves the utilisation of both accounting and financial analysis of the entity to determine value. The course will approach the subject from an applied viewpoint to enable participants to practise valuation methods. The course will also incorporate basic capital raising issues, from both the fixed income and equity perspectives.

LEVEL III

CORPFIN 3500 Corporate Finance Theory III

3 units - semester 2

3 hours + 9 hours self-directed study per week

Available for Non-Award Study

Prerequisite(s): CORPFIN 2006/2500 & CORPFIN 2502

Assumed Knowledge: SACE Stage 2 Mathematical Studies, ACCTING 1002, ECON 2008 or ECON 2508 or ECON 2012

Assessment: Exam/assignments/tests/tutorial work as prescribed at first lecture

This course looks at theoretical issues in corporate finance and their practical application. Topics include capital structure and the preferences for debt or equity as suggested by agency models, including leases, pecking order theory and timing models; dividend policy; applications of option pricing theory including real options, convertible securities and executive compensation; initial public offerings; internal capital markets and diversification.

CORPFIN 3501 Portfolio Theory & Management III

3 units - semester 1 or semester 2

3 hours + 9 hours self-directed study per week

Available for Non-Award Study

Prerequisite(s): CORPFIN 2006/2500

Assumed Knowledge: SACE Stage 2 Mathematical Studies and ECON 2008 or ECON 2508 or ECON 2012

Assessment: Exam/assignments/tests/tutorial work as prescribed at first lecture

This course is an in-depth study of the funds management theory and practice. Participants will first develop a strong theoretical knowledge of asset pricing, market efficiency and funds management. Students will then be exposed to the managed funds industry and be required to apply their theoretical knowledge to understand the process of developing, managing and evaluating these assets. In addition, students will practically develop an Investment Policy Statement (or a Statement of Advice) for an investor, forecast characteristics of various asset classes in an economy, and be able to create an investment vehicle to satisfy investors' needs. The students will also learn various strategies to manage funds, issues that impact performance, and issues in benchmarking and performance evaluation. Equities, Fixed Income Securities, Commodities, Real Estate, Alternate Funds, Emerging, Developing and Developed markets will be examined in

the context of portfolio construction.

CORPFIN 3502 Options, Futures and Risk Management III

3 units - semester 1 or semester 2

3 hours + 9 hours self-directed study per week

Available for Non-Award Study

Prerequisite(s): CORPFIN 2006/2500

Assumed Knowledge: SACE Stage 2 Math. Studies, CORPFIN 2006 or 2500, ECON 2008 or 2508 or 2012; discrete & continuous compounding, how financial markets operate, stock & bond price valuation procedures, algebra & simple differentiation

Assessment: Exam/assignments/tests/tutorial work as prescribed at first lecture

This course examines the function and operation derivative markets serve in finance. To begin, the course identifies relationships that must hold in such markets if there are to be no arbitrage opportunities. The course then covers options pricing using the Binomial and Black-Scholes approach, as well as describing a wide range of futures and options dealing strategies, along with their applications to hedging and risk management. Currency and fixed-interest derivatives are also considered as well as swaps, options on futures and some alternative exotic options.

CORPFIN 3503 Corporate Investment & Strategy III

3 units - semester 1

3 hours + 9 hours self-directed study per week

Prerequisite(s): CORPFIN 2006/2500 & CORPFIN 2502

Assumed Knowledge: SACE Stage 2 Mathematical Studies, ACCTING 1002, ECON 2008

Assessment: Exam/assignments/tests/tutorial work as prescribed at first lecture

This course examines techniques and issues in corporate finance with a focus on corporate investment decisions. The course covers several aspects of valuation in a corporate setting: estimation of free cash flow, stock valuation along with recognition of growth opportunities, risk management strategies, estimation of beta using online data, and specifying market scenarios to identify sustainable growth outcomes when evaluating investment proposals. Further topics include merger and acquisition strategies, examination of options embedded in corporate capital structures, incentive-aligning compensation including executive stock options, and techniques for measuring financial performance including Economic Value Added.

CORPFIN 3504 Treasury and Financial Risk Management III

3 units - semester 2

3 hours + 9 hours self-directed study per week

Prerequisite(s): CORPFIN 2500

Assessment: Exam/assignments/tests/tutorial work as prescribed at first lecture

The course examines the process and instruments used in treasury management and their application in hedging risk and creating risk profiles. Topics: money market instruments and management including yield curve,

convexity and price value of basis point, bond portfolio management, bond hedging and trading; derivatives including futures, interest rate swaps, currency swaps, credit derivatives; the management of market, credit, liquidity and operations risks, and computing the value of risk. These issues are examined from the view point of both financial and non-financial organisations.

Dentistry

LEVEL I

DENT 1005AHO/BHO Dental Science and Practice I

24 units - full year

Up to 24 hours a week

Restriction: BDS students only

Assessment: Formative assessment tasks, assignments, short tests, practical exercises, short answer integrated exams

From a patient care focus, this stream introduces students to the oral cavity and practice of dentistry and provides a foundation for understanding the normal structure and function of the oral cavity, patient management and dentistry as a career. By using problem-based learning packages that present a range of practice situations, students begin to develop patient investigation skills and an integrated knowledge base. The stream emphasises the scientific basis of dentistry; introduces new developments and outlines important ethical issues in the health professions; develops individual and group learning skills, describes the normal appearance of oral soft tissues, the morphology and development of the teeth and main features of the masticatory system as a basis for the analysis of patients' oral health and disease; discusses the nature, aetiology and prevention of common dental diseases at both individual and community level; introduces students to behavioural sciences and psychology applied to dentistry; provides exposure to the influences on dental practice and begins an examination of contexts in which dentists work.

Topics include: oral surface features; morphology of the teeth; tooth emergence and calcification; introduction to dental occlusion, radiographic anatomy; nature and distribution of dental diseases; preventive dentistry; fear and anxiety in dentistry; management and motivation of dental patients; dentist-patient communication; behavioural consequences of oral diseases; community dental health issues; dental education and the shaping of the professional; the professional environment; the dentist's role; career pathways; adaptation to change and the possible future for dentistry.

LEVEL II

DENT 2000HO Second Annual B.D.S. Examination

DENT 2001AHO/BHO Dental and Health Science II

6 units - full year

7 hours per week including problem-based learning sessions, class meetings, learning laboratories, tutorials

Restriction: BDS students only

Prerequisite: DENT 1001A/BH, DENT 1000HO

Corequisite: DENT 2002AHO/BHO, 2003 AHO/BHO, 2004AHO/BHO

Assessment: tests, written exam, performance in tutorials & learning laboratories, project

This stream aims, through the exploration of problem-based learning packages, to provide students with a detailed understanding of the embryology and histology of the dento-facial structures; to provide a basic understanding of the biochemistry of the human body with particular reference to the oral cavity; to develop an appreciation of the scientific aspects of clinical dentistry including functioning of the masticatory system and the importance of occlusion in all branches of dentistry.

Topics include: embryology of face; odontogenesis including enamel and dentine formation; histology of the oral tissues; dental caries; the structural basis of biochemistry; principles of nutrition; molecular organisation - including bioenergetics and the principles of metabolism; the integration and control of metabolism; hormones and growth factors; the biochemistry of soft tissues - including epithelium and connective tissue; the biochemistry of calcified tissues - bone, dentine, cementum and enamel; development of occlusion; occlusal variation; orofacial sensation; masticatory function; aspects of behavioural science. A number of problem-based dental learning packages are provided in this stream to give a context to student learning.

DENT 2002AHO/BHO Dental Clinical Practice II

8 units - full year

12 hours per week including clinical, practical, resource sessions

Restriction: BDS students only

Prerequisite: DENT 1002A/BHO, DENT 1000HO

Corequisite: DENT 2001AHO/BHO, 2003 AHO/BHO, 2004AHO/BHO

Assessment: practical (lab & clinic), academic (assignments & exams) - details in Dental Clinical Practice Manual

This course builds upon Dental Clinical Practice I with regard to the acquisition and consolidation of dental clinical skills. Experience will be gained in patient management, emphasising communication and behaviour management, clinical examination procedures and diagnostic methods before working with selected patients of the SA Dental Service.

Topics include: clinical assessment and recording of dental health data; diagnosis; introductory treatment planning; obtaining intra-oral radiographs; preventative regimes; basic restorative dentistry; properties of commonly used dental materials; introduction to management of emergencies; introduction to gingival and periodontal conditions, introduction to local anaesthesia.

DENT 2003AHO/BHO Structure and Function of the Body IID

6 units - full year

7 hours per week, including class meetings, laboratory sessions, research-based practical sessions, tutorials

Restriction: BDS students only

Prerequisite: DENT 1003AHO/BHO, DENT 1000HO

Corequisite: DENT 2001AHO/BHO, 2002 AHO/BHO, 2004AHO/BHO

Assessment: will include written exams, case scenarios, problem-based learning, tutorial and laboratory exercises

This stream aims to provide: an integrated coverage of the structure and function of selected body systems; a detailed description of the gross topographical anatomy of the head and neck emphasising aspects of functional and clinical importance; a description of the anatomy of the central nervous system. A number of problem-based scenarios are provided in this stream to give a context to student learning.

Topics include: structure and function of the alimentary, cardiovascular, respiratory, lymphoid, endocrine and renal systems; detailed osteology of the skull; applied anatomy of face and scalp, infratemporal region, temporomandibular joints, pterygopalatine fossa, submandibular region, pharynx, larynx, cranial nerves; central nervous system; sensory and motor pathways; autonomic nervous system; blood supply of the brain; anatomy related to local anaesthesia in dentistry.

DENT 2004HO General Studies IID

4 units - semester 1

3 hours per week

Restriction: BDS students only

Prerequisite: DENT 1004AHO/BHO, DENT 1000HO

Corequisite: DENT 2001AHO/BHO, 2002 AHO/BHO, 2003AHO/BHO

Assessment: projects, written reports, tests, assignments & group presentations

This stream includes topics that will be made available to students during first and second years. Aspects of basic physics: the basic physics forming the prerequisite knowledge for the major streams in the BDS program; includes X-rays. Aspects of basic chemistry: the aspects of basic chemistry forming the prerequisite knowledge for the major streams in the BDS program. Biostatistics: provides students with an appreciation of the nature and scope of statistics applied to biological problems (biostatistics) as well as a working knowledge of basic statistics, including presentation, interpretation and analysis of data. Computing: provides students with a basic understanding of computers and computing with particular reference to the needs of dental students and dentists. Communication and learning: introduces students to the educational philosophy and various study skills of the BDS program and emphasises the need to be proficient in communication. Evidence Based Dentistry II provides students with skills necessary to sustain and enhance the clinical practice of dentistry using scientific information published in biomedical journals. Social context of dentistry: aims to provide an understanding of the diversity of the Australian community and how that diversity influences the process of dental care and oral health outcomes.

LEVEL III

DENT 3000HO Third Annual B.D.S. Examination

DENT 3001AHO/BHO Dental and Health Science III

6 units - full year

7 hours per week (approx)

Restriction: BDS students only

Prerequisite: DENT 2001AHO/BHO II, DENT 2000HO

Corequisite: DENT 3002 AHO/BHOI, DENT 3003AHO/BHO

Assessment: short tests, journal review, practical and clinical exercises, problem-based learning sessions & PBL written exam

This stream aims to: describe the normal functioning of the masticatory system, the importance of occlusion and the characteristics of an optimal occlusion, describe the morphological and functional changes that occur in the masticatory system as a result of normal growth and ageing, and the adaptability of the system to these changes; emphasise the importance of occlusion in all branches of dentistry and consider the methods available for diagnosis and treatment of disorders of the masticatory system; consider the causes and effects of disease and stress on the masticatory system; describe human growth and development with particular emphasis on aspects relevant to dentistry; provide an introduction to aspects of orthodontic examination diagnosis and treatment. A number of problem-based dental learning packages are provided in this stream to give a context to student learning.

Topics include: orofacial sensation, jaw muscles and receptors; jaw reflexes, mastication and swallowing, temporomandibular joint function and loading, parafunction, occlusal therapy, concepts of physical growth and development, methods for studying growth, factors affecting growth, development of the skull, factors affecting normal dento-facial growth, indices of maturation, facial aesthetics, normal changes in dental arch form, aetiology of orthodontic problems.

DENT 3002AHO/BHO Dental Clinical Practice III

12 units - full year

16 hours per week (approx), including class meetings, laboratory sessions, clinic sessions

Restriction: BDS students only

Prerequisite: DENT 2002 AHO/BHO, 2001AHO/BHO, 2003AHO/BHO, DENT 2000HO

Corequisite: DENT 3001AHO/BHOI, DENT 3003AHO/BHO

Assessment: tests of understanding, assignments, laboratory exercises, clinical work, written exam

This stream builds upon Dental Clinical Practice II with regard to the consolidation of preventive, periodontal and restorative clinical skills, through manikin exercises and by provision of treatment for selected patients of the South Australian Dental Service. The pain control component of the stream covers local anaesthetic techniques. The stream includes a laboratory program

in removable prosthodontics, endodontic and in cast gold restorations. Topics include: patient assessment for local anaesthesia, pharmacological aspects of local anaesthesia, basic principles of local anaesthesia; aspects of basic and advanced restorative dentistry; treatment planning principles of preparation for indirect gold, resin and porcelain restorations; laboratory stages of cast gold restorations; bonding systems; philosophies and practices of removable partial denture prosthodontics; periodontics aetiology and treatment; pulpal, periapical and periradicular pathology; dental materials; periapical and panoramic radiography.

DENT 3003AHO/BHO Diseases and Disorders of the Body IIII

6 units - full year

6 hours per week

Restriction: BDS students only

Prerequisite: DENT 2003AHO/BHOD, DENT 2000HO

Corequisite: DENT 3001AHO/BHO, DENT 3002 AHO/BHO

Assessment: two written exams, end of year exam

This stream introduces students to pathology, microbiology and immunology in the context of human disease. The course aims to provide students with a detailed understanding of core pathological and immunological reactions that can occur and how such processes relate to clinical disease; to provide students with detailed knowledge of the structure and biology of bacteria, viruses and fungi and how these organisms relate to human disease states and processes; to provide a detailed understanding of the normal oral microflora and its relationship to oral health and specific dental diseases such as caries and periodontal disease; to provide a detailed understanding of the processes of neoplasia and hyperplasia generally and in relation to the mouth. Topics include: cell injury, acute and chronic inflammation, healing, the cellular composition and function of the normal immune system, immune system reactivity, immunological hypersensitivities; microbial physiology, metabolism and genetics; principles and practice of disinfection and sterilisation, antibiotic therapy, infection control; host-parasite relationships including mechanism of pathogenicity; bacterial, viral and fungal diseases of relevance in dentistry; the oral microbiota and its relation to caries and periodontal diseases; hyperplasia and oral hyperplastic lesions, HIV/AIDS, neoplasia and oral neoplasia.

LEVEL IV

DENT 4000HO Fourth Annual B.D.S. Examination

DENT 4001AHO/BHO Dental and Health Science IV

8 units - full year

Contact hours to be determined

Restriction: BDS students only

Prerequisite: DENT 3001AHO/BHO, DENT 3000HO

Corequisite: DENT 4002AHO/BHO, DENT 4003AHO/BHO

Assessment: short tests, projects, dental learning packages, written exams

This stream provides an understanding of the interactions between general health, general disease and medical treatment with dental treatment. Topics include: general and oral pathology, general medicine, pharmacology and therapeutics, general surgery; social and community aspects of health, and pain control. Dental learning packages (DLPs) will be presented in coordination with the Dental Clinical Practice IV stream. It aims to: provide a systematic overview of clinical and other pathologic features of various diseases/lesions that may be encountered in the tissues of the oral region; describe the systemic diseases and disorders of the body of relevance to dentists; provide an appreciation of principles of drug administration, distribution, action and elimination; provide instruction on important classes of drugs with emphasis on their modes of administration and action, therapeutic uses, adverse effects and interactions; discuss the role of pharmacology and therapeutics in dental practice; discuss the management of medically compromised patients; provide an overview of surgery including knowledge of metabolic response to injury and shock, bleeding and transfusion and surgical infection; discuss social and community aspects of disease including the burden of illness, inequalities and determinants of health, health promotion, care and policy.

An understanding of the basic principles and clinical and microscopic features of disease is assumed, particularly: developmental disorders, inflammation, basic immunopathology, hyperplasia, neoplasia, degenerative disease, hormonal-metabolic disease, physiology, biochemistry and microbiology.

DENT 4002AHO/BHO Dental Clinical Practice IV

12 units - full year

28 contact hours per week, including class meetings, laboratory & clinical sessions

Restriction: BDS students only

Prerequisite: DENT 3002A/BHO, DENT 3000HO

Corequisite: DENT 4001A/BHO, DENT 4003AHO/BHO

Assessment: self assessment, tutor assessment of clinical performance, written exams, may also include written assignments or patient case reports & interviews - minimum standards are required in each discipline to complete stream requirements

This stream builds upon previous years with regard to the acquisition and consolidation of dental clinical skills in the disciplines of behavioural science, conservative (operative) dentistry, dental materials, endodontics, oral diagnosis, periodontics, radiology and radiography. The stream consists of class meetings, lectures, seminars, research projects, dental learning packages and clinical practice.

In semester 1 students are introduced to the clinical disciplines of complex conservative dentistry (fixed prosthodontics), paediatric dentistry, orthodontics and removable prosthodontics. Students undertake preclinical practical exercises in these disciplines and must achieve a satisfactory standard before proceeding to treat

patients. In semester 2, the disciplines of oral surgery and temporomandibular disorders are introduced through lecture programs. In clinical practice, emphasis is placed on acquiring skills for integrated treatment planning and developing responsible professional attitudes towards care and management of patients assigned to each student for treatment.

DENT 4003AHO/BHO **Dental Selectives IV**

4 units - full year

30 hours total for one option

Restriction: BDS students only

Prerequisite: DENT 3000HO

Corequisite: DENT 4001, DENT 4002

Assessment: by supervisors/presenters, as per the option outline

This stream is designed to give students the opportunity to explore selected aspects of dentistry in more detail or gain additional experience in certain areas or take part in one or more activities not included in other parts of the program. This might include coursework from appropriate programs, supervised research projects, or exchange visits to other dental schools or dental organisations. Students may undertake established options, or develop individual options with guidance from the Stream Coordinator, and are strongly advised to discuss such a proposed selective option with the coordinator as soon as possible.

HONOURS

DENT 4100AHO/BHO **Honours Dentistry**

24 units - full year

Restriction: B.Sc.Dent. Honours students only

Candidates may, with the approval of the Head of Department, enrol in the Honours Dentistry program after they have successfully completed third year, or after they have obtained the degree of Bachelor of Dental Surgery or equivalent. Under certain circumstances, candidates who have obtained a degree in another Faculty may be admitted to an Honours program in Dentistry.

Candidates may choose as their principal area of study one of the current research thrusts of the Dental School. Candidates will be required to undertake on a full-time basis for one year (or half-time if approved by the Dean), a program of study which may include essays, seminars, laboratory work, clinical work and a research project under the supervision of a member of the School. A candidate may be required to undertake such formal courses of study in related courses as are deemed desirable. Prospective candidates are advised to consult the Dean of the Dental School and staff members in the year preceding the honours year to discuss the area of proposed study:

ANAT SC 4000A/B Honours Anatomical Sciences
BIOCHEM 4000A/B Honours Biochemistry
DENT 4100A/B Honours Dentistry

GENETICS 4005A/B Honours Genetics
PATHOL 4000A/B Honours Pathology
PHARM 4000A/B Pharmacology

DENT 4150AHO/BHO **Honours Dentistry (Two Year)**

24 units - full year

Prerequisite(s): Third year of the Ordinary degree of Bachelor of Dental Surgery, or after they have obtained the Ordinary degree of Bachelor of Dental Surgery or equivalent.

Under certain circumstances, candidates who have obtained an ordinary degree in another Faculty may be admitted to an Honours program in Dentistry.

Candidates may choose as their principle area of study one of the current research thrusts of the Dental School. Candidates will be required to undertake on a full time basis for one year (unless in half-time if approved by the Dean of the Dental School), a program of study which may include essays, seminars, laboratory work, clinical work and a research project under the supervision of a member of the School. A candidate may be required to undertake such formal courses of study in related courses as are deemed desirable. Prospective candidates are advised to consult with Dean of the Dental School and staff members in the year preceding the honours year to discuss the area of proposed study.

LEVEL V

DENT 5000HO **Fifth Annual (Final) B.D.S. Examination**

DENT 5001AHO/BHO **Dental and Health Science V**

8 units - full year

6 hours per week (approx)

Restriction: available to BDS students only

Prerequisite: DENT 4001AHO/BHO, DENT 4000HO

Corequisite: DENT 5002 AHO/BHO, DENT 5003 AHO/BHO

Assessment: written assignment, seminar presentation, seminar participation, may include written exam

This stream builds upon 4001 Dental and Health Science IV. A population perspective on oral health and access to dental care is presented as a context for the consideration of a number of problem-based learning packages on the organisation and delivery of dental care, particularly to disadvantaged groups. These problem-based learning packages are supported by guided reading, seminars and resource talks.

Clinical applications of oral pathology and oral medicine are covered including the principles of diagnosis of systemic and local diseases affecting the oral cavity. Instruction is given in the use of clinical and laboratory diagnostic procedures. Methods of treatment of oral disease are considered and emphasis is placed on interactions between dental treatment and medical conditions.

Topics related to community dentistry, practice management, working with auxiliaries, legal and ethical issues, as well as updates in a variety of clinical disciplines are discussed in a series of interdisciplinary seminars during the second semester.

DENT 5002AHO/BHO **Dental Clinical Practice V**

12 units - full year

Hours to be determined

Restriction: BDS students only

Prerequisite(s): DENT 4002A/BHO, DENT 4000HO

Corequisite(s): DENT 5001AHO/BHO, DENT 5003 AHO/BHO

Assessment: self assessment, tutor assessment, written clinical assessments - minimum standards required in each discipline to satisfactorily complete stream requirements

This stream builds upon previous years with regard to the acquisition and consolidation of dental clinical skills in different disciplines including general dental practice, oral diagnosis, dental radiology, oral surgery, paediatric dentistry and orthodontics, pain control and removable prosthodontics. Students gain clinical experience of the comprehensive management of patients, based on the coordination of skills from individual disciplines. Seminars and clinical tutorials explore a wide range of topics relating to general practice. Emphasis is placed on treatment planning, reviews of completed treatments and prognosis. Oral diagnosis and Dental Radiology components continue on, with increasing emphasis on the development of treatment planning and communication skills. Rural placements are available for final year students. Lectures on oral surgery presented during the fourth year are followed and expanded in class meetings and clinical sessions. Major aspects of oral surgery including dento-alveolar surgery, maxillo-facial injuries, pre-prosthetic surgery, orthognathic surgery, temporomandibular joint surgery and aspects of cleft surgery and head and neck oncology are covered.

Clinical practice in oral surgery includes patient assessment, diagnosis, selection of appropriate analgesia/ anaesthesia, routine exodontia, minor oral surgery and elective oral surgery on outpatients at the Royal Adelaide Hospital. Students gain further knowledge in the management of apprehension and pain, including general anaesthesia.

DENT 5003AHO/BHO **Dental Selectives V**

4 units - full year

90 hours total for two options, some aspects may be taken during semester breaks or semester at times convenient to the student and presenter

Restriction: BDS students only

Prerequisite: DENT 4000HO, some clinical selectives - students to have satisfactorily passed prerequisite level of knowledge

Corequisite: DENT 5001HO, DENT 5002HO

Assessment: determined by supervisor/presenters as per option outline

This stream follows on from Dental Selectives IV with the intention of allowing students to customise aspects

of their dental program by exploring selected aspects of dentistry in more detail, gaining additional experience in certain areas, or taking part in activities not included in the core component of the undergraduate dental program, with a scholarly component to each option. This might include additional experience in advanced aspects of dental clinical practice, dental and health sciences, or human biology, coursework from other appropriate educational institutions, supervised research projects, or exchange visits to other institutions or dental schools.

Students may undertake established options, or develop individual options with guidance from the Stream Coordinator, and are strongly advised to discuss such a proposed selective option with the coordinator as soon as possible.

Design Studies

LEVEL I

DESST 1001 **Special Topic in Design Studies IB**

3 units - winter semester

Up to 3 hours lectures and tutorials per week

Restriction: B.Des.St.students - other students should check their Academic Program Rules re eligibility

Quota will apply

Assessment: assignments, projects

This course will be focusing on one or more of the following aspects relating to the built environment: design exploration, environmental issues, plants, construction, user issues, representation, and digital media. Course description will be provided by the School when specialist teaching is available.

Detailed course description will be provided by the School prior to enrolment.

DESST 1007 **Special Topic in Design Studies IA**

3 units - semester 2

Up to 3 hours lectures and tutorials per week

Restriction: B.Des.St.students - other students should check their Academic Program Rules re eligibility

Quota will apply

Assessment: assignments, projects

This course will be focusing on one or more of the following aspects relating to the built environment: design exploration, environmental issues, plants, construction, user issues, representation, and digital media. Course description will be provided by the School when specialist teaching is available.

Detailed course description will be provided by the School prior to enrolment.

DESST 1009 **Art History and Theories IA**

3 units - semester 1

Up to 2 lectures, 1 tutorial per week; occasional excursions

Restriction: B.Des.St.students - other students should check their Academic Program Rules re eligibility

Quota will apply

Incompatible: Art History & Theories or DESST 2033

Assessment: slide test 40%, essays 35%, tutorial work 25%

Impressionism and after: a critical view of European art from the time of Manet to the First World War. This course introduces students to the most influential ideas and theories in the art of the latter part of the 19th century, a time of renegotiation of the relationship between artists and the social context within which they work. Included in the study are the major artists and ideas contributing to the development of impressionism, post-impressionism, symbolism, fauvism, cubism, futurism, constructivism, posters and political art. The course aims to stimulate an awareness that familiarity with the history of ideas can aid each person in the expansion, structuring and enrichment of his or her own life. Development of the following skills will be brought into focus: clear-thinking, verbal communication, written communication, interpretation of written and visual material, and ability to work with historical research methods. Guest lecturers and excursions are incorporated in the course where appropriate. Use is made of a broad range of visual material.

DESST 1019 **Art History and Theories IB**

3 units - semester 1

Up to 2 lectures, 1 tutorial per week; occasional excursions

Restriction: B.Des.St.students - other students should check their Academic Program Rules re eligibility

Quota will apply

Incompatible: DESST 2032

Assessment: slide test 40%, essays 35%, tutorial work 25%

Art history and theories after World War I: modernism and beyond. The course introduces students to some of the leading ideas and manifestations of visual art from about 1920 to the present day. The term 'visual art' is broadly understood to include film, graphics, photography, posters, performance and the arts of process and idea, as well as painting, sculpture and architecture (although architecture is chiefly dealt with in other courses). Expressionism, dada, surrealism, modernism, abstract expressionism, op, pop and minimalism, art and technology, environments, happenings, performance, body art, conceptual art, process art, video, women's art, murals and photorealism are studied. Guest lecturers and excursions are incorporated in the course where appropriate. Use is made of a broad range of visual material.

DESST 1027 **Human Environments: Design and Representation**

6 units - semester 1

Up to 2 hours of lectures, up to 4 hours studio/workshop/tutorial per week

Restriction: B.Des.St.students - other students should check their Academic Program Rules re eligibility

Quota will apply

Incompatible: Both DESST 1023 & DESST 1024

Assessment: Design work, assignments, class & tutorial & field activity participation

This course provides an introduction to the fundamentals of design with particular reference to the built environment including the relationships of climate/site, culture/history and technology, with the making of projects, and strategies for designing. The course engages students in active learning through research and project work, both individually and in collaboration with others, to translate ideas and concepts into form in a meaningful way. The course emphasises developing design communication skills: hand/manual and digital drawing, oral presentation with appropriate visual aids, and written communication.

DESST 1028 **Natural and Urban Systems**

3 units - semester 2

Up to 3 hours lecture/workshop per week

Restriction: B.Des.St.students - other students should check their Academic Program Rules re eligibility

Quota will apply

Incompatible: DESST 1006

Assessment: Assignments, reports, class & tutorial & field activity participation

This course provides an introduction to: the concept of systems thinking, including 'natural' and human-made systems with an emphasis upon the built environment context; sciences of landscape, climate, biology, ecology, wetlands, arid landscapes, soil and water eco-units; particular characteristics of Australian and local 'natural' systems; relationship between 'natural' systems and design/construction as well as their impacts on each other; and the concept of sustainability of environmental systems. The course also provides an introduction to the notion of different stakeholders in natural and constructed environments, their needs and aspirations. The course develops effective communication skills especially through oral presentation with appropriate visual aids, and written communication following academic protocols.

DESST 1029 **Construction and Design: Theories and Practice**

6 units - semester 2

Up to 2 hours of lectures and 4 hours workshop/tutorial per week

Restriction: B.Des.St.students - other students should check their Academic Program Rules re eligibility

Quota will apply

Prerequisite(s): DESST 1027

Incompatible: Both DESST 1008 & DESST 1014

Assessment: Design projects, assignments

This course provides an introduction to the theories and practice of construction. Building and landscape

constructions are investigated in relation to the cultural, technological and historical context in which they appear. The course introduces the students to materials and materiality, structural behaviour and construction techniques, and a small planting palette including the plants' performance, behaviour, form and maintenance. It also investigates the relationship between client, architect, engineer and builder. Typical theoretical and practical work in this course includes: interpreting theoretical texts concerned with technological issues; writing concise theoretical texts; design of a small-scale site specific project; building scale models of a small-scale building and its site/topography; building scale models of construction details; reading scaled/working drawings; and representing ideas by applying the conventions used in professional graphical representations (ie. floor/site plans, elevation, section, detail, axonometric, sketch perspective).

DESST 1030 History of Settlements

3 units - semester 1

Up to 3 hours of lectures and tutorials per week

Restriction: B.Des.St.students - other students should check their Academic Program Rules re eligibility

Quota will apply

Incompatible: DESST 1018

Assessment: Assignments and essays typically 90%, quizzes typically 10%

This course introduces the historical and socio-cultural context as well as related design theories of human settlements prior to the 19th century. It fosters a global perspective as well as awareness of particular Australian and local manifestations. The key issues examined will include: geometric and iconographic order, the status and role of architectural designers and writers, methods of representation and reproduction involved in constructing and propagating architectural ideas, and important historical perspectives that situate the developments of human settlements. Practical exercises stimulate skills in research, critical analysis and debate, and academic writing protocols for short analytical texts.

DESST 1031 Special Topic in Design Studies ID

3 units - winter semester

Up to 3 hours workshops per week

Restriction: B.Des.St.students - other students should check their Academic Program Rules re eligibility

Quota will apply

Prerequisite(s): DESST 1027 and DESST 1030

Assessment: assignments and a test

This course will be focusing on one or more of the following aspects relating to the built environment: design exploration, environmental issues, plants, construction, user issues, representation, and digital media. Course description will be provided by the School when specialist teaching is available.

Detailed course description will be provided by the School

prior to enrolment.

DESST 1032 Imaging Our World

3 units - semester 1

Up to 3 hours lectures/tutorials/workshops per week

Restriction: B.Des.St students, B.Computer Graphics students

Quota will apply

Incompatible: DESST 1007

Assessment: Assignments, projects

Cities are no longer just built, products are no longer just made, lives are no longer just lived, all are imaged. Imaging Our World is about the representation and communication of images with digital media. Both theory and practical work will explore these concepts through case studies and projects. Students will communicate their work through print and digital graphics.

DESST 1500 Landscape Narratives

3 units - semester 1

Up to 3 hours lectures and tutorials per week

Restriction: B.Des.St.students - other students should check their Academic Program Rules re eligibility

Quota will apply

Assessment: Assignments typically 30%, reading critique (essay) typically 20%, installations typically 2 x 25%

This course concentrates on introducing and equipping students with practical and theoretical skills and knowledge to sensitively design spaces and structures, public and private. It is about knowing how and where to design for spaces and how and what to erect upon spaces. This is informed by developing the ability to read sites and places, to understand the meanings and narratives within places whether told by nature or by culture as all places have an inherent meaning.

The course is about experiencing places, understanding the concept of cultural landscapes and engaging in the cultural discourse about place. It is also about developing students' imagination and ability to think creatively and broadly, enabling them to think about what could be and where it could be situated, having properly thought about what is there now and how it came to be.

We will consider place, meaning and landscape, and examine ways of reading, describing and experiencing place, as avenues for creating sensitive designs. This includes engaging the stories or narratives by considering topography, design styles, built structures, and the articulation of public spaces including public art. It includes both non-Aboriginal and Aboriginal, in particular Kaurua, place-making cosmological ideas.

The course also introduces broad concepts applicable to design practice form, the meaning inherent in materials and site analysis. There is an underlying theme of ecological and social sustainability and engaging the indigenous nature of place.

The course includes two weekend practical workshops where students develop their ability to work in

collaborations and participate in group assessment and critiquing through constructing their own collaborative and individual, site-specific interventions in places, one in an Adelaide Hills landscape, the other, the built environment of the campus.

LEVEL II

DESST 2500 Technology in Design

6 units - semester 1

Up to 6 hours per week including lectures, studios, tutorials

Restriction: Both DESST 2005 and DESST 2034

Quota will apply

Prerequisite(s): DESST 1029

Assumed Knowledge: Level I B.Des.St. core courses

Assessment: Assignments (design development stages of major design projects) typically 50%, final assignments typically 35%, exercises typically 10%, quizzes 5%

This course explores the environmental and technological aspects of design of the built environments. Key topics include climate; thermal performance; thermal comfort; natural light; noise control; building structures; construction materials, techniques and processes; and the interrelationships between plants, hard landscape and domestic scale building construction. The course also introduces students to related Standards, Codes and Regulations on design. The projects encourages innovative and investigative designs that integrate environmental, human and technical issues, with the use of different manual and digital techniques to express design as well as to apply the conventions of technical documentation.

DESST 2501 Design Studio

6 units - semester 2

Up to 6 hours a week including lectures and studios

Restriction: DESST 2016, DESST 2023 and DESST 2037

Quota will apply

Assumed Knowledge: Level I B.Des.St. core courses

Assessment: Typically, assignments (design development stages of major design projects) 60%, design exercises 30%, participation, discussion, field trip 10%

This studio course explores contemporary design forms and theories and their origins in the form-making techniques and the design movements, theories, and critiques of the modern era and recent past. Coursework will comprise a series of individual and group studio projects, emphasising experimentation in both abstract and realistic design exercises. These will include multiple shorter exercises and incremental submissions entailing intensive in-studio workshops. Students will work in a variety of 2 and 3 dimensional media, further developing skills in presenting design work with manual/hand and digital drawing and physical modelling. This will explore conventions and innovations in architectural and landscape architectural representation.

DESST 2502 Architecture Histories and Theories

3 units - semester 2

3 hours lectures and tutorials

Restriction: DESST 2016, DESST 2023 and DESST 2037

Quota will apply

Assumed Knowledge: level I B.Des.St. courses

Assessment: Essay/Design Project typically 50%, tutorial and online exercises typically 30%, quizzes typically 20%

This course explores the histories and theories of architecture in the Modern era. Formal and theoretical developments since the mid 19th century are placed in a coherent historical framework through which further spatial, social and cultural dimensions of architectural discourse may be better understood. From a global perspective, lectures and readings address the larger story of how Modern (European) ideas and forms came to dominate architectural thinking worldwide by the mid 20th century, and how these have continued to evolve in the light of more recent post-colonial and post-modern critiques and theories that have shaped the globalised world of contemporary architectural design. Through these critical perspectives, the course also addresses issues of cultural and social difference in the modern world, and how these are reflected and responded to in the development of designed environments. The course is lecture and tutorial based. Assessable coursework may consist of a short written essay and related design project, in-class quizzes, and more interactive forms of group work which may include formal debates, seminar presentations and compulsory participation in on-line discussion boards.

DESST 2503 Landscape Architecture Histories and Theories

3 units - semester 2

3 hours a week

Restriction: DESST 2016, DESST 2023 and DESST 2037

Quota will apply

Assumed Knowledge: Level I B.Des.St. core courses

Assessment: Assignments and essays typically 60%, tutorial presentations typically 30%, quizzes typically 10%

This course examines the theories and histories of landscape architecture. It focuses on key landscape movements and important designers, theorists and garden makers, including an appreciation of the Australian context. Given the dynamic history of landscape architecture, special emphasis is placed on the transmission of ideas, the diffusion of technologies or the mobility of individuals as a means to understand efforts to shape diverse landscapes. A process of accumulative assessment, research and critical analysis of iconic precedents and innovative contemporary practice will be cultivated as a solid basis for students' future design work.

DESST 2504 Art History and Theories IIA

3 units - semester 1

Up to 2 lectures, 1 tutorial hour per week, occasional excursions

Restriction: DESST 1009

Quota will apply

Assessment: Typically slide tests 40%, essays 35% and tutorial work 25%

Impressionism and after: a critical view of European art from the time of Manet to the First World War. This course introduces students to the most influential ideas and theories in the art of the latter part of the 19th century, a time of renegotiation of the relationship between artists and the social context within which they work. Included in the study are the major artists and ideas contributing to the development of impressionism, post-impressionism, symbolism, fauvism, cubism, futurism, constructivism, posters and political art. The course aims to stimulate an awareness that familiarity with the history of ideas can aid each person in the expansion, structuring and enrichment of his or her own life. Development of the following skills will be brought into focus: clear-thinking, verbal communication, written communication, interpretation of written and visual material, and ability to work with historical research methods. Guest lecturers and excursions are incorporated in the course where appropriate. Use is made of a broad range of visual material.

DESST 2505 Art History and Theories IIB

3 units - semester 1

Up to 2 lectures, 1 tutorial hour per week, occasional excursions

Restriction: DESST 1019

Quota will apply

Assessment: Typically slide tests 40%, essays 35% and tutorial work 25%

Art history and theories after World War I: modernism and beyond. The course introduces students to some of the leading ideas and manifestations of visual art from about 1920 to the present day. The term 'visual art' is broadly understood to include film, graphics, photography, posters, performance and the arts of process and idea, as well as painting, sculpture and architecture (although architecture is chiefly dealt with in other courses). Expressionism, dada, surrealism, modernism, abstract expressionism, op, pop and minimalism, art and technology, environments, happenings, performance, body art, conceptual art, process art, video, women's art, murals and photorealism are studied. Guest lecturers and excursions are incorporated in the course where appropriate. Use is made of a broad range of visual material.

DESST 2506 Digital Media II

6 units - semester 1

6 hours contact per week in lectures and tutorials

Restriction: DESST 2008, DESST 2025, DESST 2038

Quota will apply

Assumed Knowledge: DESST 1032 Imaging Our World

Assessment: Typically, digital design assignments, 3 assignments 20% each, final assignment 40%

This course develops knowledge and skills in the use of

digital media for communication and design in the visual arts. The specific forms of communication and design are those of digital visualisation and presentation. The course augments knowledge and skills developed in prior areas such as of design, architecture, landscape architecture and computer graphics. It focuses on graphic design skills, both 2D and 3D, print and digital media production, visualisation and animation.

DESST 2507 Special Topic in Design Studies IIA

3 units - semester 1

3 hours in lectures, tutorials and site visits

Quota will apply

Assumed Knowledge: Level I B.Des.St. core courses

Assessment: Typically design projects, presentation, portfolio and knowledge test

In this course, students will explore the vast spectrum of possibilities to use plants in design projects. Plants have, over centuries, been regarded as the inherent element in landscape architectural work. However, with the development of the profession moving away from garden design to creating urban settings that fulfil our contemporary, consumer-oriented demands, less attention is devoted to the complexity of planting design. In fact, plants are one of the most challenging materials in design. As living beings they change over seasons, they grow and die. The dimension of time therefore plays a significant role in design concepts and objectives.

This course approaches plants from a design perspective, which incorporates both the arts and the science. We will examine the composition of space with plants, their forms, structures and textures, the specifics of plant selection, installation and maintenance. Through the analysis of precedents we will investigate the aesthetics of planning design and develop an understanding of historic and contemporary fashion trends. As most recently, debates on the way we think about cities emphasise the importance of greenery in our build environment, a specific focus in this course lies in the exploration of possibilities for planting design in contemporary architectural and urban contexts, e.g. of roof gardens, green walls.

Finally, students will combine their analysis skills with their theoretical knowledge of horticultural, functional, and ecological aspects. In individual design projects, we will develop design solutions for site-specific conditions and learn to apply appropriate representation techniques for designs with plants.

DESST 2510 Special Topic in Design Studies IID

3 units - winter semester

3 hours of workshops

Restriction: B.Des.St.students - other students should check their Academic Program Rules re eligibility

Quota will apply

Assumed Knowledge: Level I B.Des.St. core courses

Assessment: Typically 40% main project; 40% assignments; 20% participation, field trip, quizzes

This course will be focusing on one or more of the following aspects relating to the built environment: design exploration, environmental issues, plants, construction, user issues, representation, and digital media. Course description will be provided by the School when specialist teaching is available.

Detailed course description will be provided by the School prior to enrolment.

DESST 2512 Islamic Architecture and Gardens II

3 units - semester 1

3 hours of lectures and tutorials

Quota will apply

Assumed Knowledge: Level I B.Des.St. core courses

Assessment: Typically tutorial assignments 40%, final paper 60%

This is an introductory course to the history, themes and forms of Islamic architecture and gardens in both traditional and contemporary contexts. It introduces students to the historical development of the constructed environment in the Islamic world, to key building types, and to the elements of place making in urban settings. It discusses order in space, spatial organisation, and spatial sensibility in the Islamic tradition as well as the religious and socio-cultural meanings associated with place making. It examines in some detail the notion of symbolism and the spiritual significance of form and space.

DESST 2514 Conservation in the Built Environment II

3 units - semester 1

3 hours of lectures and tutorials

Restriction: DESST 3000 Conservation in the Built Environment

Quota will apply

Prerequisite(s): Level I B.Des.St. core courses

Assessment: Typically tutorial assignments and written final assignments

This course examines the reasons, the what, where and why of conservation in the built environment. It considers how heritage items are identified, recorded, assessed and protected, and questions the validity of these actions. It also examines the various forms of conservation (preservation, restoration, reconstruction etc) and the uses and misuses of traditional and contemporary materials and construction methods. Urban conservation and the complexities of townscape character are canvassed together with the reuse of old buildings and the effects of current popular industries, such as tourism.

LEVEL III

DESST 3027 Design for Sustainable Community

6 units - semester 1

Up to 6 hours lectures/seminar/studios/tutorial per week - field camp may be required

Restriction: B.Des.St.students - other students should check their

Academic Program Rules re eligibility

Quota will apply

Assumed Knowledge: Level II Des.St. core courses

Incompatible: DESST 3011 or DESST 3027

Assessment: main project, assignments

This course centres upon 'place-making' in rural settled environments. It focuses on the diversity of philosophical positions which inform current contemporary approaches to urban and landscape sustainability understood in its widest sense, including not only the 'environmental', but the resource, cultural, social, political, economic, institutional and professional realms, and positions them within a design inquiry. Topics typically include introduction to strategic and statutory planning and legislative frameworks, natural resource management concepts, various 'sustainable' environmental systems, economic feasibility study of a design proposal, various standards and codes, and international agreements and impact on local practices. In teamwork and individual work students will explore an existing development and develop a 'sustainable' design/redevelopment proposal, presented in selective and concise graphical presentations using manual and digital techniques, as well as in concise professional report writing.

DESST 3028 Natural and Landscape Systems

6 units - semester 1

Up to 6 hours lectures/seminars/tutorials per week - field camp may be required

Restriction: B.Des.St.students - other students should check their Academic Program Rules re eligibility

Quota will apply

Assessment: assignments, presentations, posters, field reports

This course focuses on the analysis and assessment of physical and biological systems in a non-urban context. Students will be required to examine the impact of a medium scale landscape design project on a specific arid/mallee/coastal/wetland or temperate environment in South Australia. Through on-site analysis and assessment, research, mapping, and written and graphic documentation, the course seeks to expand students' knowledge and appreciation of the diversity and sensitivity of 'natural' systems, including geomorphology, hydrology, biospheric conditions, fauna, flora (including taxonomy, performance and maintenance) aquatic and bird life, as well as ecological systems theory and practice generally.

DESST 3029 Architecture Design Studio

6 units - semester 2

Up to 6 hours lectures/studios per week

Restriction: B.Des.St.students - other students should check their Academic Program Rules re eligibility

Quota will apply

Assumed Knowledge: Level II Des.St. core courses & DESST 3011

Incompatible: DESST 3006

Assessment: assignments, final project

This course focuses on the exploration of contemporary

architecture theories and their application to the design and development of medium scale building project(s). Emphasis will be placed on development of brief and program; developing design to respond to the local environments with the application 'passive' design principles, natural and artificial lighting, and building ergonomics; selecting building materials suitable for the construction; developing construction details; sizing of the structural elements; performing life-cycle cost analysis; and presenting design work with manual/hand and digital drawing and physical modelling using the conventions in architectural representation as well as using innovative digital techniques.

**DESST 3030
Landscape Architecture Design Studio**

6 units - semester 2

Up to 6 hours lectures/studios/workshops per week - field camp may be required

Restriction: B.Des.St.students - other students should check their Academic Program Rules re eligibility

Quota will apply

Assumed Knowledge: Level II Des.St. core courses, DESST 3011 or DESST 3027 & DESST 1025 or DESST 2025 or DESST 3028

Incompatible: DESST 3022

Assessment: design projects, assignments, presentations and portfolios

This course focuses on the exploration of the breadth of contemporary landscape architectural practice, theories and their application within design projects. The student will explore the diversity of landscape expression and its definition through site analysis and alternative concept development. The student is engaged in a range of design communications from manual/hand and digital drawing through physical modeling, to effective oral and written presentations. The art of criticism is emphasised as the mode of teaching and learning exchange between students, coordinator and guest reviewers.

**DESST 3031
Digital Media Studio**

6 units - semester 2

Up to 6 hours lectures/digital studio per week

Restriction: B.Des.St.students - other students should check their Academic Program Rules re eligibility

Quota will apply

Assumed Knowledge: DESST 1032 Imaging Our World

Assessment: digital design projects, assignments

This course focuses on the concepts of rules, contingency, grammar and play in the design of virtual places. It explores interaction between the user/designer and virtual space and issues of narrative and animation. Designs will be developed in several digital media applications using visualisation techniques, including Web design, 3D modelling, animation and simulation using a general purpose solid modeller of the kind used in the digital film production industry, as well as 3D Studio Max. An introduction to non-linear editing and sound track production will be used as part of the electronic presentation of virtual design spaces.

**DESST 3502
Islamic Architecture and Gardens III**

3 units - semester 1

3 hours of lectures and tutorials

Assumed Knowledge: Level II B.Des.St. core courses

Assessment: Typically tutorial assignments 40%, final paper 60%

This is an introductory course to the history, themes and forms of Islamic architecture and gardens in both traditional and contemporary contexts. It introduces students to the historical development of the constructed environment in the Islamic world, to key building types, and to the elements of place making in urban settings. It discusses order in space, spatial organisation, and spatial sensibility in the Islamic tradition as well as the religious and socio-cultural meanings associated with place making. It examines in some detail the notion of symbolism and the spiritual significance of form and space.

**DESST 3506
Special Topic in Design Studies IIID**

3 units - winter semester

3 hours of workshops per week

Restriction: B.Des.St.students - other students should check their Academic Program Rules re eligibility

Quota will apply

Assumed Knowledge: Level II B.Des.St. core courses

Assessment: Typically 40% main project; 40% assignments; 20% participation, field trip, quizzes

This course will be focusing on one or more of the following aspects relating to the built environment: design exploration, environmental issues, plants, construction, user issues, representation, and digital media. Course description will be provided by the School when specialist teaching is available.

Detailed course description will be provided by the School prior to enrolment.

**DESST 3508
Special Topic in Design Studies IIIF**

6 units - winter semester

Field Trip plus contact time before and after the Field Trip.

Quota will apply

Prerequisite(s): Level II B.Des.St. core courses

Assessment: Individual work 70% and team work 30%

Following the success of last year this Special Course - Penang Urban Design Studio - will again be offered and conducted during the mid-year break and completed within the first 2-3 weeks of the second semester. Following a short three day exploration of Singapore, this course will focus on the revitalisation of the compact urban centre of George Town now a UNESCO World Heritage site - on the island of Penang in Malaysia and will be of particular value to those students with a keen interest in heritage and environmental protection, cultural diversity, and urban regeneration. Students will work on urban design projects identified by George Town communities as being fundamental to the future of their

much neglected historic town. Projects are likely to span a wide range of urban issues from heritage protection, traffic management, environmental degradation, public realm development and enhancement, affordable housing, and the adaptation of existing urban fabric for contemporary uses. Architects, an architectural historian, a philosopher, heritage experts, an environmentalist, government representatives, and community representatives - all Penang citizens - will share their experience, knowledge and ideas and will provide support and encouragement throughout the studio. Through teamwork and individual research and exploration, students will use manual and digital techniques to present their proposals for George Town's revitalisation to community and government representatives. An essential part of this process will be the production of short films about aspects of George Town life that each team of students will determine and film with the assistance and advice of the media lecturer, Mr Josh McCarthy. Throughout the three weeks students will be encouraged to use their George Town experiences to challenge theoretical views about what constitutes livable cities and to arrive at urban design proposals that balance the theoretical with the realities of daily life.

DESST 3509 Digital Media III: Narratives in Animation

6 units - semester 1

1 hour lecture and 4 hours tutorial/workshop per week

Restriction: DESST 3005 Special Topic in Design Studies IIIA, DESST 3509 Digital Media III

Quota will apply

Assessment: Digital design projects and assignments

This course explores narratives and storytelling through the use of 2D animation in short film. Through project work and assignments students will develop scripts, storyboards and short, 2D animated films using industry standard software and techniques, while under the supervision of industry leaders. Students will communicate their work through digital presentations and folios.

DESST 3510 Sustainable Residential Building Design

3 units - semester 1

Up to 3 hours of lectures and tutorials per week.

Restriction: Available to B.E(ArEng) and B.DesSt. students only.

Quota will apply.

Assumed Knowledge: For B.DesSt students only: DESST 2500

Incompatible: DESST 2510 and DESST 3506

Assessment: Typically a research report 20%, sustainability assessments 40%, design projects (preliminary and final) 40%

This course focuses on the principles for sustainable residential building design where sustainable is understood to include environmental, social and economic aspects. Topics covered include low energy design, water sensitive design, lighting, waste, materials, on-site power, user issues, as well as environmental performance assessments and life-cycle analysis. On completion of this course students will be able to make a proposal for a sustainable house design including using performance simulation software to assess and rate the building.

DESST 3511 Sustainable Commercial Building Design

3 units - semester 2

Up to 3 hours of lectures and tutorials per week.

Restriction: Available to B.E(ArEng), B.E(SustEE) and B.DesSt. students only.

Quota will apply.

Assumed Knowledge: For B.DesSt students only: DESST 2500

Assessment: Typically a research report 20%, energy simulation and environmental assessments 40%, design projects 40%

This course focuses on the principles for sustainable commercial building design where sustainable is understood to include environmental, social and economic aspects. Topics covered include 'green' commercial building design, appropriate technology for heating, cooling, ventilating, and lighting systems, building materials, water and waste management, energy production, user issues, as well as environmental performance assessments and life-cycle cost analysis. On completion of this course students will be able to make a proposal for a medium scale sustainable commercial design, use energy simulation software, and rate the building design against a nationally accepted benchmark.

HONOURS

DESST 4001A/B Honours Design Studies

24 units - full year

Restriction: approved Honours B.Des.St.students only

Assumed Knowledge: consult the Head of the School of Architecture, Landscape Architecture and Urban Design

Students will be required to undertake supervised research in one or two advanced topics, thereby developing a thorough understanding of appropriate research techniques. The outcome of this research will be submitted in the form of a substantial essay or research report including a survey of the literature relevant to the topic(s) chosen. The range of topics to be offered in any year will depend on staff availability.

Topics expected to be offered from time to time include:

- Architectural & Landscape Architectural History
- Australian Architectural & Landscape Architectural History
- Australian Urban Design History & Practice
- Computer-Aided Design
- Computer Applications in Architecture, Landscape Architecture or Urban Design
- Conservation in the Built Environment
- Criticism and Architecture & Landscape Architecture
- Cross-Cultural Architectural & Landscape Architectural Topics
- Dryland Landscape Design
- Heritage Conservation & Cultural Landscapes
- Islamic Architecture & Garden Design

Issues in Sustainable Architecture & Urban Design
 Plants in Design
 Project Management
 South East Asian Architecture & Landscape Architecture
 Theories in Modern Architecture & Landscape Architecture
 Thermal Design of Buildings
 Urban Design Histories & Theories
 Urban Design in Islamic or South East Asian Places
 Urban Ecology.

Subject to the approval of the Head of the School of Architecture, Landscape Architecture and Urban Design and with the agreement of the other Departments/ Schools/Faculties concerned, a course equivalent to 12 units at Level IV taught in another department/ school/ faculty may be taken as part of this program.

Development Studies

LEVEL I

DEVT 1001 Introduction to Development Studies

3 units - semester 1

3 contact hours per week

Available for Non-Award Study

Assessment: tutorial papers/participation, essays

This course aims to provide students with an understanding of key perspectives and issues in development theory, policy, and practice. It focuses in particular on debates surrounding the effect of globalisation on poverty, the nature of 'capable states', the causes of civil war, and strategies for ensuring the sustainability of development, overcoming gender inequality, and rebuilding collapsed states. The course is intended to be multi-disciplinary in character in that it seeks to illustrate the way in which different disciplinary lenses can inform our understanding of what development is, how it occurs, and how it can be achieved.

ADVANCED LEVEL

DEVT 2100 Poverty and Social Development

3 units - semester 2

3 contact hours per week

Prerequisite: 12 units Level I Humanities/Social Sciences

Incompatible: ANTH 2027

Assessment: Tutorial paper, essay, participation

Among the biggest challenges facing the global community today are the eradication of poverty and inequality, and the needs of social development. This course introduces students to the history of the concept

of poverty, the culture of poverty, the causes of poverty and its effects. Intersections between poverty and health, human rights and education will be explored in a variety of international contexts. Policies designed to reduce poverty will be analysed at both the global or international level and from community perspectives. Case studies of poverty assessments and poverty reduction projects will be a major feature of course content. The course also introduces social development, with emphasis on understanding and planning for socially sensitive development. Global attention to social development, such as the World Bank's plan and the World Summit on social development will be explored.

DEVT 2101 Community, Gender and Critical Development

3 units - semester 1

3 contact hours per week

Prerequisite(s): 12 units Level I Humanities/Social Sciences

Incompatible: DEVT 2001/3001 and ANTH 2021/3021

Assessment: Report, essay, tutorial presentation/participation, case study assessment

This course critically explores some of the ways in which community and gender influence and are transformed by contemporary development policies, processes and programs. Students will evaluate key concepts and frameworks in terms of the anthropology of development and critique international development and planned culture change from modernist, gender-based and poststructuralist perspectives.

The course takes an actor-oriented perspective, grounding applied practices in macro-economic, historical and socio-political contexts of local people's development experiences. It privileges the ways in which development beneficiaries perceive, understand and feel about the imposition of development and culture change and to what extent they can gain knowledge and/or power over this process through the analysis of several community-based case studies. The course also looks at some of the knowledge, skills and attitudes that are needed to seek practical solutions in these settings, exploring various participatory field methods concerned with generating shared information, ensuring community empowerment and participation and in eliciting community/ local views.

CAPSTONE

DEVT 3002 Development Studies Professional Practicum

6 units - summer semester

71 hours in class (14 hours lectures, 9 hours field trips, 48 hours language classes) plus 160 hours internship placement

Restriction: Bachelor of Development Studies students only

Quota applies. Students will need to apply to, and be accepted by, ACICIS.

Prerequisite(s): 24 units of level 1 courses, plus at least 12 units of Advanced level courses

Assessment: Language exam (40%), participation (10%), 4500 word reflective journal (50%)

The Development Studies Professional Practicum (DSPP) offered by the Australian Consortium for In-Country Indonesian Studies (ACICIS) provides an opportunity for students to gain valuable experience working as an intern with a development organisation in a developing country context while learning about a country that is central to global efforts to reduce poverty and promote sustainable development. The course will involve four main components, all of which will be carried out in Jakarta, Indonesia: two weeks of intensive Indonesian language training aimed at achieving basic competency; a series of lectures by experts on development issues in Indonesia; field trips to related sites; and an internship with a development organisation in which English is widely used. Possible host organisations for the internship include multilateral and bilateral donor agencies, local and international non-governmental organisations, local and international business organisations, research institutes, and government departments and agencies.

For further information on applying, including the application due date, please visit the ACICIS website at www.acicis.murdoch.edu.au/hi/dspp2.html. Students who are interested in this program should register their interest with the Program Convenor for Development Studies prior to applying.

DEVT 3100 **Aid Policy and Administration**

3 units - semester 2 (Not offered until 2010)

3 contact hours per week

Prerequisite: 15 units in Development Studies/Anthropology with no more than 6 units at Level I

Assessment: Participation, tutorial presentation/paper, essay

This course is concerned with a critique of ODA (Overseas Development Assistance, or more commonly referred to as AID) in terms of its effectiveness at both micro and macro levels and the socio-cultural, economic and political implications of interventions in developing economies. This 2010 course offering will mainly focus on critiquing the practices, problems, and processes in social development and planned culture change in the context of AID programs. It will also briefly look at some of the anthropological knowledge/skills used in poverty reduction activities on AID.

HONOURS

DEVT 4401A/B **Honours Development Studies**

24 units - full year

Prerequisite: UG degree and distinction average in courses contributing to a major in Development Studies, or equivalent approved by Head of Discipline - other candidates may apply to Honours Coordinator

Assessment: 2 x 5,000 word essays, 15,000–20,000 word thesis

Students wishing to take Honours Development Studies should consult the Honours Coordinator prior to commencing Advanced Level studies to ensure that appropriate course choices are made in preparation for Honours.

Honours Development Studies is a full-year program involving weekly seminars, essays and a final dissertation. In some circumstances Honours Development Studies can be studied part-time over two years or can be combined with Honours in another Discipline.

Students are encouraged to complete DEVT 2100 Poverty and Social Development before proceeding to Honours.

Economics

LEVEL I

ECON 1000 **Principles of Macroeconomics I**

3 units - summer semester or semester 1 or semester 2

2 lectures, 1 tutorial per week

Available for Non-Award Study

Quota will apply

Incompatible: Not available to students who have passed WINEMKTG 1063EX

Assessment: Typically, tutorial participation, mid semester test & final exam

This course provides an introduction to macroeconomic theory and policy in Australia. Provides a framework in which the interaction of labour, money, goods and services markets are developed to allow the students to understand how the process, unemployment, interest rates and production of goods and services are jointly determined. The framework is then used to understand how policies set by the central bank and the government affect the economy.

ECON 1002 **Australia & the Global Economy I**

3 units - semester 1

2 lectures, 1 tutorial a week

Available for Non-Award Study

Assessment: Typically tutorial work, essays or papers, final exam

How does the global economy affect Australia and Australians? Lectures will examine current challenges such as greenhouse gas emissions, national security and the management of our seas. They will review debates about the way our growth is affected by China and the United States, about the impact of foreign investment and migration, and about the determinants of our interest rate and therefore our loan repayments. The course will deepen students' understanding of the world around us and its impact on the way we live and work.

ECON 1004 **Principles of Microeconomics I**

3 units - summer semester or semester 1 or semester 2

2 lectures, 1 tutorial per week

Available for Non-Award Study

Quota may apply

Incompatible: Not for students who have passed WINEMKTG 1026EX

Assessment: Typically a mid semester exam & a final exam

The course provides an introduction to a core area of economics known as microeconomics. It considers the operation of a market economy and the problem of how best to allocate society's scarce resources. The course considers the way in which various decision making units in the economy (individuals and firms) make their consumption and production decisions and how these decisions are coordinated. It considers the laws of supply and demand, and introduces the theory of the firm, and its components, production and cost theories and models of market structure. The various causes of market failure are assessed, and consideration is given to public policies designed to correct this market failure.

ECON 1005 Mathematics for Economists I

3 units - semester 1

5 hours lectures/tutorials/workshops per week

Cerequisite: ECON 1004

Incompatible: Beginners course - except with permission of Head of School, may not be taken by students who have performed satisfactorily in SACE Stage 2 Maths (Maths Studies, Specialist Maths or Math Methods) or equiv.

Assessment: Typically tutorial work, mid-semester test, final exam

The course is intended for students without sufficient SACE Stage 2 Maths who wish to obtain knowledge of mathematical techniques suitable for economic analysis. It assumes very little prerequisite knowledge. The approach is informal and aims to show students how to do and apply the mathematics they require for a successful study of economics. Economic applications are considered although this course aims to teach the mathematics not the economics. Topics covered include basic algebra, simple finance, calculus and matrix algebra.

ECON 1008 Business and Economic Statistics I

3 units - summer semester or semester 1 or semester 2

2 lectures, 1 workshop per week

Available for Non-Award Study

May apply

Incompatible: WINEMKTG 1015EX. In addition, ECON 1008, STATS 1000 cannot both be counted toward degree.

Assessment: Typically tutorials, tests, final exam

This course is an introduction to statistics. It is aimed at students in business, economics and similar disciplines, although it may have wider appeal. The emphasis is on understanding the concepts that statistics relies on and in interpreting the results. By the end of the course students will understand what statistical techniques are appropriate and when they aren't appropriate. No computing background is required although students will be shown how Microsoft Excel can be used in statistical analysis. Topics covered may include descriptive statistics, correlation and simple regression, probability, point and

interval estimation, hypothesis testing, index numbers and time series analysis.

ECON 1009 International Financial Institutions & Markets I

3 units - semester 1 or 2

2 lectures, 1 tutorial per week

Available for Non-Award Study

Quota may apply

Assessment: Typically tutorial participation, written assignments, mid semester exam & final exam

This course provides an introduction to the institutions, markets and securities that form the basis of modern financial and monetary systems. It also introduces some of the main theories and quantitative concepts and methods used in finance. The aim is to use the Australian system as an example, and to emphasise those characteristics that Australia has in common with other modern financial systems around the world. It provides a sound basis for students progressing to the study of finance at higher levels within the University, and at the same time is a valuable, self contained and up-to-date overview of Australian financial markets and institutions for non-specialists.

ECON 1010 Introductory Mathematical Economics I

3 units - semester 1

2 lectures and 1 tutorial per week

Available for Non-Award Study

Assessment: Typically exam and test

This course focuses on the mathematical methods and models that are required to understand current economics and to investigate economic models. Topics may include limits, open sets and spaces; univariate and multivariate calculus; matrix algebra and systems of linear equations; and applications in important economic models.

LEVEL II

ECON 2500 International Trade & Investment Policy II

3 units - semester 2

2 lectures and 1 tutorial per week

Available for Non-Award Study

Assumed Knowledge: ECON 1004

Incompatible: ECON 2000

Assessment: Tutorial work, essay and final exam

This course examines the interactions between economic, political, strategic, and legal aspects of international trade and investment policies at national, regional and global levels. This includes the ways in which WTO members affect and are affected by regional and multilateral trade and economic integration agreements. The effects of trade and investment policy on the efficiency of resource

use, on income distribution, and on national and global trade and economic welfare are analysed using trade theories and models of international trade and investment.

ECON 2501 **Resource & Environmental Economics II**

3 units - semester 1
2 lectures and 1 tutorial per week
Available for Non-Award Study
Assumed Knowledge: ECON 1004
Incompatible: ECON 2001
Assessment: Project, essay and final exam

This course is designed to demonstrate practical applications of economic analysis to a variety of environmental issues. The course aims to better understand how economics can help resolve environmental problems caused by human activity. The course's overall purpose is to increase understanding of the role of economics in environmental policy making. A variety of local, regional and global issues are examined. The topics explored include: the optimal level of pollution; the extinction of species; the economics of renewable resources (fisheries and forests); the role of taxes, property rights and regulations; the linkages between economic development, sustainable growth, population pressure, and habitat preservation.

ECON 2502 **East Asian Economies II**

3 units - winter semester or semester 2
2 lectures and 1 tutorial per week
Available for Non-Award Study
Assumed Knowledge: ECON 1004 or ECON 1000 or any 6 units of Asian Studies courses or equivalent
Incompatible: ECON 2003
Assessment: Typically tutorial work, essay and final exam

The course is designed to introduce students to the economic and political nature and structure of the economies of East Asia. It will examine the mechanisms which shape their economic activity and the role of historical and cultural factors in the development of their economic institutions. The contribution of these institutions to economic growth will also be closely examined.

ECON 2503 **Mathematical Economics II**

3 units - semester 1
2 lectures and 1 tutorial a week
Restriction: Not available to students who have passed ECON 2005
Available for Non-Award Study
Assumed Knowledge: ECON 1004, ECON 1010 or equivalent
Assessment: Typically exam, test

This course concentrates on the mathematical methods that are required to understand current economics and to investigate economic models. Topics include optimisation with and without constraints; linear models; advanced matrix algebra; integration and functions; and linear differential equations. It is recommended that students

intending to proceed to the Honours degree or Master of Economics successfully complete this course.

ECON 2504 **Intermediate Econometrics II**

3 units - summer semester or semester 1 or semester 2
2 lectures and 1 tutorial per week
Restriction: Not available to students who have passed ECON 2006
Available for Non-Award Study
Prerequisite(s): ECON 1008 or STATS 1000 or equiv
Assumed Knowledge: ECON 1004, ECON 1000, Maths at least to level of ECON 1005
Incompatible: Cannot be counted with STATS 2002, STATS 2003 and MATHS 2103
Assessment: Typically tutorial work, mid-semester test and final exam

This course provides an introduction to the econometric techniques used to analyse data sets in economics, business and finance. It builds on basic statistics, inference and regression as covered in introductory statistics courses. The focus is on understanding the methods involved, using statistical software to provide the results and then interpreting and commenting on these results. The course reviews basic statistics, regression and inference, and then introduces multiple regression analysis, which remains the most commonly used statistical technique in econometrics. The remainder of the course considers various practical aspects of linear regression models and may include dummy variables, different functional forms and the consequences of violation of the classical regression assumptions.

ECON 2506 **Intermediate Microeconomics II**

3 units - semester 1 or semester 2
1 lecture and 1 tutorial per week
Available for Non-Award Study
Prerequisite(s): ECON 1004
Assumed Knowledge: ECON 1000
Incompatible: ECON 2009
Assessment: Typically assignments, mid-semester exam, participation and final exam

This course builds on the microeconomic principles studied in the Level I Economics courses and provides an analysis of the way in which the market system functions as a mechanism for coordinating the independent choices of individual economic agents. It develops a basis for evaluating the efficiency and equity implications of competition and other market structures, and a perspective on the appropriate role of government. Included are the study of consumer choice, production and cost, market structure, and market failure.

ECON 2507 **Intermediate Macroeconomics II**

3 units - semester 1 or semester 2
2 lectures and 1 tutorial per week
Available for Non-Award Study
Prerequisite(s): ECON 1000

Assumed Knowledge: ECON 1004

Incompatible: ECON 2011

Assessment: Mid-semester exam and final exam

The first year macroeconomics course provided a broad overview of the subject area. In this course, the aim is to delve a little deeper into the subject. Macroeconomics is concerned with the behaviour of the economy as a whole. In particular it addresses the big issues which affect us on a day to day basis. As macroeconomists we want to know why some countries grow more quickly than others, why some experience high inflation while others have stable prices and why all countries experience recessions and booms. Furthermore, we want to know if government policy can have an impact on these factors.

The aim of this course is to provide these tools and give a deeper understanding of these issues. It is intended that this course leads on from the first year macroeconomics course and provides a smooth transition for those intending to pursue macroeconomics in later years.

ECON 2508 Financial Economics II

3 units - semester 1 or semester 2

2 lectures and 1 tutorial per week

Available for Non-Award Study

Quota may apply

Assumed Knowledge: CORPFIN 2006 or ECON 1009

Incompatible: ECON 2012

Assessment: Assignments, mid-semester test, final exam

This course is designed to provide both a self contained study of the principles of financial economics, and a bridge between courses such as International Financial Institutions and Markets I or Business Finance II and third year finance courses. It includes a critical discussion of the efficient markets theory, an overview of quantitative methods in finance, considers risk aversion in the context of utility theory, examines portfolio theory, the Capital Asset Pricing Model and multi-factor asset pricing models, covers bond pricing, duration and convexity, theories of the term structure of interest rates, the dividend discount and price-earnings models of share valuation, and introduces the top down approach to investment decisions.

ECON 2509 Topics in Microeconomics II

3 units - semester 2

2 lectures and 1 tutorial per week

Available for Non-Award Study

Prerequisite(s): ECON 2009 or ECON 2506

Assessment: Typically mid-semester exam, assignment, final exam

This course builds on the microeconomic theory studied in Principles of and Intermediate Microeconomics. It provides analysis of choices and actions of economic agents when faced with market failure, uncertainty and asymmetric information. It considers markets for the factors of production and considers the role of government as an institution to maximise welfare. This course provides an essential grounding for further

studies in all fields of microeconomics including: public economics, resource and environmental economics, labour economics, strategic thinking, industrial organisation, game theory, and behavioural economics.

ECON 2510 Business & Economic Statistical Theory II

3 units - semester 2

2 lectures and 1 tutorial per week

Available for Non-Award Study

Prerequisite(s): MATHS 1011 Mathematics IA and MATHS 1012 Mathematics IB, or ECON 2005, or ECON 2503, or equiv

Assumed Knowledge: ECON 1004, ECON 1005 and ECON 1008

Assessment: Typically tutorial work, mid-semester test, final exam

The purpose of this course is to provide a solid foundation in probability and statistics for use in economics, business and other social sciences. It is primarily intended to prepare students for the further study of econometrics and other economics subjects. Topics to be covered in the course include probability theory, random variable, distributions, expectation, random variable transformations, special distributions, random sample, law of large numbers, central limit theorem, properties of estimators, estimation methods, confidence intervals, hypothesis testing, Bayesian analysis, and nonparametric methods.

LEVEL III

ECON 3018 Environmental Economics E III

3 units - semester 2

2 lectures and 1 tutorial per week

Restriction: Civil & Env. Engineering students only

Prerequisite(s): C&ENVENG 3067

Assessment: Typically project, tutorial assignments and final exam

This course studies the application of economic analysis to the management of the environmental and natural resources. We will consider the role of economic theory in understanding and solving environmental and resource problems and discuss empirical examinations of the theory. Domestic and international policy implications will be addressed. Topics that may be covered include: air and water pollution, sustainability, renewable and non-renewable resource management, and the impact of trade.

ECON 3500 Resource & Environmental Economics III

3 units - semester 2

2 lectures, 1 tutorial per week

Available for Non-Award Study

Assumed Knowledge: ECON 2009 or ECON 2506

Incompatible: ECON 3003

Assessment: Typically project, tutorial assignments & final exam

This course studies the application of economic analysis to the management of the environmental and natural resources. We will consider the role of economic theory in understanding and solving environmental and resource problems and discuss empirical examinations of the theory. Domestic and international policy implications will be addressed. Topics that may be covered include: air and water pollution, sustainability, renewable and non-renewable resource management, and the impact of trade.

ECON 3501 Development Economics III

3 units - semester 1

2 lectures and 1 tutorial per week

Available for Non-Award Study

Assumed Knowledge: ECON 2506 Intermediate Microeconomics, and ECON 2507 Intermediate Macroeconomics

Incompatible: ECON 3006

Assessment: Tutorial work, mid-semester exam, assignment and final exam

The course is concerned with the economics of less-developed countries. Topics to be discussed include: the meaning and measurement of development, demographic change, industrialisation, trade, poverty and income distribution, agricultural development and relevant growth theories.

ECON 3502 Topics in Applied Econometrics III

3 units - semester 1

2 lectures and 1 tutorial per week

Available for Non-Award Study

Prerequisite(s): ECON 2006 Economics and Financial Data Analysis, or ECON 2504 Intermediate Econometrics II

Incompatible: ECON 3013. Not permitted to be undertaken after ECON 3507 Econometric Theory III

Assessment: Typically mid-semester exam and final exam

The aim of this course is to teach students various aspects of estimation and inference for linear and binary regression models. Particular attention is paid to the econometric theory, to the application of econometrics to real-world problems, and to the interpretation of the estimation results. The first part of the course includes a review of statistics and multiple regression models. The second part discusses some extensions to cross-sectional, time series and panel data models commonly used in economics. The course will include the use of standard statistical package, STATA. Prior knowledge of STATA is not assumed.

ECON 3503 Strategic Thinking III

3 units - semester 1

2 hour lecture and 2 hour workshop per week

Available for Non-Award Study

Assumed Knowledge: ECON 2503 Mathematical Economics

Incompatible: ECON 3016

Assessment: Typically assignments, mid-semester exam, final exam and participation.

This course provides an introduction to Game Theory.

Game Theory is a mathematical framework which makes possible the analysis of the decision making process of interdependent subjects. It is aimed at explaining and predicting how individuals behave in a specific strategic situation, and therefore help improve decision making. A situation is strategic if the outcome of a decision problem depends on the choices of more than one person. Most decision problems in real life are strategic.

The course will explain in depth the standard equilibrium concepts (such as Nash Equilibrium, Subgame-Perfect Nash Equilibrium, and others) in Game Theory. To illustrate the concepts, real-world examples, case studies, and classroom experiments might be used.

ECON 3504 Labour Economics III

3 units - semester 2

2 lectures and 1 tutorial per week

Available for Non-Award Study

Assumed Knowledge: ECON 2506 Intermediate Microeconomics

Incompatible: ECON 3017

Assessment: Case study, tutorial participation, essay and final exam

This course is designed to introduce students to economic models of the labour market, both theoretical and empirical. Illustrations from current policy debates are used. After completing this course, students will be able to describe key features of the labour market, analyse models of the labour market in order to make predictions concerning the impact of public policy recommendations, and evaluate existing data relating to these predictions. Topics include the supply of labour and accumulation of human capital; demand for labour in competitive and non-competitive markets; labour unions; the determination of equilibrium wages; wage discrimination; policies such as minimum wage laws, welfare reform, and trade.

ECON 3506 International Trade III

3 units - semester 1

2 lectures and 1 tutorial per week

Available for Non-Award Study

Assumed Knowledge: ECON 2506 Intermediate Microeconomics, and ECON 2507 Intermediate Macroeconomics

Incompatible: ECON 3021

Assessment: Typically mid-semester exam and final exam

This course deals with the theory and practice of international trade and of trade-related policies. It focuses on analysing the gains from trade, the changing patterns of trade, the income distributional consequences of liberalising foreign trade, the relationship between trade, investment, and economic growth, and the reasons for and consequences of trade policies.

ECON 3507 Econometric Theory III

3 units - semester 2

2 lectures and 2 tutorials per week

Available for Non-Award Study

Prerequisite(s): ECON 2510 Business and Economic Statistical Theory II

Assumed Knowledge: MATH 1011/1012 or MATH 1013

Incompatible: ECON 3023

Assessment: Typically tutorial work, mid-semester exam and final exam

Students who want to do the Honours degree are expected to complete this course successfully. The objective of this course is to study more advanced topics on econometrics. Students are expected to have knowledge in statistics and multiple regression models at the level of Business Economic Statistical Theory II or equivalent. The topics in the course include heteroskedasticity, specification and data problems, regression analysis with time series data, panel data, instrument variables estimation, simultaneous equation models, and limited dependent variable models. The emphasis is on understanding the models in light of actual empirical applications. Through the course, we will apply the econometrics models to real-world data and interpret the estimation results in many respects. Standard econometric packages are used for computer exercises.

ECON 3508 Public Economics III

3 units - semester 1

2 lectures and 1 tutorial per week

Available for Non-Award Study

Assumed Knowledge: ECON 2506 Intermediate Microeconomics

Incompatible: ECON 3024

Assessment: Typically mid-semester test and final exam

This course investigates the role of the public sector in the economic arena. We will attempt to explain why government intervention is needed, how it influences the behaviour of the private sector and what the welfare effects of such influences are. We will also survey political economy, which regards actions of the public sector as determined by political processes. Topics covered may include welfare economics, market failures, and political economy.

ECON 3509 International Economic History III

3 units - semester 1

2 lectures and 1 tutorial per week

Available for Non-Award Study

Assumed Knowledge: ECON 2506 Intermediate Microeconomics and ECON 2507 Intermediate Macroeconomics

Incompatible: ECON 3030

Assessment: Tutorial work, essay, final exam

The course surveys the evolution of the international economy since the industrial revolution, with emphasis on the period since 1945 and on topics which are relevant to an understanding of current economic issues. The distinguishing feature of the course is analysis of long-run phenomena such as sustained economic growth or the impact of economic institutions which have long-lasting effects. The topics covered include international trade, finance and migration, differences in national rates of

economic growth and in economic systems, and sources of economic instability.

ECON 3510 International Finance III

3 units - semester 2

2 lectures and 1 tutorial per week

Available for Non-Award Study

Assumed Knowledge: ECON 2506 Intermediate Microeconomics and ECON 2507 Intermediate Macroeconomics and ECON 2504 Intermediate Econometrics II

Incompatible: ECON 3032

Assessment: Typically tutorial work, mid-semester test and final exam

This course deals with the analysis of two important and related macroeconomics issues in open economies: the exchange rate and the capital flows. The objectives of the course are two-fold: to introduce the main concepts, principles and models in the theory and empirical works in those two key areas of International Finance; to apply analytical tools to understand the relevant policy issues in the global markets. Based on additional reading materials, discussions on relevant current events from various parts of the globe will be carried out.

ECON 3511 Money, Banking and Financial Markets III

3 units - semester 1

2 lectures and 1 tutorial per week

Assumed Knowledge: ECON 1009 International Financial Institutions and Markets I, and ECON 2507 Intermediate Macroeconomics

Incompatible: ECON 3035

Assessment: Typically a mid-semester test, assignment, tutorial participation and final exam

This course links the fields of macroeconomics and finance. It provides coverage of economic principles that underlie the operation of banks and other financial institutions. The role of money in the economy and the impact of monetary policy on the macroeconomy are examined as are the links between monetary policy and the foreign exchange market. The course focuses on an understanding of the institutional environment in order to provide students with the ability to analyse contemporary issues facing those in financial markets such as the sub-prime mortgage and global financial crises, currency crises, regulation of financial institutions and inflation or deflation; it is not a course designed to further technical expertise in the instruments used in financial markets.

ECON 3512 Public Finance III

3 units - semester 2

2 lectures and 1 tutorial per week

Available for Non-Award Study

Assumed Knowledge: ECON 2506 Intermediate Microeconomics and ECON 3508 Public Economics III

Incompatible: ECON 3037

Assessment: Typically tutorial work, mid-semester exam and final exam

This course seeks to introduce the advanced undergraduate to formal models of public finance and topics in public finance that are of particular relevance in the Australian context. The course provides various typologies of taxes and introduces models that link optimal taxation to market characteristics such as elasticities. We shall examine the relationship between government finance and private sector finance. The budgeting process and various funding instruments are discussed with special reference to Australian institutions. Finally, issues of fiscal federalism will be covered with a strong emphasis on the Australian institutional and historical context. These will be contrasted with current literature on fiscal federalism arising out of research inspired by issues concerning the European Union.

**ECON 3514
Macroeconomics III**

3 units - semester 2
 2 lectures and 1 tutorial per week
 Available for Non-Award Study
 Prerequisite(s): Credit average in ECON 2507 Intermediate Macroeconomics
 Assumed Knowledge: ECON 2506 Intermediate Microeconomics
 Incompatible: ECON 3034
 Assessment: Typically mid-semester test and final exam

This subject presents an introduction to the advanced treatment of economic theory covered in ECON 2507 Intermediate Macroeconomics II. Topics covered may include general equilibrium, open economy models, advanced analysis of the role of wealth, expectations, and monetary and fiscal policy.

**ECON 3515
Time Series Econometrics III**

3 units - semester 1
 2 lectures and 2 tutorials per week
 Available for Non-Award Study
 Prerequisite(s): ECON 2503 Mathematical Economics II
 Assumed Knowledge: ECON 2510 Business and Economic Statistical Theory II
 Incompatible: ECON 3038
 Assessment: Typically tutorial work, mid-semester exam and final exam

Recently there has been much interest in developing econometric analyses for problems involving linear and nonlinear time series models. In part this has been motivated by the general scientific interest in stochastic dynamical systems and in part motivated by the advances in computational power which allows complex systems to be more accurately modelled. Examples of these systems include climatic and weather variations in meteorology and environment science, and fluctuating risk in financial derivatives.

Topics include stochastic difference equations; stationary and non-stationary time series; estimation for ARIMA models; model building and forecasting with ARIMA time series; basic ARCH and GARCH models; multivariate time series; and regression analysis of time series with non-linearity and non-stationarity. Applications include

time series approximations in pricing securities, risk management and term structure dynamics, estimation of interest rate models and nonparametric pricing derivatives, selection of time series models for detecting climate change, and trend detection in regional and global mean temperature series.

**ECON 3516
Industrial Organisation III**

3 units - semester 2
 2 lectures and 1 tutorial per week
 Available for Non-Award Study
 Assumed Knowledge: ECON 2009 or ECON 2506
 Assessment: Typically a project, assignments, mid-semester test and final exam

This course in applied microeconomics is concerned with the behaviour and performance of firms in markets, with a particular focus on strategic interactions. It goes beyond the perfectly competitive model by considering the nature of market power and how that affects firm behaviour and subsequently consumers and policy-makers. The course covers theories of monopoly, price discrimination, oligopoly, auctions, vertical and horizontal integration, economies of scale and scope, network externalities, and regulation; applications may include soft-drink advertising, bank mergers, deregulation of electricity and telecommunications, petrol pricing and mineral auctions.

**ECON 3517
Managerial Economics III**

3 units - semester 2
 2 lectures and 1 tutorial per week
 Available for Non-Award Study
 Assumed Knowledge: ECON 2009 or ECON 2506
 Assessment: Typically a project, assignments, mid-semester test and final exam

Managerial economics applies microeconomic analysis to decision methods of businesses or other management units. As such, it bridges economic theory and economics in practice. Topics generally include 1) Risk analysis - various models are used to quantify risk and asymmetric information and to employ them in decision rules to manage risk; 2) Production analysis - microeconomic techniques are used to analyse production efficiency, optimum factor allocation, costs, economies of scale and to estimate the firm's cost function; 3) Pricing analysis - microeconomic techniques are used to analyse various pricing decisions including transfer pricing, joint product pricing, price discrimination, price elasticity estimations, and choosing the optimum pricing method; 4) Capital budgeting - Investment theory is used to examine a firm's capital purchasing decisions.

HONOURS

**ECON 4003A/B
Honours Economics**

24 units - full year

Contact hours to be advised - arrangements for classes will depend on enrolments and students are advised to communicate with the Honours Coordinator before February

Restriction: Economic Honours students only

Prerequisite(s): B.Ec. (or equiv.) incl. a credit or better in ECON 3034, & ECON 3023 (or equiv), plus high standard in degree courses, credit or better in ECON 2509, ECON 2503, ECON 2510 & at least two other Level III economics courses

Assessment: paper in each of Econometrics, Microeconomics, Macroeconomics [examined in June], papers in optional courses, [approx] 12000 word thesis

Honours students are required to undertake a research project and present a thesis. The thesis, to be commenced by the first week of February, counts for either 37.5% or 25% of the year's assessment, depending on whether 3 or 4 optional courses are selected under clause (see below). The thesis is to be completed and presented, typed and bound, towards the end of second semester: the exact date is notified in February.

Students will be expected to present themselves for an oral exam on their thesis at a date towards the end of the University's November examination period. Each student is required to undertake the courses Econometrics, Microeconomics and Macroeconomics, given in first semester. Students will select 2 or 3 options from a range of courses which, subject to staff availability and sufficient enrolments, may include the following*:

Economic Development

International Finance

International Trade

Labour Economics

Time Series Econometrics

Mathematical Economics

Public Economics

*classes take place in semester 1 or 2

ECON 4005A/B Honours Finance

24 units - full year

Contact hours to be advised

Restriction: Finance Honours students only

Prerequisite: B.Fin (or equiv), ECON 3023, high standard in courses presented for degree

Assessment: coursework, papers, research project, thesis

Requirement: (a) Honours students are required to undertake a research project and present a thesis - the thesis, part of the final honours examination, counts for 25% - 50% of the year's assessment; (b) each student will select compulsory and optional courses from a range of Honours level courses from various Schools (it will be assumed usually that students will have appropriate prerequisites for these courses).

Detailed arrangements for classes will depend on enrolments and students are advised to communicate with the Honours Coordinator before February. Students may express an interest of admission in writing to the Honours Coordinator and will be admitted by invitation in November. Students admitted to the program will be

given a handbook with full details of expectations and details of courses.

Arrangements are possible for joint honours combining study in Finance with study in another Department/School. Details are available from the Honours Coordinator.

Education

LEVEL I

EDUC 1001 Schools and Policy

3 units - semester 1

2 hours per week

Restriction: Bachelor of Teaching students only

Check with School for Non-Award Study

This course will increase students' understanding of the complexities of educational policy impacting on schools, assist students to become effective leaders who inform, shape and implement educational policy, examine underlying themes of change and implementation challenges, explore the impact of various reform strategies on building teaching capacity, ensuring accountability, delivering adequate resources & improving learning, and explore international perspectives on school reform and change.

EDUC 1002 Primary School Interaction

3 units - semester 2

3 hours per week (or equiv.), including seminars, teaching placement

Restriction: Bachelor of Teaching students only

Assessment: completion of observation journal, series of reflective exercises

This course will require students to complete the equivalent of 10 half days of observation and experience in a primary school selected for them. In addition, there will be 3 half-day compulsory seminars associated with this experience. These seminars are outside teaching weeks.

LEVEL II

EDUC 2001 Issues in Contemporary Education

3 units - semester 1

3 hours per week

Restriction: Bachelor of Teaching students only

Check with School for Non-Award Study

Prerequisite: EDUC 1001 and EDUC 1002

Assessment: case study, assignment, portfolio

This course will focus on understanding some of the important issues facing education today. It will also

introduce student to theories which help to explain and provide practical approaches to dealing with these issues in the schools context.

EDUC 2002 **Professional Practice & Research**

3 units - semester 2

3 hours per week

Restriction: Bachelor of Teaching students only

Check with School for Non-Award Study

Prerequisite(s): EDUC 2001

Assumed Knowledge: EDUC 1001 and EDUC 1002

Learning modules will include critique of state-wide and national policy documents in education, examination of research in education and the opportunity to investigate effective models of professional development. The teacher's professional standards document will be referred to in establishing professional learning goals, planning and undertaking learning and development and participating in the extended professional community. The course will also showcase exemplary practices in schools and classrooms. Students will reflect on their first year practicum, understand the experiences and knowledge gained by students in the country practicum and the opportunities it presents for enhancing professional practice and research in education.

LEVEL III

EDUC 3002 **Secondary School Interaction**

3 units - semester 2

3 hours per week (or equiv) including seminars & teaching placement

Restriction: Bachelor of Teaching students only

Prerequisite: EDUC 1001, EDUC 1002

Assessment: observation journal, reflective exercises

This course will require students to complete the equivalent of 5 days observation and experience in a secondary school at a time and in a school to be negotiated. In addition there will be 3 half-day compulsory seminars associated with this experience which will be held outside normal teaching weeks.

LEVEL IV

EDUC 4201 **Education, Culture & Indigenous Perspectives (UG)**

3 units - semester 1

4 hours per week

This course is divided into two modules, both of which are valued at 1.5 units. The first module is entitled 'Culture, Education and Society' and aims to introduce students to theories around the diverse constructions of cultures, identities, and institutions in Australia. This

will include an overview of some of the theories which underpin school students' cultural identities and schools, and how these then affect our assumptions about what students know, how they learn and how teachers teach. The module examines theories around race and whiteness, gender, cultural pluralism, hybridity, diasporas and power, and how teachers and schools can operate hegemonically to reinforce social 'norms'. The complexity of cultural identities is highlighted and some strategies that enable the provision of 'inclusive' education to culturally plural groups are suggested.

The second module is entitled 'Indigenous Perspectives.' This module will focus more specifically on theories and ideas that relate to Indigenous Australians. This includes racism, the history and impacts of colonisation, and an overview of ontological perspectives. In addition, it will also explore education in contemporary contexts, including health and wellbeing, and social justice. Students will be exposed to pertinent policy issues and debates.

EDUC 4202 **Student Learning and Interaction**

3 units - semester 1

Restriction: Bachelor of Teaching and B Mus Ed students only

Module 1: Student Teacher Interaction in the Classroom. This course assists beginning teachers to consider and reflect upon the dynamics they participate in and are witness to within the classroom context. Our approach is informed by the knowledge that the learning process is inseparable to the interactions between teachers and students. In this course you will examine various approaches to foster and maintain a positive classroom environment so as to engender an effective context in which learning can take place.

Module 2: ICT for Teachers. In this module beginning teachers are introduced to the inclusion of ICT (Information & Communication Technology) into the design of lessons across all subject curricula in the classroom. Teachers in South Australia are required to have expertise in the embedding of ICT into their lesson design, so that they may provide textured ways for their students to increase their ICT literacy. This module will give beginning teachers exposure to the many avenues through which this may be done. Assumed knowledge is some ability in applications such as MS Word and Excel. It is understood that students in this module will range widely in their ICT knowledge.

EDUC 4203 **Curriculum and Assessment of Learning (UG)**

3 units - semester 2

3-4 hours per week

This course aims to provide students with an overview of curricula models and frameworks. It examines the theories underlying the design and development of curriculum, the nexus between the understanding of the process involved in the assessment of student learning and to provide them with the knowledge and skills necessary to manage this process are discussed.

Policies and influences that guide assessment practices, the role of assessment in optimising learning outcomes, and the assessment planning process including the purpose of assessment, the role of the student, reliability and validity, and basic skills testing are highlighted. At the end of the topic students will have developed a range of strategies and skills for critically examining curricula issues, constructing meaningful assessment to gauge student learning as well as have an understanding of state and national developments relating to senior secondary assessment, national statements and profiles, and recent assessment materials from ACER and other sources.

EDUC 4204 Families, Schools and Special Needs (UG)

3 units - semester 2

This course has two modules, each worth 1.5 units. The first module, entitled Families, Schools and Student Outcomes, explores the social and cultural context of students' learning. In particular, it examines family and school learning environments, as well as issues of gender, religion and funding as they affect students' learning outcomes at school. The course will culminate in some international perspectives on global education issues.

The second module will be called Education for Special Needs. This module will overview specific types of disability and explore current issues in the education of young people with special needs. It will introduce students to key theoretical and practice approaches to behaviour management and examine general principles of formal and informal assessment techniques. It will then address processes of transition from school to adult life for young people with disabilities.

EDUC 4205 Teaching Practice Part 1 (UG)

3 units - semester 1 or 2

Restriction: B.Teaching & B. MusicEd students only

Prerequisite: At least one Curriculum and Methodology course

Corequisite: At least one Curriculum and Methodology course

Students will undertake a series of 3 hour lectures for 8 weeks at University and one 5 week full time block of supervised teaching practice. Students who successfully complete the course are given a non-graded pass.

EDUC 4206 Teaching Practice Part 2 (UG)

3 units - semester 1 or 2

Restriction: B.Teaching & B. MusicEd students only

Prerequisite: At least one Curriculum and Methodology course

Corequisite: At least one Curriculum and Methodology course

Students will undertake one block of supervised teaching practice. Students who successfully complete the course are given a non-graded pass.

EDUC 4308A/B Accounting Curriculum and Methodology (UG)

2 units - full year

Restriction: Bachelor of Teaching students only

Prerequisite: Pass in 6 semesters of accounting course

The course aims to present information on a range of methodologies and discuss a variety of skills to help students to be better prepared for the start of their teaching career.

EDUC 4309A/B Adult Learner Curriculum & Methodology (UG)

2 units - full year

Restriction: Bachelor of Teaching students only

The course will explore life-long, life-wide and continuing learning in formal, informal and non-formal contexts. It will also investigate curriculum design and teaching methodology issues applicable for programs for adult learners, and include discussion of effective and appropriate strategies and techniques for assessment and evaluation of learning processes.

EDUC 4310A/B Biology Curriculum and Methodology (UG)

2 units - full year

Restriction: Bachelor of Teaching Students only

Prerequisite: pass in a Level III biological science course

Corequisite: EDUC 4329

Assessment: essay, unit of work, online tasks, designing pracs & investigations

The course aims to present information on a range of methodologies and discuss a variety of skills that will better equip students to be better prepared for the start of their teaching career in middle school science and senior school biology.

EDUC 4311A/B Business Studies Curriculum & Method (UG)

2 units - full year

Restriction: Bachelor of Teaching students only

Prerequisite: pass in six semesters of business studies

The course aims to present information on a range of methodologies and discuss a variety of skills to help students to be better prepared for the start of their teaching career.

EDUC 4312A/B Chemistry Curriculum and Methodology (UG)

2 units - full year

Restriction: Bachelor of Teaching students only

Prerequisite: pass in a Level III chemistry course

Corequisite: EDUC 4329

Assessment: essay, unit of work, online tasks, designing pracs & investigations

The course aims to present information on a range of methodologies and discuss a variety of skills to better equip students to be better prepared for the start of their teaching career in middle school science and senior school chemistry.

EDUC 4313A/B
Chinese Curriculum and Methodology (UG)

2 units - full year

Restriction: Bachelor of Teaching students only

Prerequisite: Pass at Level III Chinese or equivalent

Corequisite: EDUC 4330 Language Methodology

The course aims to present information on a range of methodologies and discuss a variety of skills to help students to be better prepared for the start of their teaching career.

EDUC 4314A/B
Classroom Music Curriculum & Methodology (UG)

3 units - full year

Restriction: Bachelor of Teaching students only

Prerequisite: degree in Music or a pass in Level III music course

The course aims to present information on a range of methodologies and discuss a variety of skills to help students to be better prepared for the start of their teaching career.

EDUC 4315A/B
Economics Curriculum and Methodology (UG)

2 units - full year

Restriction: Bachelor of Teaching students only

Prerequisite: pass in six semesters of economics degree

The course aims to present information on a range of methodologies and discuss a variety of skills to help students to be better prepared for the start of their teaching career.

EDUC 4316A/B
English as a 2nd Language Curriculum and Methodology (UG)

2 units - full year

Restriction: Bachelor of Teaching only

Prerequisite: UG linguistics courses or Uni of Adelaide TESOL Cert IV

Corequisite: EDUC 4339

Assumed Knowledge: High level of English literacy competency - Linguistics study must have been in English

The course aims to present information on a range of methodologies and discuss a variety of skills to help students to be better prepared for the start of their teaching career.

EDUC 4317A/B
Extended Specialist Curriculum (UG)

2 units - full year

Restriction: Bachelor of Teaching students only

Restriction: only with agreement of Head of School

The course aims to present information on a range of methodologies and discuss a variety of skills to help students to be better prepared for the start of their teaching career.

EDUC 4318A/B
French Curriculum and Methodology (UG)

2 units - full year

Restriction: Bachelor of Teaching students only

Prerequisite: pass at Level III French or equiv

Corequisite: EDUC 4330

The course aims to present information on a range of methodologies and discuss a variety of skills to help students to be better prepared for the start of their teaching career.

EDUC 4319A/B
General English Curriculum & Methodology (UG)

2 units - full year

Restriction: Bachelor of Teaching students only

Prerequisite: four semesters of English literature

The course aims to present information on a range of methodologies and discuss a variety of skills to help students to be better prepared for the start of their teaching career.

EDUC 4320A/B
Geography Curriculum and Methodology (UG)

2 units - full year

Restriction: Bachelor of Teaching students only

Prerequisite: pass in 6 semesters of geography course - in certain circumstances students with 4 semesters may be accepted

Corequisite: EDUC 4334

The course aims to present information on a range of methodologies and discuss a variety of skills to help students to be better prepared for the start of their teaching career.

EDUC 4321A/B
German Curriculum and Methodology (UG)

2 units - full year

Restriction: Bachelor of Teaching students only

Prerequisite: pass at Level III German or equiv

Corequisite: EDUC 4330

The course aims to present information on a range of methodologies and discuss a variety of skills to help students to be better prepared for the start of their teaching career.

EDUC 4322A/B
History Curriculum and Methodology (UG)

2 units - full year

Restriction: Bachelor of Teaching students only

Prerequisite: Pass in 6 semesters of history - in certain circumstances students with only 4 semesters may be accepted

Corequisite: EDUC 4334 Studies of Society and Environment

The course aims to present information on a range of methodologies and discuss a variety of skills to help students to be better prepared for the start of their teaching career.

EDUC 4323A/B
Indonesian Curriculum and Methodology (UG)

2 units - full year

Restriction: Bachelor of Teaching students only

Prerequisite: Pass at Level III Indonesian or equiv

Corequisite: EDUC 4330

The course aims to present information on a range of methodologies and discuss a variety of skills to help students to be better prepared for the start of their teaching career.

EDUC 4324A/B
Information Technology Curric & Method (UG)

2 units - full year

Restriction: Bachelor of Teaching students only

Prerequisite: pass at Level III Computer Studies

Assessment: essay, unit of work, online tasks, designing pracs & investigations

The course aims to present information on a range of methodologies and discuss a variety of skills that will better equip students to be better prepared for the start of their teaching career in middle school science and senior school information technology.

EDUC 4325A/B
Instrumental Music Curriculum & Method (UG)

3 units - full year

Restriction: Bachelor of Teaching students only

Prerequisite: degree in Music, or a pass in Level III music course, recognised instrumental qualifications

Corequisite: EDUC 4314

The course aims to present information on a range of methodologies and discuss a variety of skills to help students to be better prepared for the start of their teaching career.

EDUC 4326A/B
Italian Curriculum and Methodology (UG)

2 units - full year

Restriction: Bachelor of Teaching students only

Prerequisite: pass at Level III Italian or equiv

Corequisite: EDUC 4330

The course aims to present information on a range of methodologies and discuss a variety of skills to help students to be better prepared for the start of their teaching career.

EDUC 4327A/B
Japanese Curriculum and Methodology (UG)

2 units - full year

Restriction: Bachelor of Teaching students only

Prerequisite: pass at Level III Japanese or equiv

Corequisite: EDUC 4330

The course aims to present information on a range of methodologies and discuss a variety of skills to help students to be better prepared for the start of their teaching career.

EDUC 4328A/B
Junior Mathematics Curriculum & Methodology (UG)

2 units - full year

Restriction: Bachelor of Teaching students only

Prerequisite: pass in Mathematics I or equiv

The course aims to present information on a range of methodologies and discuss a variety of skills to help students to be better prepared for the start of their teaching career.

EDUC 4329A/B
Junior Science Curriculum & Methodology (UG)

2 units - full year

Restriction: Bachelor of Teaching students only

Prerequisite: pass in two Level I physical & biological sciences courses

Assessment: essay, unit of work, online tasks, designing pracs & investigations

This course is aligned with the SACSA Companion Document Series [www.sacsa.sa.edu.au/companion] and is an introduction to the classroom applications and a study of the relationship of teachers and schools to the methods of teaching junior science. The course seeks to develop the knowledge, skills, and professional standards required to effectively instruct science at the junior- and middle-schools. Participants will be provided with insights into selecting and using a variety of instructional methods, resources and assessment strategies for teaching science to all learners. Workshop modules cover hands-on, inquiry, process and project-based approach to the teaching of science with a focus on conceptual teaching and learning. Knowledge of junior science content is emphasised throughout the course. Course content strongly reflects the curricular emphasis of DECS, and standards articulated by the Australian Science Teachers Association [www.asta.edu.au/membership/benefits/recognition/profstds].

EDUC 4330A/B
Language Methodology (UG)

2 units - full year

Restriction: Bachelor of Teaching students only

Prerequisite: pass in a Level III language other than English course

Syllabus details to be advised.

EDUC 4331A/B
Physics Curriculum and Methodology (UG)

2 units - full year

Restriction: Bachelor of Teaching students only

Prerequisite: pass in Level III physics course

Corequisite: EDUC 4329

Assessment: essay, unit of work, online tasks, designing pracs & investigations

The course aims to present information on a range of methodologies and discuss a variety of skills that will better equip students to be better prepared for the start of their teaching career in middle school science and senior school physics.

EDUC 4332A/B
Senior English Curriculum & Methodology (UG)

2 units - full year

Restriction: Bachelor of Teaching students only

Prerequisite: six semesters of English literature

Corequisite: EDUC 4319

The course aims to present information on a range of methodologies and discuss a variety of skills to help students to be better prepared for the start of their teaching career.

EDUC 4333A/B
Senior Mathematics Curriculum & Methodology (UG)

2 units - full year

Restriction: Bachelor of Teaching students only

Prerequisite: pass in Level III maths course

Corequisite: EDUC 4328

The course aims to present information on a range of methodologies and discuss a variety of skills to help students to be better prepared for the start of their teaching career.

EDUC 4334A/B
Studies of Society and Environment (UG)

2 units - full year

Restriction: Bachelor of Teaching students only

Prerequisite(s): pass in 6 semesters Anthropology, Classical Studies, Economics, Geography, History, Law, Politics or other approved course

The course aims to present information on a range of methodologies and discuss a variety of skills to help students to be better prepared for the start of their teaching career.

EDUC 4335A/B
Spanish Curriculum & Methodology (UG)

2 units - full year

Restriction: Bachelor of Teaching students only

Prerequisite: pass at Level III Spanish or equiv

Corequisite: EDUC 4330

The course aims to present information on a range of methodologies and discuss a variety of skills to help students to be better prepared for the start of their teaching career.

EDUC 4336A/B
Other Language Curriculum & Methodology (UG)

2 units - full year

Restriction: Bachelor of Teaching students only

Prerequisite: pass in appropriate language at Level III or equiv

Corequisite: EDUC 4336

The course aims to present information on a range of methodologies and discuss a variety of skills to help students to be better prepared for the start of their teaching career.

EDUC 4337A/B
Vietnamese Curriculum and Methodology (UG)

2 units - full year

Restriction: Bachelor of Teaching students only

Prerequisite: pass at Level III Vietnamese or equiv

Corequisite: EDUC 4330

The course aims to present information on a range of methodologies and discuss a variety of skills to help students to be better prepared for the start of their teaching career.

EDUC 4338A/B
Modern Greek Curriculum & Methodology (UG)

2 units - full year

Restriction: Bachelor of Teaching students only

Prerequisite: Major in Modern Greek or equiv

Corequisite: EDUC 4330

In this course, students will be introduced to current curriculum frameworks and learning methodologies in the teaching of Modern Greek from years 8 -12.

EDUC 4339A/B
Languages Education for TESOL (UG)

2 units - full year

Restriction: Bachelor of Teaching students only

Prerequisite: 4 UG linguistics courses or University of Adelaide TESOL Cert IV - Linguistics study must have been in English

Corequisite: EDUC 4316

Assumed Knowledge: High level of English literacy competency

Languages Education for TESOL aims to equip students with the knowledge, skills and understandings required for the effective teaching of ESL to middle and senior year students in South Australian schools. In particular, the course aims to develop skills in effective classroom communication. Whilst relating to students is the primary focus of the course, at a wider level the course emphasises the importance of communication with staff, parents and the wider community. Lectures will introduce students to a range of teaching strategies in the context of current language learning theories. Migration trends and indigenous populations will be considered in exploring school curriculum development and policy in relation to teaching English as a second or other language. The course will give students tools for lesson and unit planning using the South Australian Curriculum Standards and Accountability Framework. Directed group work will allow students to work collaboratively in building resources, establishing contacts and networking with practicing teachers.

EDUC 4340A/B
Psychology Curriculum & Methodology (UG)

2 units - full year

2 hours per week

Prerequisite: major in Psychology or equiv

Assessment: practical assignments & essays

This course will introduce students to the new year 11

and 12 SACE Curriculum in Psychology and discuss appropriate learning methodologies for teaching it.

Engineering

LEVEL I

C&ENVENG 1008 Engineering Planning and Design IA

3 units - semester 1

36 hours lectures, 12 hours practicals (design)

Available for Non-Award Study

Assumed Knowledge: High school Physics & Maths (basic algebra, geometry & calculus)

Assessment: exam 50%, design practical 35%, quizzes and participation 15%

Introduction to engineering: engineering planning and design methodology: basic systems concepts; creative aspects of design; economic, environmental and social evaluation of engineering projects; introduction to economic and environmental economics; decision theory; scheduling: engineering ethics; sustainability; engineering practice; case studies.

C&ENVENG 1009 Civil and Environmental Engineering IA

3 units - semester 2

48 hours lectures, tutorials and design practicals

Available for Non-Award Study

Prerequisite(s): C&ENVENG 1010 Eng Mech - Statics,

Assumed Knowledge: High school Physics & Maths (basic algebra, geometry & calculus)

Assessment: 3 design projects, exam

This course provides an introduction to civil and environmental engineering design covering the sub-discipline areas of civil and environmental engineering: this is, environmental, hydraulic, hydrology, geotechnical and structural engineering. The course will also cover the basics of interpreting and producing civil engineering drawings. Students will work in small groups to produce designs, utilising basic theory and simple design procedures covered during the lectures.

Part of the course will be devoted to framing and solving unstructured problems by discussing a variety of puzzles. Such educational puzzles are used to illustrate basic concepts of critical thinking, mathematics, and problem-solving.

C&ENVENG 1010 Engineering Mechanics - Statics

3 units - summer semester or semester 1

36 hours lectures, 12 hours tutorials

Available for Non-Award Study

Assumed Knowledge: High school Physics & Maths (basic algebra, geometry, calculus)

Assessment: exam 60%, in-class or online tests (40%, ie 2x20% each)

This course familiarises students with the principles of static equilibrium by applying Newton's laws of motion to solve engineering problems. Topics will be taken from: introduction to forces; 2D and 3D equilibrium of particles and rigid bodies; centre of gravity and centroids; distributed loading and hydrostatics; friction; analysis of structures including trusses, frames and machines; and drawing shear and bending moment diagrams. The course finishes with an introduction to approximate analysis techniques for statically indeterminate structures. Emphasis is placed on drawing free-body diagrams and self-checking strategies.

C&ENVENG 1012 Engineering, Modelling and Analysis IA

3 units - semester 2

48 hours lectures, tutorials and practicals

Available for Non-Award Study

Assumed Knowledge: Year 12 Mathematics

Assessment: 3 hour exam - including theory & practical assignments - run in CAT suite. Also includes projects and assignments throughout semester

This course serves as an introduction to how engineers typically solve real world and complex problems. In many cases mathematical or analytical solutions are not available and numerical or computer methods must be used. This course will introduce this important area and provide training in its fundamental components. These include: Introduction to computer theory and computing environments; Development of programming skills in Fortran 90/95, Visual Basic in Excel (VBA) and Matlab; Development of programs that are well-structured and can be easily maintained; Introduction to probability and statistics and Monte Carlo simulation techniques.

Introduction to numerical methods in engineering, including: Approximations and errors; Solving large sets of Linear algebraic equations; Roots of equations; Numerical differentiation and integration; Solution of ordinary differential equations.

CHEM ENG 1004 Introduction to Bio-Processing

3 units - semester 1

3 hours lectures, 2 hours tutorials/practical classes

Restriction: students in specified programs only, please check Academic Rules of the program in which you are enrolling

Available for Non-Award Study

Prerequisite: SACE Stage 2 Maths Studies, Chemistry

Assumed Knowledge: SACE Stage 2 Specialist Maths, Physics

Assessment: written exam, performance in tutorial classes & class assignments - complete details at commencement of course

Introductory computing and programming; the elements of databases; elementary concepts and tools used in bioinformatics. Simple process engineering concepts are introduced and their application in society, industry and the environment will be illustrated. Basic measurement and conservation principles for mass and energy are applied to solve simple problems e.g. in food processing, biotechnology, fuel combustion and energy generation, fluid flow and waste treatment.

CHEM ENG 1006 **Introduction to Pharmaceutical Engineering**

3 units - semester 1

48 hours lectures, tutorials, projects

Restriction: students in specified programs only, please check Academic Rules of the program in which you are enrolled if you are unclear

Available for Non-Award Study

Assumed Knowledge: SACE Stage 2 Mathematical Studies

Assessment: written exams, performance in tutorial classes; class assignments & projects - full details advised at beginning of course

An introductory subject with emphasis on integrating the molecular and cellular biosciences with the quantitative, systems-oriented engineering analysis and synthesis approach. Topics include history of pharmaceuticals; introduction to the pharmaceuticals industry and its various sectors; engineering stages required for manufacture of active ingredients (primary manufacture) and its dosage forms (secondary manufacture) overview of economics (e.g bugs to \$s); overlap of molecular sciences with traditional engineering disciplines; need for interdisciplinary work; particular case studies or examples (e.g. drug delivery systems, bioactive molecules from GMOs, etc).

CHEM ENG 1007 **Process Engineering I**

3 units - semester 1 or 2

30 hours lectures, 11 hours tutorials, 3 hours demonstrations

Available for Non-Award Study

Assumed Knowledge: SACE Stage 2 Math.Studies, Specialist Maths, Physics

Assessment: Final exam, tests, quizzes, assignments

To provide students with the basic principles and knowledge which define chemical and process engineering, and to demonstrate these through basic calculations and problem solving. Students are introduced to topics and theory related to the core tasks that chemical process engineers undertake. The four main areas of chemical engineering are introduced: conservation principles, fluid mechanics, transfer processes and reaction engineering.

CHEM ENG 1008 **Engineering Computing**

3 units - semester 1 or 2

45 hours lectures and practical classes

Available for Non-Award Study

Assumed Knowledge: SACE Stage 2 Math. Studies, Specialist Maths, Physics

Assessment: projects, exam

The course will be focused on the use of computing in engineering application. The course consists of four parts, these are: Introduction to Engineering modeling techniques, advanced Spreadsheet for engineering calculations, introduction to the ANSI "C" computing language, and introduction to engineering computing using MATLAB.

CHEM ENG 1009 **Materials I**

3 units - semester 2

48 hours lectures and tutorials

Available for Non-Award Study

Assumed Knowledge: SACE Stage 2 Math.Studies, Specialist Mathematics, Physics

Assessment: Final exam, test, quizzes, assignments

To provide students with a basic understanding of the underlying science and the engineering performance of materials used in engineering applications. Topics covered include: atomic structure, imperfections in solids, diffusion in solids, mechanical properties of metals, dislocations and strengthening mechanisms, failure mechanisms, phase diagrams and phase transformations in metals, structures and properties of ceramics/polymers/composites, applications and processing of ceramics/polymers, corrosion and degradation of materials.

CHEM ENG 1010 **Professional Practice I**

3 units - semester 1

44 hours of lectures, workshops and site visits

Available for Non-Award Study

Assessment: 25% exam, 40% design project, 35% individual and group assessments

The discipline of chemical engineering has a long history and an exciting future. Since its formation in the late-1800s, the discipline has grown and evolved from its early roots in the production of bulk chemicals, through the petrochemical age, until today where chemical engineers are at the forefront of industries such as biotechnology, pharmaceutical, advanced materials, nanotechnology, food & beverage, and many more. Chemical engineers' work in an array of industries and various contexts includes communication with colleagues, managers, clients, representatives from professional organisations, allied industries and government departments. As an effective communicator and decision maker, you will need to be able to present your interpretation and findings on a range of issues, as will occur in the negotiation and management of projects, the submission of tenders, and the advising of clients. This course is an introduction for new students of chemical engineering and related programs to their new discipline and to their new learning environment. This introduction is made through a mix of lectures, group-based activities, site visits, and presentations from practising chemical engineers. Since a key attribute of successful professional engineers is the ability to communicate effectively, the course focuses on improving core engineering communication skills, while also accommodating students entering the course with different standards of communication skills.

ELEC ENG 1009 **Electrical & Electronic Engineering IA**

3 units - semester 1 or 2

73 hours lectures, tutorials and practicals

Available for Non-Award Study

Assessment: assignments, exams, performance in laboratory

Basic Circuits/DC Analysis: electrical quantities, components and sources, circuit analysis laws; Kirchhoff laws, series/parallel circuits, voltage/current divider, superposition, Thevenin theorem; controlled sources. Introduction to Electronics: electrical devices (diodes, transistors) and applications. Diodes, DC power supplies, transistors and op-amps. Introduction to Electrical Machines: introduction to magnetic circuits, transformers and DC and AC machines. Introduction to Digital Electronics: Boolean numbers and algebra, combinational components. Microcontroller Principles: microprocessor basics, interfacing and sensors. Digital Workshop: safety and basic skills; Design Project; electronic die, power supply, oscillator, logic gates, flip-flops and counters, an electrical machines lab session.

ELEC ENG 1010
Electrical & Electronic Engineering IB

3 units - semester 1 or semester 2
77 hours lectures, tutorials and practicals
Available for Non-Award Study
Assumed Knowledge: ELEC ENG 1009
Assessment: assignments, exams, performance in laboratory

AC Analysis: sinusoidal AC signal characteristics; review of complex numbers; phasor representation and analysis; power energy. Mesh and Nodal analysis: Signals and Communication: resonance of RLC circuits; filters and frequency response; amplitude and frequency modulation concepts. Digital Electronics: sequential logic, advanced methods. Communications Skills and Professional Engineering: basic verbal skills including presentation; basic written skills for documents such as experimental reports; introduction to EEE degree programs. Analog Workshop: safety and basic skills; regulated power supply. Simple audio amplifier, hee-haw siren, preamplifier, crystal set, system project: AM radio.

MECH ENG 1006
Design Graphics and Communication

3 units - semester 2
45 hours of lectures and tutorials
Available for Non-Award Study
Assessment: continuous assessment, final exam - further details at beginning of semester

The course introduces students to internationally accepted standards of both written and graphical engineering communication methods. Students will learn the fundamentals of professional engineering oral, written and team communication as well as manual and computer aided drawing skills.

MECH ENG 1007
Engineering Mechanics - Dynamics

3 units - summer semester or semester 2
45 hours lectures and tutorials
Available for Non-Award Study
Assumed Knowledge: SACE Stage 2 Math.Studies, Specialist Maths, Physics
Assessment: mid-semester test, assignments, exam

This course teaches students how to apply Newtonian physics to relatively simple physical situations. It follows on from the Statics course, but considers systems that are not in equilibrium i.e. with velocity and acceleration. Some of the topics covered are pure kinematics (a mathematical description of motion only), while others are kinetic (determine motion in problems involving the concepts of force and energy). The course restricts itself to 2-D (planar) mechanisms.

MECH ENG 1100
Introduction to Mechanical Engineering

3 units - semester 1
45 hours lectures/laboratory classes
Available for Non-Award Study
Assessment: Assignments, Final exam

This introductory course is made up of three parts. The first part is a series of lectures designed to introduce the discipline of mechanical engineering. The second part consists of a series of lectures on an exciting learning experience called puzzle based learning, in which puzzles are used to demonstrate important physical and mathematical concepts. The third part is an introduction to computer programming using the C language and MatLab.

MECH ENG 1101
Introduction to Automotive Engineering

3 units - semester 1
45 hours lectures/laboratory classes
Available for Non-Award Study
Assessment: Assignments, Final exam

This introductory course is made up of three parts. The first part is a series of lectures designed to introduce the discipline of automotive engineering. The second part consists of a series of lectures on an exciting learning experience called puzzle based learning, in which puzzles are used to demonstrate important physical and mathematical concepts. The third part is an introduction to computer programming using the C language and MatLab.

MECH ENG 1102
Introduction to Aerospace Engineering

3 units - semester 1
45 hours lectures/laboratory classes
Available for Non-Award Study
Assessment: Assignments, Final exam

This introductory course is made up of three parts. The first part is a series of lectures designed to introduce the discipline of aerospace engineering. The second part consists of a series of lectures on an exciting learning experience called puzzle based learning, in which puzzles are used to demonstrate important physical and mathematical concepts. The third part is an introduction to computer programming using the C language and MatLab.

MECH ENG 1103 **Introduction to Mechatronic Engineering**

3 units - semester 1

45 hours lectures/laboratory classes

Available for Non-Award Study

Assessment: Assignments, Final exam

This introductory course is made up of three parts. The first part is a series of lectures designed to introduce the discipline of mechatronics engineering. The second part consists of a series of lectures on an exciting learning experience called puzzle based learning, in which puzzles are used to demonstrate important physical and mathematical concepts. The third part is an introduction to computer programming using the C language and MatLab.

MECH ENG 1104 **Introduction to Sports Engineering**

3 units - semester 1

45 hours lectures/laboratory classes

Available for Non-Award Study

Assessment: Assignments, Final exam

This introductory course is made up of three parts. The first part is a series of lectures designed to introduce the discipline of sports engineering. The second part consists of a series of lectures on an exciting learning experience called puzzle based learning, in which puzzles are used to demonstrate important physical and mathematical concepts. The third part is an introduction to computer programming using the C language and MatLab.

MECH ENG 1105 **Introduction to Sustainable Energy Engineering**

3 units - semester 1

45 hours lectures/laboratory classes

Available for Non-Award Study

Assessment: Assignments, Final exam

This introductory course is made up of three parts. The first part is a series of lectures designed to introduce the discipline of sustainable engineering. The second part consists of a series of lectures on an exciting learning experience called puzzle based learning, in which puzzles are used to demonstrate important physical and mathematical concepts. The third part is an introduction to computer programming using the C language and MatLab.

MINING 1011 **Introduction to Mining Engineering 1A**

3 units - semester 2

48 hours lectures, practicals and a field trip

Restriction: BE(Mining) and associated double degrees only

Available for Non-Award Study

Assumed Knowledge: High school Physics & Maths

Assessment: site visit report 25%, quizzes (x2) 20%, assignment 15%, final exam 40%

This course provides a basic introduction to the fundamental operations involved in mining engineering.

Topics to be covered include stages in the life of a mine, resources evaluation, mine planning and design, surface and underground mining methods, drilling and blasting, rock support systems, haulage and hoisting, mineral processing, mine safety and environment. Site visits to working mines during mid-term break will also be included.

Part of the course will be devoted to framing and solving unstructured problems by discussing a variety of puzzles. Such educational puzzles are used to illustrate basic concepts of critical thinking, mathematics, and problem-solving.

PETROENG 1005 **Introduction to Petroleum Geosciences & the Oil Industry**

3 units - semester 1

36 hours lectures, 24 hours prac work and overnight field camp

Available for Non-Award Study

Assumed Knowledge: SACE stage 2 Maths Studies, Specialist Maths, Physics

Assessment: Selected prac exercises, Field camp report, theory exam

This course provides an introduction to geology (first half of the semester) and an introduction to the petroleum geosciences (second half of the semester). No prior knowledge in geology is assumed and the course starts from basic geological concepts (e.g. minerals, igneous rocks, sedimentary rocks, metamorphic rocks, rock deformation and geological time) then works onto the petroleum system (e.g. source rocks, reservoir rocks, sealing rocks, maturation, migration and trapping of hydrocarbons) and finally introduces the tools used in petroleum exploration (seismic surveying, drilling and logging). Throughout the semester one lecture per week is also given by a guest speaker from different sectors of the oil industry in order to provide an overview of the oil industry.

PETROENG 1006 **Introduction to Petroleum Engineering**

3 units - semester 2

24 hours lectures, 24 hours tutorials, 12 hours puzzle-based learning

Available for Non-Award Study

Assumed Knowledge: SACE stage 2 Maths Studies, Specialist Maths, Physics

Assessment: Assignments, exam

The aim of the course is to provide students with a broad overview of introduction to petroleum engineering in order that advanced courses in subsequent years can be understood within their context in petroleum engineering. This course covers an overview of, petroleum exploration, drilling, completion and production, reservoir mechanics, fundamentals of rock and fluid properties, composition and PVT properties of petroleum fluids; basic physical and chemical properties of petroleum reservoir fluids related to reservoir processes and production and petroleum engineering environment.

LEVEL II

C&ENVENG 2025 **Strength of Materials IIA**

3 units - semester 1

48 hours lectures, tutorials, practical work

Restriction: students in specified programs only, please check Academic Rules of the program in which you are enrolling

Available for Non-Award Study

Prerequisite(s): Pass (not Conceded Pass) in C&ENVENG 1010, MATHS 1012

Assessment: exam, assignments

Topics to be chosen from: elastic and elastic-plastic behaviour; plane stress and strain; constitutive relationships, principal stress and strain; failure criteria; stresses in thick cylinders; bending and shearing stresses in beams; deflections of beams; Euler buckling; short and long columns; torsion of solid and hollow circular sections; elastic axis; introduction to statical indeterminacy and simple redundant structures; work and strain energy concepts.

C&ENVENG 2067 **Construction, Management & Surveying**

3 units - semester 2

48 hours lectures, tutorials, practicals and site visits

Available for Non-Award Study

Incompatible: Cannot be presented with C&ENVENG 2015

Assessment: Exam 60%, Coursework 40%

The aim of this course is to introduce students to the practical aspects of the construction industry. In particular, this will involve: Engineering construction terminology; Common construction methods and processes; Project organisation and management; Contracts and specifications; Elementary surveying principles; and Familiarisation with selected surveying equipment. Topics include: Overview of the construction and engineering industries; Contracts, specifications and tendering; Occupational health safety and welfare, Industrial relations; Project management, scheduling, quality assurance, environmental aspects of construction, engineering ethics; Civil construction - earthworks, embankments, foundations, retaining structures, pavements and tunnels; Construction using concrete, steel, timber and masonry; Residential construction; Construction of bridges, dams, tunnels, skyscrapers and domes; Introduction to civil engineering surveying incorporating: Linear measurement; Levelling; Theodolite; Horizontal and vertical curves.

C&ENVENG 2068 **Environmental Engineering & Sustainability II**

3 units - semester 1

48 hours lectures, tutorials, design sessions and study

Available for Non-Award Study

Assumed Knowledge: C&ENVENG 1008, C&ENVENG 1009

Incompatible: Cannot be presented with C&ENVENG 2026

Assessment: tests/quizzes, assignments/projects, exam - Details provided at start of course

This course explores the relationship between engineers and one of our most valuable natural resources - river systems. The themes covered include the value of river systems, the modifications that have been made to river systems as a result of engineering activities, some of the negative impacts this has had, and continues to have, on our natural resources, as well as the role engineering plays in rehabilitating and managing these resources and ensuring the mistakes of the past will not be repeated by adopting sustainable planning and design practices. Specific topics might include: River Modification and Rehabilitation, Water Quality Parameters, Water Quality Modelling, Fish Passage, Environmental Flows, Erosion Control, Social Impact, Sustainable Design and Environmental Decision-Making. The course features a design project on river restoration and rehabilitation, as well as the multi award-winning Mekong e-Sim, which is a roleplay/simulation centred on development issues in the Mekong River in south-east Asia.

C&ENVENG 2069 **Geotechnical Engineering IIA**

3 units - semester 2

32 hours lectures, 10 hours tutorials, 6 hours practicals

Assumed Knowledge: C&ENVENG 1010, MATHS 1011, MATHS 1012

Incompatible: Cannot be presented with C&ENVENG 2006

Assessment: Exams 70%, coursework 30%

The course provides an understanding of: the nature of soils and their variability; and the state and behaviour of a soil. Topics include: The origin and composition of Soils: Introduction to geotechnical engineering, processes that form soils, clay mineralogy; Phase relationships, Atterberg Limits and Soil classification: Soil state definitions, phase relationships, grain size analyses, Atterberg limits, soil classification and description; Vertical Stress in Soils: Soil suction, total vertical stress, pore water pressure, effective vertical stress; Flow of water through soils: Water flow, permeability, 2D seepage and measurement; Consolidation: Introduction to consolidation theory, oedometer test, overconsolidation ratio, consolidation settlement, time rate effects, sand drains; Strength of soils: Shear strength of sands and clays, Mohr-Coulomb failure criterion, direct shear test, triaxial test, stress paths, Skempton's pore pressure parameters; Soil Improvement: Compaction - concepts, measurement and field techniques, Overview of other soil improvement techniques; Stability of slopes: Landslides, Taylor's charts, Bishop's method of slices.

C&ENVENG 2070 **Engineering Modelling and Analysis IIA**

3 units - semester 2

24 hours lectures, 12 hours tutorials, 12 hours practicals

Assumed Knowledge: C&ENVENG 1012

Incompatible: Cannot be presented with C&ENVENG 2014 Engineering Modelling and Analysis II

Assessment: 3 hour exam - including theory & practical assignments - run in CAT suite. Also includes assignments throughout semester

This course serves as an extension to Engineering, Modelling and Analysis 1A to study methods used by

engineers to solve real world and complex problems. In many cases mathematical or analytical solutions are not available and numerical or computer methods must be used. Fortran 90/95 and Visual Basic in Excel (VBA) programming skills are extended and applied to a number of engineering applications.

This course covers a range of practical engineering modelling and analysis methods that engineers use to solve real world and complex problems. The components include: Roots of Equations; Systems of Linear Equations; Polynomial Interpolation And Cubic Splines; Numerical Integration and Differentiation; Numerical Solution of Ordinary Differential Equations; Common probability distributions including normal and log-normal distributions; Monte Carlo simulation; Finite difference methods; and Fourier transform spectral methods.

C&ENVENG 2071 Water Engineering IIA

3 units - semester 1

28 hours lectures, 8 hours tutorials, 6 hours practicals, 6 hours design

Available for Non-Award Study

Assumed Knowledge: C&ENVENG 1010, MATHS 1012 or MATHS 1014

Incompatible: Cannot be presented with C&ENVENG 2033 or 2035

Assessment: Exam 60%, Assignments and quizzes 15%, Laboratories 10%, Design 15%

An introduction to hydraulic engineering and fluid mechanics. Description and properties of fluids: hydrostatics; buoyancy and stability; laws of inviscid flow; continuity, energy and momentum equations; dimensional analysis and model theory; steady uniform and non-uniform flow of liquid and gases in closed conduits; flow of real fluids; friction in open and closed conduits, Moody diagram; laminar flow; types of turbulent flow; viscous sublayer; flow measurement in pipes and open channels; steady uniform flow in open channels, hydraulic jumps. Uniform and non-uniform flow in open channels, super and subcritical flows; hydraulic structures and dissipator design; flow measurement techniques; computation of water surface profiles in open channel flow.

C&ENVENG 2072 Structural Engineering Design

3 units - semester 2

36 hours lectures, 12 hours tutorials

Available for Non-Award Study

Assumed Knowledge: C&ENVENG 1010, C&ENVENG 2025

Incompatible: Cannot be presented with C&ENVENG 2032

Assessment: May include assignments and/or exam or quizzes - details at start of course

Iterative nature of the design procedure developed through a truss design, construct and test project, and the preliminary design of a reinforced concrete frame. Topics covered include: limit states; gravity and wind loads; fundamental principles that govern the behaviour of reinforced concrete and steel structures; buckling of slender members and effective lengths; connections for steel members.

CHEM ENG 2010 Introduction to Process Simulation

3 units - semester 1

24 hours lectures, 21 hours tutorials

Restriction: Students in specified programs only

Available for Non-Award Study

Assumed Knowledge: CHEM ENG 1007, MATHS 1012

Assessment: assignments, final exam

To introduce students to the principles of material and energy balances and the techniques used in chemical process calculations; To develop systematic problem solving skills so as to be able to deal with the complexity of large problems; To provide basic instruction in application of knowledge learned to industrial process design.

CHEM ENG 2011 Chemical Engineering Thermodynamics

3 units - semester 2

30 hours lectures, 15 hours tutorials

Available for Non-Award Study

Assumed Knowledge: MATHS 1012, CHEM ENG 1008, CHEM ENG 1007, CHEM 1200, Chemistry II/IIA

Assessment: Exam 70%, Tutorials and tests 30%

To provide students with the fundamental concepts and principles of modern chemical and pharmaceutical engineering thermodynamics with an emphasis on relevance to other parts of the chemical and pharmaceutical engineering curriculum. The application of these principles to the solution of energy flow and equilibrium problems will be emphasised.

CHEM ENG 2012 Principles of Pharmaceutical Engineering

3 units - semester 1

48 hours lectures, tutorials and projects

Restriction: students in specified programs only, please check Academic Rules of the program in which you are enrolling

Available for Non-Award Study

Prerequisite(s): CHEM ENG 1006

Assumed Knowledge: CHEM ENG 1007

Assessment: Exams and assignments

This course provides an overview of the pharmaceutical industry, including basic information about drug discovery and development, FDA requirements and approval processes, and the role of key operational units in drug manufacturing processes. The principles for separation operations to recover products from biological processes & natural resources will be covered, including recombinant DNA technology, cell growth, kinetics, cell disruption, centrifugation, membrane filtration, chromatography. Brief introduction to process design emphasising unique requirements of pharmaceutical plants (e.g. high purity, specialised utility systems, etc.) will be included.

CHEM ENG 2013 Process Modelling and Computations

3 units - semester 2

30 hours lectures, 15 hours tutorials

Available for Non-Award Study

Assumed Knowledge: CHEM ENG 1007, CHEM ENG 1008

Problem solving in Chemical & Biochemical Engineering, introduction to commonly used software package- Polymath, simple chemical process models - heat exchange, flash systems, CSTRs (tank CSTRs, Thermodynamic models, heat exchange, mass transfer, phase equilibria, biochemical engineering, design & preliminary economic analysis.

CHEM ENG 2014 Process Engineering IIA

3 units - semester 1

24 hours lectures, 21 hours tutorials

Available for Non-Award Study

Assumed Knowledge: MATHS 1012

Assessment: Exam 70%, Tutorials 30%

The objective of the course is to introduce students to the basic concepts of heat and mass transfer encountered in chemical process industries. At the conclusion of the course, students should be able to: Understand the basic concepts and laws of the three modes of heat transfer; Apply analytical techniques in conduction heat-transfer problems; Understand and use empirical equations to solve forced and natural convection heat-transfer problems; Solve simple radiation heat transfer problems; Analyse the heat transfer processes involved in boiling and condensation; Perform basic calculations of common heat exchangers to determine relevant design parameters; Solve simple diffusion mass transfer problems; Understand the workings of relevant instrumentation.

CHEM ENG 2015 Principles of Biotechnology II

3 units - semester 2

36 hours lectures, 12 hours tutorials

Available for Non-Award Study

Assumed Knowledge: CHEM 1000A/B, GENETICS 1000A/B

Assessment: Final exam, lectures, projects, tutorials

This multi-disciplinary course provides students with an introduction to key aspects of modern biotechnology practice including the interaction between scientific discovery and practical production tools and aspects. Four key areas will be covered: Introduction to Bio-Process Engineering Principles - enzymes, cell-culture systems, fermenters, recovery and purification of product. Microbial Gene Expression - sequencing and amplification of DNA, gene expression in prokaryotic and eukaryotic systems, molecular diagnostics, therapeutic agents, vaccines and commercial processes. Plant Systems - DNA marker technology, plant culture, genetic engineering and geonomics. Mammalian Systems - characteristics and growth, gene transfer invitro & invitro, expression systems, applications.

CHEM ENG 2016 Professional Practice II

3 units - semester 2

24 hours lectures and workshops

Available for Non-Award Study

Assumed Knowledge: CHEM ENG 1010, CHEM ENG 1007

Assessment: 65% laboratory report and presentation, 20% case study, 15% individual and group assessments

Excellent practical skills and the ability to communicate effectively to a wide range of audiences are amongst the most important attributes of professional engineers. In this course students will undertake a series of workshops and laboratory sessions to enhance and develop these important skills with an emphasis on the professional practice of chemical engineering (e.g. career planning and equity and diversity) and on laboratory projects dealing with the study of fluid mechanics.

CHEM ENG 2017 Transport Processes in the Environment

3 units - semester 1

24 hours lectures, 21 hours tutorials

Available for Non-Award Study

Assessment: Final Exam 70%, Tutorials 30%

The objective of this course is to illustrate the application of certain key principles of engineering and science that are required for any quantitative treatment of environmental problems. Topics to be covered in this course include: Introduction and basic concepts; Simple kinetic models, Environmental chemicals and properties; Inter-media transport; Simple exchange models; Air pollution problems; Water chemistry, Environmental modeling; Plume dispersion; Greenhouse effect; Ozone depletion; Nuclear chemistry; Radiation and Uranium mining.

CHEM ENG 2018 Process Engineering IIB

3 units - semester 2

24 hours lectures, 11 hours tutorials, 6 hours practicals

Available for Non-Award Study

Assumed Knowledge: MATHS 1012, CHEM ENG 1000

Lectures and tutorials focused on the statics and dynamics of fluids. Substantial emphasis is placed on analysis and solutions of fluid flow problems frequently encountered in the process industries.

ELEC ENG 2007 Signals and Systems II

3 units - semester 2

45 hours lectures, tutorials, Matlab practicals

Restriction: students in specified programs only, please check Academic Rules of the program in which you are enrolling

Available for Non-Award Study

Assumed Knowledge: ELEC ENG 1006

Assessment: assignments, written exam

Continuous signals and systems: block diagrams, linearity, causality, stability and time-invariance, linear time-invariant (LTI) systems, impulse response; convolution sum & integral; convolution & correlation. Fourier techniques in signals and systems: Fourier series and transform of signals, frequency response of continuous time LTI

circuits and systems, Fourier transforms and continuous spectra, applications, correlation and power spectrum. Communication Signals and Systems Introduction: signal and carrier; bandwidth and spectrum allocation; modulation schemes: AM, FM and PM; transmitters and receivers : filters, down- and up-conversion, mixers; modulators and demodulators. Analogue Filters: filters and filtering; analog filter design; low pass prototypes (Butterworth, Chebyshev, All Pass, Elliptic); filter design and transformations - (low, high, band); realisation of passive filter circuits; scattering parameters, lumped LC circuits, admittance parameters; active filters 1st and 2nd order transfer functions.

ELEC ENG 2008 Electronics II

3 units - semester 1

45 hours lectures, tutorials, practicals

Restriction: students in specified programs only, please check Academic Rules of the program in which you are enrolling

Available for Non-Award Study

Corequisite(s): student must be enrolled in, or previously passed, ELEC ENG 2011

Assumed Knowledge: ELEC ENG 1010

Assessment: assignments, written exam

Devices and Basic Circuits. Diodes: ideal, characteristics, operation, analysis, small-signal model and application, reverse breakdown (Zener), rectifier. BJTs: structure, operation, npn/pnp, graphical characteristics, DC analysis, amplifiers, small-signal model, graphical analysis, biasing, single-stage amplifiers. FETs: structure, operation, I-V characteristics, enhancement/depletion, biasing, single-stage amplifiers. Analog Circuits: BJT differential pair, small-signal analysis, non-ideal behaviour, biasing, current mirrors, differential and multi-stage amplifiers, output stages classification (A, B, AB) biasing. Altium: application to rectifier, BJT, FET, inverter analysis. Intro. to Digital Circuits: electronics in digital circuits, FET inverter : linear and non-linear transfer function, slew-rate, delay time, fan-out, extension to more complex digital gates

ELEC ENG 2009 Engineering Electromagnetics

3 units - semester 2

45 hours lectures, tutorials, practicals

Restriction: students in specified programs only, please check Academic Rules of the program in which you are enrolling

Available for Non-Award Study

Assumed Knowledge: ELEC ENG 1006, APP MTH 2002, PHYSICS 1100/1200

Assessment: assignments, written exam

Statics: electrostatics (Coulomb/Gauss laws, electric scalar etc); magnetostatics (fields in vacuum, magnetic material, circuits). Electromagnetic Induction: time-varying electromagnetic fields, machines and transformers (DC gen/motor, ideal transformer, 3ph induction motor). Maxwell's Equations and Electromagnetic Waves: Maxwell's equations, transmission lines, skin effect, uniform plane waves, reflection and refraction. Practical Aspects: antennas (transmit/receive, dipole, directivity) and applications (attenuation, propagation).

ELEC ENG 2011 Circuit Analysis

3 units - semester 1

45 hours lectures, tutorials, practicals

Restriction: students in specified programs only, please check Academic Rules of the program in which you are enrolling

Available for Non-Award Study

Prerequisite: ELEC ENG 1009, ELEC ENG 1010

Assessment: On-line tests, quizzes, practicals, final exam

Circuit Fundamentals. Revision of circuit elements and analysis methods including symbols, passive/active conventions, dependent and independent sources, KVL, KCL, mesh/nodal. Operational Amplifiers. Analysis of ideal amplifier for inverting, non-inverting, voltage follower configurations. Non-ideal effects: finite gain, bandwidth, slew rate and DC offsets. Time-Domain Techniques. Capacitors and inductors : energy storage, integration/differentiation of voltage and current, differential equations and numerical simulation. Altium introduction. First-order RC and RL circuits: transient response, time-constant, calculation of response using initial/final values and time-constant. Second-order RLC circuits: overview of analytical solution, effect of damping and natural frequency on time response. Frequency-Domain Techniques. Phasors: phasor quantities, complex impedance, AC steady-state circuit analysis (lagging and leading). Laplace Transforms: uni- and bi-lateral transform, transfer functions, partial fractions for simple/repeated poles, initial/final value theorem. Bode plots: transfer functions, poles and zeros, drawing first and second-order functions. RLC filter types: low, high, band-pass.

ELEC ENG 2012 Sustainable Energy Project

3 units - semester 2

2 lectures, 120 hours practical work

Restriction: Restriction: students in specified programs only, please check Academic Rules of the program in which you are enrolling

Assumed Knowledge: ELEC ENG 1009, ELEC ENG 1010

Assessment: Project work performance, Written report, Seminar presentation

This course aims to utilise standard electrical engineering calculations and preliminary electrical design knowledge for renewable energy systems. After some preliminary lectures, the students will participate in engineering design projects which will involve modeling, simulation and testing of a selected renewable energy source and associated control circuit topologies. The students will work in groups and gain an depth understanding of practical issues related to renewable energy systems. They will perform a technical review of the concept covered in their project, and will produce a technical report including design approach, results and conclusions. There will also be opportunity to present their work to their peers. The course assessment will be primarily based on the overall project performance as well as the technical report and presentation skills.

ELEC ENG 2013 **Electric Energy Systems E**

3 units - semester 1

42 hours lectures, tutorials, practicals

Restriction: students in specified programs only, please check Academic Rules of the program in which you are enrolling

Available for Non-Award Study

Assumed Knowledge: ELEC ENG 1009

Assessment: Written exams, quizzes, experiments

Electric energy systems overview: generation, transmission, distribution and usage of electric energy. Transformers and electrical machines. Modelling and analysis of electric energy systems: AC phasors and complex impedance; complex power; power-factor correction; parameter measurement; three-phase circuit analysis; and equivalent circuit concept. Electromagnetics : magnetic quantities and properties; BH curves, magnetic circuits; permanent magnets, magnetic saturation; leakage and fringing; and iron losses. Transformers : ideal transformer operation; referred impedances; transformer ratings, equivalent circuit, parameters, losses, testing and analysis; voltage regulation; special transformers. DC Machines: revision of DC motor concepts and analysis of DC generators. Induction Machines: three-phase windings and rotating magnetic fields; principles and construction; idealised torque vs. speed characteristic; slip and slip frequency; and induction machine equivalent circuit, parameters, power flow, analysis and testing; performance characteristics; rotor types; variable-speed operation; wound-rotor slip energy recovery; and single-phase machines. Synchronous Machines: principles and construction; per-unit analysis; round-rotor machine equivalent circuit, parameters, rotor angle, testing and analysis; salient-pole machine phasor diagram, d-q axes, slip test, torque expression, steady-state and dynamic analysis. Synchronous motors: brushless AC and DC motor drives and control. Electric Power Systems: transmission line modeling including equivalent circuit, transposition, surge impedance loading; control of voltage, power and frequency.

ENG 2001 **Communication and Study Skills**

3 units - semester 1 or semester 2

24 hours lectures, 6 hours tutorials

Restriction: available as a bridging course to approved students only

Available for Non-Award Study

Assessment: Written reports, oral presentations, on-line activities

Topics covered in this course include: reference citation; critical analysis of research publications; writing essays, reports and technical documentation; oral presentation skills; participating in tutorials; formulating questions; exam preparation techniques and familiarisation with assessment procedures.

ENG 2002 **Financial Computing II**

3 units - semester 1

56 hours lectures, tutorials and practicals

Available for Non-Award Study

Prerequisite(s): SACE Stage 2 Mathematical Studies or equiv

Incompatible: cannot be counted with APP MATH 1000, COMP SCI 1012, CHEM ENG 1002, APP MTH 2005 or APP MTH 2106

Assessment: written exam, assignments

This course provides an introduction to basic computer programming concepts and techniques useful for Scientists, Mathematicians and Engineers. The course takes exposes students to practical applications of computing and commonly used tools within these domains. Online content will be provided in MyUni (lecture recordings, discussion forums, online quizzes, grades, advanced topics).

Introduction and Motivation (approximately 2 lectures): Introduction to the use of computer programming and tools within Science, Mathematics and Engineering.

Algorithm Development (approximately 4 lectures): Problem solving and algorithm design; Program design and software development; Software testing and debugging.

MATLAB (approximately 18 lectures): Basic programming: introduction to the MATLAB environment and the MATLAB help system; data types and scalar variables; arithmetic and mathematical functions; input and output; Flow control: selection and iteration statements; Program design and algorithm development in MATLAB; Functions: user defined functions, function files, passing information to and from functions, function design and program decomposition; recursion; Arrays: vectors, arrays and matrices; addressing; vector, matrix and element-by-element operations; in-built and user-defined functions; Graphics: 2-D and 3-D plotting.

Spreadsheets (approximately 6 lectures): Spreadsheets as a tool for Scientific Computing; using in-built functions; optimisation using the Goal-Seek tool; finding roots using the Solver tool; data analysis.

MECH ENG 2002 **Stress Analysis and Design**

3 units - semester 2

45 hours lectures/tutorials, practicals

Restriction: available to students in specified programs only, please check Academic Rules of the program in which you are enrolling

Available for Non-Award Study

Assumed Knowledge: MECH ENG 1007, C&ENVENG 1010

Assessment: assignments, quizzes, finite element labs, laboratory experiments, exam

Concept of stress and strain, characterisation of stress-strain curves and failure of metals, plastics and wood, Hooke's law in tension/compression and shear, axially loaded members, Saint-Venant's principle, non-linear deformation, statically indeterminate structures, thermal stresses, torsion of circular bars and tubes, bending, stresses in beams, combined loading, deflection of beams, buckling instability, analysis of stress and strain, Mohr's circle, generalised Hooke's law, strain energy, energy methods, elementary theories of plasticity and

failure, intro to design of columns, shafts, pressure vessels, welded joints, fasteners and springs and Finite Element Analysis.

MECH ENG 2015 Electronics IIM

3 units - semester 1

36 hours lectures, tutorials, 12 hours laboratory classes

Restriction: available to students in specified programs only, please check Academic Rules of the program in which you are enrolling

Available for Non-Award Study

Assumed Knowledge: ELEC ENG 1009

Assessment: practical work, assignments, final exam

Amplifier models and imperfections. Operational amplifiers and their applications. Diodes, rectifier circuits, wave-shaping circuits, diode logic circuits and voltage regulator circuits. Characteristics of Transistors (BJTs and FETs), modelling transistors and circuits. Circuits analysis. Active filters, PSPICE, and some practical circuits using the learned components.

MECH ENG 2019 Dynamics and Control I

3 units - semester 2

45 hours lectures, tutorials, 9 hours laboratory experiments

Restriction: available to students in specified programs only, please check Academic Rules of the program in which you are enrolling

Available for Non-Award Study

Assumed Knowledge: MECH ENG 1007, APP MTH 2201, ELEC ENG 1009

Assessment: small tests, assignments, laboratory experiments, final exam

Students will be introduced to various applications of feedback control systems and develop fundamentals associated with modelling, analysis, design and simulation of automatic control systems. This course also aims to introduce the basic concepts of machine dynamics and their engineering applications, and deals with the analysis, design and application of a variety of mechanisms.

MECH ENG 2020 Materials and Manufacturing

3 units - semester 1

45 hours lectures and tutorials

Restriction: available to students in specified programs only, please check Academic Rules of the program in which you are enrolling

Available for Non-Award Study

Assumed Knowledge: CHEM ENG 1009

Assessment: assignments, final exam

Relationship between structure and properties of materials; mechanical behaviour, testing and manufacturing properties of ferrous, non-ferrous, polymeric, ceramic and composite materials; strengthening of materials (alloying, heat-treatment); manufacturing processes, design considerations and economics for forming and shaping engineering materials (casting, forging, rolling, extrusion, injection moulding, machining).

MECH ENG 2021 Thermo-Fluids I

3 units - semester 1

45 hours lectures, 4 hours laboratory experiments

Restriction: available to students in specified programs only, please check Academic Rules of the program in which you are enrolling

Available for Non-Award Study

Assumed Knowledge: MATHS 1011/1012, C&ENVENG 1010, MECH ENG 1007

Assessment: assignments, practicals, final exam

An introduction to mechanical engineering thermodynamics dealing with the application of the first and second laws of thermodynamics to the thermodynamic design and performance analysis of typical thermo-mechanical plant using condensable vapours and gases as the working fluid. Basic fluid mechanics including: kinematics and dynamics of fluid flows; conservation laws applied to fluid flow; Euler, Bernoulli, Navier-Stokes equations; dimensional analysis; differential and integral flow analysis; flow visualisation.

MECH ENG 2100 Design Practice

3 units - semester 1

12 hours lectures, 36 hours practicals

Available for Non-Award Study

Assumed Knowledge: MATHS 1012, C&ENVENG 1001 or 1010, MECH ENG 1000 or 1007

Incompatible: May not be presented with MECH ENG 2018

Assessment: Assignments, reports, practicals, final exam

The design process; sources of design information; accuracy of engineering quantities; introduction to reliability and applications of statistics; tolerancing and fits; friction clutches and brakes; power transmission belts, gears and chains; rubbing, rolling element and hydrodynamic bearing selection and design.

Group design/build/test project involving: conceptual embodiment and detail design; sources of design information; material selection; fabrication methods; troubleshooting; system development; group dynamics; project organisation

MECH ENG 2101 Mechatronics 1M

3 units - semester 2

36 hours lectures, practicals, 40 hours workshop practice (mid-year break)

Available for Non-Award Study

Assumed Knowledge: ELEC ENG 1008 or 1009, MECH ENG 1007 & 2021

Incompatible: May not be presented with MECH ENG 2004 or 2011

Assessment: Assignments, in-class quizzes, Final exam, laboratory experiments

To provide an introduction to the application of electronic control systems in mechanical and electrical engineering. To give framework of knowledge that allows students to develop an interdisciplinary understanding and integrated approach to mechatronic engineering. In the Workshop Practice component, organised during the semester

break, students will become familiar with basic workshop practices, including machining and the use of hand tools.

MECH ENG 2102 Sports Engineering 1

3 units - semester 1

36 hours lectures, practicals, 40 hours workshop practice (mid-year break)

Available for Non-Award Study

Assessment: Assignments, Final exam

Includes Workshop Practice

Instrumentation of sports equipment, athletes and sports facilities is an invaluable tool for quantifying sports performance and optimising training. The development of smart equipment is an emerging area, which enables advanced training including biofeedback methods. Recent developments in sensor and wireless technologies like cost reduction, miniaturisation, and improvement in reliability and accuracy open new avenues for instrumentation in sport.

This course introduces the fundamental concepts of instrumentation including principles of sensors and data processing, and specifically the instrumentation of sports equipment, athletes and sports facilities. The course addresses the design of instrumented equipment in conjunction with equipment rules and size constraints, the effective instrumentation of athletes in conjunction with worn markers and sensors, and the potential of non-contact instrumentation embedded in sports facilities. One topic covers the design of cost-effective do-it-yourself instrumentation.

MECH ENG 2103 Anatomy & Physiology for Sports Engineers

3 units - semester 1

48 hours lectures, 6 hours lab

Available for Non-Award Study

Assessment: assignments, final exam. Compulsory laboratory experiments

Sports Engineers need to understand the anatomy and physiology of the musculoskeletal system to successfully design sports equipment for improving the athletes' performance and preventing injuries. The course addresses the main muscles and major muscle groups required for specific sports disciplines in terms of function and training. A solid foundation of the nervous system is required to understand the muscle reflexes, muscle and motion coordination, proprioception, and equilibrium pathways. Furthermore, the course addresses specific injuries and diseases of the musculoskeletal and nervous system essential to understand disabilities and the principles of treatment, thereby introducing the student to sports medicine. The last part of the course deals with classification of parathletes according to the IPC (International Paralympic Committee) classification system, including classification practice. The understanding of disabilities based on diseases and injuries of the musculoskeletal and nervous system is essential to successfully design sports equipment for

parathletes.

PETROENG 2001 Reservoir Thermodynamics and Fluid Properties

3 units - semester 2

Lectures, practicals/labs

Restriction: students in specified programs only, please check Academic Rules of the program in which you are enrolling.

Available for Non-Award Study

Assessment: assignments, exam

Fluid properties and the application of mass and energy balances to a variety of petroleum systems. Introduction to phase behaviour and chemical reaction equilibria (flash calculations with k-values); and equation of state applications and modelling.

PETROENG 2005 Sedimentology and Stratigraphy

3 units - semester 2

Lectures, practicals, field trip

Restriction: students in specified programs only, please check Academic Rules of the program in which you are enrolling.

Available for Non-Award Study

Assessment: assignments, exam

The course covers applications of sedimentology and stratigraphy to petroleum exploration and development. It includes details of depositional environments and diagenesis; lithostratigraphic and sequence stratigraphic methods of correlation, seismic stratigraphy and basic 3D reservoir modelling techniques. The class will undertake two field trips. It is an essential introduction to sedimentology and stratigraphy for those wishing to become petroleum engineers.

PETROENG 2009 Formation Evaluation, Petrophysics & Rock Props

3 units - semester 2

Lectures, tutorials, practicals

Restriction: students in specified programs only, please check Academic Rules of the program in which you are enrolling

Available for Non-Award Study

Assessment: in-class assignments, take home tasks, quiz, final assessment test in-class

The purpose of this theoretical and practical course is to introduce petrophysical and transport properties of rocks, methods of their determination in lab from cores and in oilfields from wireline logging.

This course gives abilities to determine main rock properties in lab and practical understanding of the interpretation of wire line tools and techniques, open and cased hole log analysis methods for the determination of lithology, porosity, fluid content and movement, and net pay. Both, qualitative (quick look) and quantitative analyses methods are covered. Practical examples are used throughout and case histories are used to demonstrate specific aspects. Several laboratory works are performed for coring with determination of rock properties.

PETROENG 2010 Drilling Engineering

3 units - semester 1

45 hours lectures and practicals

Assumed Knowledge: Higher Maths, Physics, Chemistry

The aim of the course is to provide students with a fundamental understanding of petroleum well drilling procedures, its mechanics, and design methodology. The course gives an overview of drilling rig operations and related equipment; offshore drilling and advanced drilling tools; drill-string design; drill bit technology and optimisation; drilling hydraulics; drilling mud design; cementation options and design; pore pressure and fracture pressure calculations; casing design; basic well control; well planning; directional drilling and well trajectory calculations.

TECHCOMM 2000 Project Management for New Ventures

3 units - summer semester or winter semester

Intensive lectures, tutorials and practicals

Restriction: At least 2 years full time UG study or equiv

Available for Non-Award Study

Assessment: Individual assignment, practicals, exam

Types and importance of project plans; Project Manager's responsibilities, goals and success factors; Microsoft Project; charts and other tools; time, money and quality relationships.

TECHCOMM 2001 Foundations of Entrepreneurship

3 units - summer semester or winter semester

13 hours lecture, 26 hours tutorial, 6 hours workshop

Restriction: Students must have at least 24 units of UG study

Available for Non-Award Study

Assessment: individual assignment 20%, team project 40%, exam 40%

The nature and importance of entrepreneurship; the entrepreneurial process; the entrepreneurial mind; creativity, ideas and innovation; screening entrepreneurial opportunities; identifying resources to support entrepreneurial activities; intellectual property issues; accessing finance and other resources; the entrepreneurial team; assessing risk; business structure and ethics; entrepreneurial strategy; finding and reaching customers and marketing innovation; feasibility planning.

LEVEL III

C&ENVENG 3001 Structural Mechanics IIIA

3 units - semester 1

48 hours lectures, tutorials

Restriction: students in specified programs only, please check Academic Rules of the program in which you are enrolling

Available for Non-Award Study

Assumed Knowledge: Pass (not Conceded Pass) in C&ENVENG 2025

Assessment: coursework, exam

This course is intended to provide students with a thorough understanding of the theory and application of structural analysis as it applies to trusses, beams and frames. Emphasis is placed on developing the student's ability to both model and analyse statically determinate and indeterminate structures and to provide realistic applications encountered in professional practice. Topics to be chosen from: Influence lines; Approximate methods of analysis; Calculation of deflections in statically determinate structures by the moment-area theorems, the conjugate beam method, the principle of virtual work and Castigliano's theorem; Force method of analysis for indeterminate structures; Displacement methods of analysis for indeterminate structures including the slope-deflection method, method of moment distribution, and the stiffness method; an introduction to finite element modelling; and plastic analysis.

C&ENVENG 3005 Structural Design III (Concrete)

3 units - semester 2

48 hours lectures, tutorials, project work

Restriction: students in specified programs only, please check Academic Rules of the program in which you are enrolling

Available for Non-Award Study

Assumed Knowledge: C&ENVENG 2032, 2034, 2025 & 3001

Assessment: may include assignments and/or exam or quizzes - details at beginning of semester

The aim of the course is to provide students with a thorough understanding of the iterative nature of design. And in particular, the fundamental principles of reinforced concrete analysis so that students can design reinforced concrete structures with any sectional shape and type of reinforcement and concrete which modern society requires. The course is not tied to a local national standard so it is of use to students from all parts of the world. The course covers the design and analysis of a multi-storey concrete sway frame. Wherever possible, analyses are based on fundamental principles and are assessed through quizzes and/or exams. The course also includes an open ended design topic, often outside the scope of existing national standards, to develop the students' ability as an engineer and problem solver and which is assessed through the submission of a report. Topics are taken from: spreadsheet analyses from first principles based on stress, strain and force profiles; column curves; quantification of magnified moments from first principles; loading lines from first principles; reinforced concrete beams, slabs, columns and shear walls; and the retrofitting of concrete structures using steel and/or FRP plating or encasement.

C&ENVENG 3007 Structural Design III (Steel)

3 units - semester 1

48 hours of lectures, tutorials and project work

Restriction: students in specified programs only, please check Academic Rules of the program in which you are enrolling

Available for Non-Award Study

Assumed Knowledge: C&ENVENG 2032, 2034, 2025 & 3001

Assessment: may include assignments and/or exam or quizzes - details at beginning of semester

The aim of this course is to provide students with a thorough understanding of the iterative nature of design and the fundamental principles on which the analyses are based.

The course covers the design and analysis of a multi-storey steel and composite braced frame for local and global buckling as well as material failure. Wherever possible, analyses are based on fundamental principles which can be used by anybody anywhere in the world and are assessed through quizzes and/or exams. The course also includes an open ended design topic, often outside the scope of existing national standards, to develop the students' ability as an engineer and problem solver and which is assessed through the submission of a report. Topics are taken from: steel beams; composite steel and concrete beams; steel columns; retrofitting of steel columns and beams; retrofitting of composite beams; and permanent and temporary bracing and propping.

C&ENVEG 3012 Geotechnical Engineering Design III

3 units - semester 2

48 hours lectures, tutorials, practical work, design, directed study

Restriction: students in specified programs only, please check Academic Rules of the program in which you are enrolling

Available for Non-Award Study

Assumed Knowledge: C&ENVEG 2069

Assessment: exams 60%, coursework 40%

This course is intended to provide students with a thorough understanding of the fundamentals of soil mechanics and basic techniques for the analysis and design of geotechnical problems. Design procedures will be introduced through problem solving, emphasising the role of idealisation of the field problems. Topics covered in this course include: seepage analysis; consolidation of soils; triaxial testing; insitu testing of soils; foundation design; loading induced stresses and displacements; bearing capacity of shallow foundations; analysis and design of shallow and pile foundations; stability of slopes; pavement design.

C&ENVEG 3077 Engineering Hydrology

3 units - semester 1

25 hours lectures, 18 hours practicals, 5 hours tutorials

Available for Non-Award Study

Assumed Knowledge: C&ENVEG 1002, 2068, 2071

Incompatible: C&ENVEG 2035

Assessment: Online Quizzes (10%), Design Projects / Tutes (40%), Exam (50%)

The course serves as an introduction to the field of engineering hydrology. It covers fundamentals such as the hydrological cycle, catchments, losses, hydrographs and hyetographs, as well as topics such as: flood frequency analysis, determination of design rainfall intensity and hyetographs, peak flow estimation, design hydrograph estimation, groundwater processes and modelling.

C&ENVEG 3078 Engineering Management & Planning IIIA

3 units - semester 2

32 hours lectures, 16 hours tutorials

Available for Non-Award Study

Assumed Knowledge: C&ENVEG 1008

Incompatible: Cannot be presented with C&ENVEG 3011

Time management and other self-improvement skills; management in organisations; communication skills; engineering economics; decision-making under uncertainty; risk and reliability; use of mathematical models and optimisation in the planning process; applications to civil and environmental engineering practice.

C&ENVEG 3079 Water Engineering & Design III S2

3 units - semester 2

23 hours lectures, 8 hours tutorials, 6 hours practicals, 9 hours design, 8 hour field trip

Available for Non-Award Study

Assumed Knowledge: C&ENVEG 2071

Incompatible: C&ENVEG 3013, C&ENVEG 3014

Assessment: exam 65%, assignments/laboratories/design 35%

Closed Conduit Flows: Hydraulic engineering design. Elements of pipeline and network design; pipes in series; pipes in parallel; unsteady flow and water hammer in closed conduits; hydraulic machine basics and selection including pumps and turbines; water distribution system computer simulation modelling, EPANET. Design of water distribution systems. Open Channel Flow: Non-uniform flow in open channels, spillway design, flow in erodible channels, unsteady flow in open channels; rapidly varied flow in open channels; level pool routing; environmental factors affecting river basins.

CHEM ENG 3007WT Winery Engineering III

3 units - semester 1

Application of engineering principles and practices to winemaking. Process calculations (mass and energy balances), process utilities (refrigeration, process heating and cooling), steam systems, electrical power systems, heat transfer and heat exchangers, must, juice and wine transfer methods, centrifugation and filtration, process control and instrumentation.

CHEM ENG 3019 Pharmaceutical Plant Design & Process Engineering

3 units - semester 2

24 hours lectures, 12 hours tutorials, 3 hours practical

Restriction: students in specified programs only, please check Academic Rules of the program in which you are enrolling

Available for Non-Award Study

Assumed Knowledge: CHEM ENG 1007, CHEM ENG 2000, CHEM ENG 2002

Assessment: Project report and Exam

Principles of process engineering and plant design for

pharmaceutical engineering products. An introductory design project is solved using computer-aided process design techniques. Parallels the conventional chem. eng subject but tailored to be specific to pharmaceutical processes; costing of unit operations, design heuristics, process simulation theory & applications; software surveys.

CHEM ENG 3021 Advanced Pharmaceutical Unit Operation

3 units - semester 2

36 hours lectures, 12 hours tutorials

Restriction: students in specified programs only, please check Academic Rules of the program in which you are enrolling

Assumed Knowledge: CHEM ENG 2005, CHEM ENG 2009

Assessment: Exam and assignments

This course examines methodologies, both applied and fundamental, to analyse and scale up manufacturing pharmaceutical processes involving crystallisation, adsorption, moving bed processes, electrophoresis, liquid and dispersed-phase systems e.g. liquid and multiphase mixing, sterilisation and sanitation, lyophilisation. Also processes involving solids processing, such as solids characterisation, blending, milling, granulation, tableting, coating, etc.

CHEM ENG 3022 Pharmaceutical Engineering Applications A

3 units - semester 1

35 hours lectures, 10 hours tutorials

Available for Non-Award Study

Assumed Knowledge: CHEM ENG 2018

Assessment: Exams 70%, Tutorials 30%

Description of particulate systems. Multiphase systems; fundamentals and application to design and analysis of physical separation and transport processes

CHEM ENG 3023 Chemical Engineering Unit Operations Laboratory

3 units - semester 2

50 hours lecture, tutorial & practical work

Corequisite(s): CHEM ENG 3031, CHEM ENG 3033

Assumed Knowledge: CHEM ENG 3035, CHEM ENG 3034, CHEM ENG 2014, CHEM ENG 2018

Assessment: Project reports

A laboratory program illustrating the principles of transport theory, fluid mechanics, unit operations, process dynamics and control, and kinetics and reactor design.

CHEM ENG 3024 Professional Practice III

3 units - semester 1

45 hours lectures and workshops

Available for Non-Award Study

Assessment: 60% exam, 40% continuous assessment

The professional practice of chemical engineering, and related disciplines, relies on a broad range of discipline-

specific and transferable professional skills. In this course, key aspects of the professional practice of chemical engineering are studied. These aspects include the fundamental elements of process economics, process safety, sustainability, ethics and the responsibilities of professional engineers, project management, risk analysis and decision-making. In this course students will undertake a series of workshops, lectures, projects and case studies.

CHEM ENG 3025 Pharmaceutical Plant Design & Process Engineering

3 units - winter semester

12 hours lectures, 16 hours tutorials, 18 hours practicals

Assumed Knowledge: CHEM ENG 2010

Assessment: Final examination (50%), Major design project (50%)

The course contents includes:

Economic analysis of process designs; Introduction to process design; Introduction to computer simulation packages; Design of major process components using a computer simulation package; Major process design project.

CHEM ENG 3026 Pharm Eng Projects & Experimental Design III

3 units - semester 2

45 hours lectures, practicals and tutorials

Assumed Knowledge: CHEM ENG 3022, CHEM ENG 3027, CHEM ENG 3024

Assessment: Project reports

Advanced laboratory practice, data analysis and technical communications are the focus of this course. As a component of this course, experimental design which deals with the design and analysis of experiments with respect to the pharmaceutical process will be included. A laboratory program to pharmaceutical engineering students to illustrate the principles and phenomena encountered in pharmaceutical engineering

CHEM ENG 3027 Pharmaceutical Engineering Applications B

3 units - semester 1

24 hours lectures, 22 hours tutorials

Available for Non-Award Study

Assumed Knowledge: CHEM ENG 2510 or CHEM 2530

Incompatible: CHEM 3017

Assessment: Examination 70%; Assignments 30%

The theory of simple and complex chemical kinetic systems and their application to the design of commercial-scale reactors.

CHEM ENG 3029 Materials III

3 units - semester 2

33 hours lectures, 12 hours tutorials

Incompatible: CHEM ENG 1009, CHEM ENG 3001

Assessment: Final examination/assignments

Mechanical and rheological properties of materials. Role of dislocations and imperfections. Case studies in phase transformations. Polymers and composites. Fracture behaviour of materials. Merit indices and materials selection. Electrochemical engineering including corrosion and corrosion prevention, electroplating, electro-machining, fuel cells, energy storage and electrochemical synthesis. High temperature oxidation.

CHEM ENG 3030 Simulation and Concept Design

3 units - semester 2

12 hours lectures, 16 hours tutorials, 18 hours practicals

Prerequisite(s): CHEM ENG 2010

Incompatible: CHEM ENG 3014

The course contents are:

Economic analysis of process designs; Introduction to process design; Introduction to computer simulation packages; Design of major process components using a computer simulation package; Major process design project.

CHEM ENG 3031 Process Control & Utilities

3 units - semester 2

35 hours lectures, 10 hours tutorials

Incompatible: CHEM ENG 3015

Assessment: 70% Final Examination, 30% Projects & Tutorials

Introduction to key elements of feedback control, development of models, analysis of first and second-order systems, effect of dead time, PID controllers, stability & stability criteria, controller tuning and model fitting. Instrumentation: commonly used primary sensing elements, signal transmission for analog & digital systems, final control elements. Introduction to plant utility systems. The major components and typical layouts of three-phase and single-phase electricity supply systems; The performance of transformers and major electric motor types. Principles of motor selection; Economic aspects of electric power supply including power factor correction

CHEM ENG 3033 Chemical Engineering Applications C

3 units - semester 1

24 hours lectures, 22 hours tutorials

Assumed Knowledge: CHEM ENG 2010

Assessment: Examination 70%; Tutorials 30%

Stage-wise and continuous contact processes; single and multi-stage operation; use of reflux; analysis and design. Processes considered include: liquid-liquid extractions, leaching, stripping, gas absorption, and distillation.

CHEM ENG 3034 Chem Eng Application B

3 units - semester 1

24 hours lectures, 22 hours tutorials

Assumed Knowledge: MATHS 2201, CHEM 2510 or CHEM 2530

Incompatible: CHEM 3017

Assessment: Examination 70%; Assignments 30%

The theory of simple and complex chemical kinetic systems and their application to the design of commercial-scale reactors.

CHEM ENG 3035 Chem Eng Application A

3 units - semester 1

35 hours lectures, 10 hours tutorials

Assumed Knowledge: CHEM ENG 2018

Incompatible: CHEM ENG 3018

Assessment: Examination 70%; Tutorials 30%

Description of particulate systems. Multiphase systems; fundamentals and application to design and analysis of physical separation and transport processes.

ELEC ENG 3018 RF Engineering III

3 units - semester 1

36 hours lectures, 6 hours tutorial, 12 hours practicals

Restriction: students in specified programs only, please check Academic Rules of the program in which you are enrolling

Available for Non-Award Study

Assumed Knowledge: ELEC ENG 2008, ELEC ENG 2009

Assessment: written exam, tests and practicals

Basic concepts of electromagnetic radiation, propagation and antennas. Elementary transmission line theory. Radio Frequency systems and performance constraints. Tuned circuits and matching. High frequency transistor models. Tuned and broadband amplifiers. Oscillators and mixers. Modulation and demodulation. Introduction to phase locked loops. Miscellaneous analogue circuits.

ELEC ENG 3019B Practical Electrical & Electronic Design III

3 units - full year

78 hours lectures, practical work

Restriction: students in specified programs only, please check Academic Rules of the program in which you are enrolling

Prerequisite: ELEC ENG 2010A/B, ELEC ENG 3019A

Corequisite: ELEC ENG 3018, ELEC ENG 3016

Assessment: practical exercises with informal reports, practical exercises with formal reports, laboratory & two written tests - each assessment component must be passed separately

Practical experiments in the key areas of: Radio reception, Signal processing & Control, Communications and Energy conversion. Practical electronic design, development of Report writing skills and measurement skills.

ELEC ENG 3021 Electric Energy Systems

3 units - semester 1

36 hours lectures, tutorials and practicals

Restriction: students in specified programs only, please check Academic Rules of the program in which you are enrolling

Available for Non-Award Study

Assumed Knowledge: ELEC ENG 1006, ELEC ENG 2009

Assessment: written exam, assignments, practicals

Electric energy systems overview: Electric loads and energy pricing. Electric transmission and distribution networks. Conventional energy generation systems, sustainable/renewable energy sources. Energy storage. Economics, management and sustainability.

Modelling and analysis of electric energy systems: single-phase and three-phase circuits (real and reactive power, per-unit systems). Electromechanical energy conversion (construction, modelling and characteristics of induction and synchronous machines). Electric energy transmission and distribution (modelling of transmission lines, system analysis, control of voltage, power and frequency).

ELEC ENG 3022 Real Time Systems IV

3 units - not available 2010

26 hours lectures, tutorials, programming exercises

Restriction: students in specified programs only, please check Academic Rules of the program in which you are enrolling

Available for Non-Award Study

Assumed Knowledge: ELEC ENG 1006, COMP SCI 2000

Assessment: assignment, written exam

Time-critical computing, real-time kernels and development systems, scheduling periodic and aperiodic task techniques, intertask communication and synchronisation, rate monotonic analysis, real-time message transmission in distributed local area networks.

ELEC ENG 3024 Project Management for Electrical Engineering

3 units - semester 2

69 hours lectures, tutorials, group project, practicals

Restriction: students in specified programs only, please check Academic Rules of the program in which you are enrolling

Available for Non-Award Study

Assumed Knowledge: ELEC ENG 2007, ELEC ENG 2008

Assessment: written exam, assignments, project work

Principles of project management as applied to engineering systems; leadership and team skills; group project work to exercise planning organisational and communication skills.

ELEC ENG 3025 Power Electronics & Drive Systems M

3 units - semester 2

36 hours lectures, 6 hours tutorials

Restriction: Students in specified programs only, please check Academic Rules of the program in which you are enrolling

Available for Non-Award Study

Assumed Knowledge: ELEC ENG 1009

Assessment: Quizzes, Major Assignment

Power electronics: characteristics of power electronic devices and classes of power converters. Power supplies (uninterruptible, switchmode). Hard and soft-switching, resonant circuits. Losses and thermal design. Converter topologies and their operations and typical applications including traction drives, solar and wind generation

systems.

Advanced energy-efficient motor drives: review of motor theory, power electronic control principles, vector and servo drives (stepper, DC, induction, brushless PM and switched-reluctance). Motor and drive selection. System design, implementation and control. Computer interfacing, network communication.

ELEC ENG 3026 Engineering Systems: Avionics

3 units - semester 2

45 hours lectures and tutorials

Available for Non-Award Study

Assumed Knowledge: ELEC ENG 2007, ELEC ENG 2008

Assessment: Examination and assignments

A: Complexity in engineering systems - nature, measures, implications; Managing complexity - partitioning, separation of concerns, abstraction, information hiding, hierarchies; Functional partitioning, interfaces, specifications, standards, compliance and verification; Planning.

B: Avionic Systems: Aircraft as systems - overview of major subsystems; Aircraft as subsystems - overview of air transport system and major subsystems; Aircraft subsystems: Principles of flight; Flight control system; Flight management system; Navigation Control and Guidance system; Landing aids; Surveillance; Collision avoidance System; In flight entertainment system; Regulatory framework and standards.

ELEC ENG 3027 Control III

3 units - semester 1

36 hours lectures, 6 hours tutorials, 12 hours practicals

Available for Non-Award Study

Assumed Knowledge: ELEC ENG 2007, MATH 2201 and MATH 2202

Assessment: Written exam, homework exercises, practicals

Transfer functions; stability; dynamic and steady-state performance; root locus diagrams; Bode and Nyquist plots; cascade compensation using root locus and frequency response techniques; minor-loop feedback. Introduction to state-space modelling and analysis. Analysis and design of digital control systems.

ELEC ENG 3028 Digital Systems

3 units - semester 2

36 hours lectures, 6 hours tutorials, 9 hours computer design exercises

Available for Non-Award Study

Assumed Knowledge: ELEC ENG 1009, ELEC ENG 1010, ELEC ENG 2008

Assessment: practical exercises and collaborative design exercises, tutorial preparation and a final examination

Building Digital Systems; Combinatorial Logic Design; Sequential Logic Design; Digital Subsystems and

Interfaces; Digital Systems Architecture; Beneath the Digital Abstraction.

ELEC ENG 3029 **Project Management for Sustainable Energy**

3 units - semester 2

Lectures, tutorials and practicals

Assumed Knowledge: ELEC ENG 1009 and 1010, ELEC ENG 3021

Assessment: Team project 60%; written exam 40%

Teamwork; Project lifecycle; Project planning; Project monitoring and evaluation; Completion of a team project in electrical sustainable energy engineering involving teamwork, problem solving, and use of project management and engineering skills.

ELEC ENG 3031 **Power Systems**

3 units - semester 2

36 hours lectures, 6 hours tutorials, 18 hours practicals and computer exercises

Available for Non-Award Study

Assumed Knowledge: ELEC ENG 1009 and ELEC ENG 1010

Assessment: Quizzes and practical assignments

Transmission Line Parameters; Transmission Lines: Steady-State Operation; Power Transformers; Power Flows; Symmetrical Faults; Symmetrical Components and Unsymmetrical Faults; Power System Controls; Transient Stability.

ELEC ENG 3033 **Signal Processing III**

3 units - semester 1

56 hours lectures, tutorials and practicals

Available for Non-Award Study

Assumed Knowledge: ELEC ENG 2007, MATHS 2201, MATHS 2202

Assessment: Examinations, Quizzes, Homeworks and Practicals

Discrete-time signals; Discrete-time LTI systems; Fourier Transforms; Digital Filtering Principles; Digital Filter Design; Statistical Signal Processing Fundamentals; Correlation functions and Covariance Matrices; Practical signal processing skills in MATLAB.

ELEC ENG 3034 **Telecommunications III**

3 units - semester 2

36 hours lectures

Available for Non-Award Study

Assumed Knowledge: ELEC ENG 2007

Assessment: examination, homework and assignment

Plain Old Telephone System; Cellular systems, including GSM and IS-95 CDMA; Principles of IP - datagram networks and routing; Principles of ATM; QoS on IP; Voice over IP; GPRS and ADSL - hybrid voice/data network principles.

ENG 3003 **Engineering Communication EAL**

3 units - semester 1 or 2

12 hours lectures, 24 hours tutorial

Restriction: International students from NES background who present English language score (IELTS/TOEFL) for admission, or entered via Found.St.Prog or students resident in Australia with admission based on SACE Level 2 LOTE or eligible to take ESL unit in Yr 11/12

Available for Non-Award Study

Incompatible: May not be presented with MATHS 3015 or ENG 3002

Assessment: Online tests, seminar presentation, written assignments

This course provides task-based language development in English as an additional language for spoken and written communication. It is designed to develop English language ability appropriate to the study of Engineering and, at an introductory level, relevant to professional Engineering communication practice. Class work is designed to develop the students' English speaking, listening, writing and reading proficiencies and does so through the use of materials that focus on topical social issues in Engineering professional practice. Tasks and assignments are focused on academic writing, research and the preparation of evidence-based documents, as well as on group discussion and formal seminar presentation.

MECH ENG 3026 **Aerospace Materials and Structures**

3 units - semester 1

45 hours lectures and tutorials

Restriction: available to students in specified programs only, please check Academic Rules of the program in which you are enrolling

Available for Non-Award Study

Assumed Knowledge: CHEM ENG 1003, APP MTH 2000, APP MTH 2002, MECH ENG 2002

Assessment: assignments, quizzes, finite element labs, laboratory experiment, exam

Concepts of stress and strain tensors, elasticity, plasticity, visco-elasticity and creep, elementary solutions of theory of elasticity and plasticity, plane stress and plane strain states, Airy's stress function, application of the principle of minimum potential energy, contact problems, finite element analysis of 2D and 3D structures, elastic waves in solids and into fracture mechanics. The course also examines the different types of materials used in the aerospace industry, including metals, ceramics and composites. Selection of the appropriate material for a variety of applications will be discussed in terms of the material properties, ease of manufacture and performance in the anticipated service environment. Case studies will be used to demonstrate the design principles used when using each of these materials for aerospace applications.

MECH ENG 3027 **Engineering Systems Design and Communication**

3 units - semester 2

60 hours lectures, tutorial, design office

Restriction: available to students in specified programs only, please check Academic Rules of the program in which you are enrolling

Available for Non-Award Study

Assessment: assignments 30%, final exam 70%

The course covers communication skills, effective team work practices, project management, and all of the elements of the design process that are relevant to engineering projects. The various stages of the design process will be discussed including problem identification, concept generation, concept selection and design embodiment. Fundamentals of good design practices will also be covered including aesthetics, ergonomics and safety. Since effective communication is an essential aspect of engineering design, the course provides written and spoken language development in the context of academic and professional engineering. Class work is designed to develop the capacity of students for effective communication relevant to their current studies and intended professional careers. Areas covered include logical cohesion, structuring and writing a research paper, integrating evidence, and the effective presentation of seminars.

MECH ENG 3028 Dynamics and Control II

3 units - semester 2

45 hours lectures, tutorials, 4-6 hours laboratory experiments

Restriction: available to students in specified programs only, please check Academic Rules of the program in which you are enrolling

Available for Non-Award Study

Assumed Knowledge: 6 units of Level II Applied Maths courses, MECH ENG 2019

Assessment: assignments, laboratory experiments, final exam

Dynamic systems are found everywhere, from musical instruments to transportation vehicles such as automobiles and aircraft. Even static civil structures such as bridges and buildings exhibit a dynamic response, which must be considered during design and construction of such systems.

This course introduces the fundamental concepts of vibrating dynamical systems, from single degree of freedom systems through to continuous and multi-degree of freedom systems. Design of vibration control devices, such as vibration isolators and vibration absorbers, is also considered. Concurrently with the introduction to vibratory systems described above, this course also addresses how to control such dynamic systems using modern state-space control. This involves time domain descriptions of dynamic systems using state-space system models. The characteristics responsible for the dynamic response (poles, zeros, eigenvalues) are presented. Control laws using state-space are introduced, including specification of controller characteristics, controller design using pole placement and optimal (LQR) control (introduction). State observers are presented, including observer design using both pole placement and optimal (Kalman) observers (introduction). Finally, a computer aided control system design methodology is applied to a real MIMO Aerospace platform and several other unstable MIMO systems.

MECH ENG 3030 Structural Design and Solid Mechanics

3 units - semester 1

48 hours lectures, tutorials, 8 hours laboratory classes

Restriction: available to students in specified programs only, please check Academic Rules of the program in which you are enrolling

Available for Non-Award Study

Assumed Knowledge: MECH ENG 2002, 6 units of Level II Applied Maths courses

Assessment: assignments, final exam

Concepts of stress and strain tensor, elasticity, plasticity, viscoelasticity and creep, elementary solutions of theory of elasticity and plasticity, Airy's Stress Function, Principle of Minimum Potential Energy, Finite Element Analysis, waves in solids, intro to Fracture Mechanics, properties and behaviour of structural materials and elements together with fabrication, construction and durability aspects, preliminary sizing of members, assessment of loads, analysis and design of structural members for load capacity and serviceability.

MECH ENG 3032 Micro-controller Programming

3 units - semester 2

45 hours lectures, tutorials

Restriction: available to students in specified programs only, please check Academic Rules of the program in which you are enrolling

Available for Non-Award Study

Assumed Knowledge: CHEM ENG 1002, MECH ENG 2011

Assessment: assignments, final exam

The focus of this course is on the programming and use of micro-controllers in mechatronics applications. Assuming basic knowledge of the C programming language, the material is presented in a combination of lectures, tutorials and hands-on laboratory sessions. The build process of micro-controller software is examined in great detail thereby providing the language for understanding compiler handbooks, on-line publications and micro-controller datasheets. The newly developed skills are then applied in a number of practical case studies covering typical mechatronics applications including servo-mechanisms, sensor interfacing, real-time issues and inter-platform communication. Emphasis will be laid on the confident use of the C programming language using a variety of programming environments. Fault finding techniques will be introduced, ranging from low-level in-circuit debugging to source-level debugging on simulators and evaluation boards. Small-group projects and case studies will be used to provide important hands-on experience with micro-controller based projects.

MECH ENG 3033 Automotive Materials and Structures

3 units - semester 1

45 hours lectures, tutorials

Restriction: available to students in specified programs only, please check Academic Rules of the program in which you are enrolling

Available for Non-Award Study

Assumed Knowledge: CHEM ENG 1003, APP MTH 2000, APP MTH 2002, MECH ENG 2002

Assessment: assignment, quizzes, finite element labs, laboratory experiment, exam

The course examines the different types of materials used in the automotive industry, including metals, ceramics and composites. Selection of the appropriate material for a variety of applications will be discussed in terms of the material properties, ease of manufacture and performance in the anticipated service environment. Case studies will be used to demonstrate the design principles used when using each of these materials for automotive applications. The course develops an understanding of the mechanics of complex practical situations through the establishment and solution of an appropriate boundary value problem.

MECH ENG 3100 Aeronautical Engineering

3 units - semester 1

45 hours lectures, 6 hours tutorials

Available for Non-Award Study

Assumed Knowledge: MECH ENG 2021

Incompatible: Cannot be presented with MECH ENG 3016 or 4008

Assessment: Assignments, Final exam

The aim of the course is to equip students with the necessary knowledge and skills to understand and analyse the design and performance of modern aircraft. The course focuses on the fluid mechanical and thermodynamic aspects of aeronautical engineering as follows: it firstly introduces the basics of flight mechanics and aircraft performance as well as aircraft stability and control. This is followed by low and high Mach number aerodynamics where lift and drag mechanisms as well as design principles and requirements are described. Concluding the course are different methods of thrust generation as well as propeller theory and selection, followed by V/STOL flight.

MECH ENG 3101 Applied Aerodynamics

3 units - semester 2

45 hours lectures, 9 hours practicals

Available for Non-Award Study

Assumed Knowledge: MECH ENG 2021, 6 units Level II APP MATHS courses

Assessment: Lab classes 10%, assignments 20%, Final exam 70%

The aim of this course is to introduce students to the fundamentals and practical aspects of incompressible and compressible flows and the design and operation of flow systems, including pipe networks, automobiles and flight vehicles. The course content includes: flow of inviscid and viscous fluids; laminar and turbulent flow in pipes and boundary layers; losses in pipe systems; lift and drag forces on moving bodies, aerofoil theory; incompressible-flow machines; fundamentals of compressible flow; 1-D pipe flow; compressible flow nozzles; Rayleigh flow; Fanno flow; external compressible flow around bodies including transonic and supersonic vehicles; design considerations.

MECH ENG 3102 Heat Transfer & Thermodynamics

3 units - semester 1

45 hours lectures, 6 hours practicals

Available for Non-Award Study

Assumed Knowledge: MECH ENG 2021, 6 units Level II APP MATHS courses

Assessment: Lab class 10%, assignments 20%, Final exam 70%

Heat transfer modes: Conduction, Convection and Radiation. Heat Exchanger design and optimisation, boiling evaporation and condensation. Vapour power cycles; refrigeration cycles; non-reacting mixtures; psychrometry; combustion.

MECH ENG 3103 Manufacturing Engineering

3 units - semester 1

45 hours lectures, and site visits

Available for Non-Award Study

Incompatible: Not presentable with MECH ENG 2007 or 3015

Assessment: Assignments, Final exam

Plastics manufacturing, the design and control of advanced manufacturing systems. Techniques for the analysis and operation of manufacturing systems. Design for assembly, design for manufacture techniques. Quality management; design for quality statistical process control; quality techniques including quality function deployment and failure mode and effect analysis. Up to 6 invited industry lectures on four different topics will be used to convey applied quality management and control topics. These lectures will complement introductory lectures held in the weeks directly prior to the individual industry talks.

MECH ENG 3104 Space Vehicle Design

3 units - semester 2

45 hours lectures, 6 hours practicals

Available for Non-Award Study

Assumed Knowledge: 6 units level 2 APP MATHS courses

Incompatible: Not presentable with MECH ENG 3025 or 4015

Assessment: Assignments, final exam

The aim of the course is to introduce the students to the basic theories and design criteria of space vehicles. The first part of the course describes historical developments in space flight and the basic rocket equations, as well as the principles of rocket staging and its optimisation. This is followed by orbital theory, where two-body motion, manoeuvres and special trajectories are described. A section about rocket propulsion focuses on performance, propulsion requirements and various propellant systems (monopropellant, bipropellant, solid, cold gas and non-chemical propellant systems). Concluding the course will be a description of current developments in space flight, such as the International Space Station and missions to Mars.

MECH ENG 3105 Sustainability & the Environment

3 units - semester 1

45 hours lectures and practicals

Available for Non-Award Study

Assumed Knowledge: 6 units of Level 2 Maths courses

Incompatible: Not presentable with MECH ENG 3017

Assessment: assignments, final exam

Engineering ethics, noise assessment and control, air pollution assessment and control, water pollution assessment and control, sustainability, sustainable design and manufacture, sustainable buildings, sustainable energy, environmental impact statements, legislative requirements, climate change.

MECH ENG 3106 Mechatronics II

3 units - semester 1

45 hours lectures/ practicals

Available for Non-Award Study

Incompatible: Not presentable with MECH ENG 3014

Assessment: assignments, final exam

Advanced PLC programming and implementation, memory and data types, program structure, mathematic functions, floating point operation, and PLC industrial applications.

MECH ENG 3107 Sports Engineering II

3 units - semester 2

48 hours lectures, 6 hours labs

Assumed Knowledge: MECH ENG 2102, MECH ENG 2002

Assessment: assignments, final exam, compulsory laboratory experiments

Sports equipment is an integral part of sportive activity. Sophisticated and innovative design enhances the performance of athletes and prevents injuries. Equipment customised for elite athletes may provide a competitive edge. Sports and exercise equipment sales account for approximately 35% of the global sporting goods market, whilst sports apparel comprises 50 % and athletic footwear 15%.

This course introduces the fundamental concepts of sports equipment design and technology for competitive purposes, including customisation and legal principles of design within the rules. The course addresses the entire range of contemporary competitive equipment in conjunction with sport biomechanics, athletic performance and injury prevention. One topic covers the principle of expert witness reports for legal cases.

MECH ENG 3108 Sports Materials

3 units - semester 1

48 hours lectures, 6 hours labs

Assumed Knowledge: CHEM ENG 1009, MECH ENG 2103, MECH ENG 2002

Assessment: assignments, final exam, compulsory laboratory experiments

A solid foundation of materials science and engineering is required to successfully design sports equipment and to understand its structural properties. Sports equipment covers the full range of traditional biological materials like wood to advanced spacecraft materials. The appropriate selection and design of sports materials enhances the performance of athletes and prevents injuries.

This course introduces the fundamental concepts of material models including mathematical modelling, followed by specific properties and applications of materials for the design of sports equipment. One topic provides the design guide for protective equipment. The section on materials testing covers the fundamental concepts of experimental design and specific application to sports equipment according to rules and standards issued by governing sporting bodies and professional associations. The section on human biological materials covers the biomechanics of soft and hard tissues and their importance for sports injuries.

MECH ENG 3109 Engineering Biomechanics

3 units - semester 1

48 hours lectures, 6 hours practical

Available for Non-Award Study

Prerequisite(s): C&ENVENG 1010, MECH ENG 1007, MECH ENG 2019, MECH ENG 2103

Assessment: assignments, final exam, compulsory laboratory experiments

A solid foundation of Biomechanics is required to perform advanced sports biomechanics analyses and to understand the effects of sports equipment on the human body. The course is designed as an Engineering Biomechanics course, involving design elements, systems engineering approach, analysis of biological mechanisms, and engineering problem identification and decision making. The practical contents of this course outweigh the theoretical part, which relies on prerequisites and assumed knowledge from Level I and II courses.

The course introduces the fundamental concepts of Engineering Biomechanics and applies them to force analysis for clinical and sports purposes as well as to kinematic analysis. The course addresses the mathematical determination of muscle and joint forces and decision making based on mathematical results (e.g. which muscle is active, which ligament is loaded, will a joint dislocate or not). The major part of the course focuses on practical calculation of muscle and joint forces as well as critical interpretation of the results.

MINING 3068 Mine Ventilation

3 units - semester 2

24 hours lectures, 12 hours tutorials, 12 hours practicals

Available for Non-Award Study

Assumed Knowledge: C&ENVENG 1011, C&ENVENG 2071

Assessment: Exams and assignments

Subsurface environment in underground mining operations; hazard and risk; mine dust, gases, fires and radiation; health and safety issues; ventilation circuit design and analysis; ventilation surveying and monitoring.

MINING 3069 Rock Breakage

3 units - semester 2

24 hours lectures, 12 hours tutorials, 12 hours practicals

Available for Non-Award Study

Assumed Knowledge: C&ENVENG 1011, 3071, 3072

Assessment: Exam, assignments and quizzes

Introduction to rock fragmentation theory and blasting theory; types of drillings, drilling equipment and drilling system selection; types of explosives and their selections; detonating devices and their applications; pattern design for drilling and blasting.

MINING 3070 Resource Estimation

3 units - semester 1

24 hours lectures, 12 hours tutorials, 12 hours practicals

Available for Non-Award Study

Assumed Knowledge: C&ENVENG 1011, MATHS 2201, GEOLOGY 2009

Assessment: Exams, assignments, group projects

Mine Geology. Resource and reserve estimation of coal and metalliferous deposits. Sampling methodology, basis of preparation and reliability of resources and reserves, with particular reference to the JORC code grade control/ mine to mill. Merits of various estimation methods and relevance to specific mineral deposits. Ore body and block modeling.

MINING 3071 Mining Systems

3 units - semester 1

24 hours lectures, 6 hours tutorial, 18 hours practical

Available for Non-Award Study

Assumed Knowledge: C&ENVENG 1011

Assessment: Exams and assignments

This course provides an overview of the principles and application of the major underground and surface mining methods and equipment, and the conceptual design of the major materials handling and transport systems and support infrastructure. Specific topics to be covered include: Surface mining methods; Underground mining methods; materials handling and transport systems; Systems infrastructure and site requirement.

MINING 3072 Mining Geomechanics

3 units - semester 1

24 hours lectures, 12 hours tutorials, 12 hours practicals

Available for Non-Award Study

Assumed Knowledge: C&ENVENG 1010, GEOLOGY 1104, C&ENVENG 2025

Assessment: Exams and assignments

This course aims to provide students with the basic knowledge required to undertake geotechnical investigations. The topics covered in the course include: Basics of materials behaviour; stress-strain, failure criteria, stress and strain tensors. Basic Soil Mechanics; phase relationships, soil classification, effective stress, seepage, consolidation, compaction, retaining structures. Basic Rock Mechanics rock material behaviour, joints, rock mass strength and deformability.

MINING 3073 Mine Planning

3 units - semester 2

24 hours lectures, 6 hours tutorials, 18 hours practicals

Available for Non-Award Study

Assumed Knowledge: C&ENVENG 1011, 3070, 3071

Assessment: Exams and assignments

This course deals with the theoretical principles and practical methodologies associated with mine planning. Mine planning is an iterative process entailing elements of design, scheduling and evaluation. As part of the planning process a range of issues has to be considered including, short and long term planning, mine optimisation, cut-off grade analysis and mining valuation. The course presents principles of surface and underground mine planning and valuation for metaliferous and coal mining projects.

MINING 3074 Special Topics in Mining Engineering

3 units - semester 1 or semester 2

24 hours lectures, 14 hours tutorials, 10 hours practicals

Available for Non-Award Study

Assessment: To be advised at beginning of semester

Special Topics in Mining Engineering.

PETROENG 3001 Reservoir Simulation

3 units - semester 2

Lectures, tutorials

Restriction: students in specified programs only, please check Academic Rules of the program in which you are enrolling.

Available for Non-Award Study

Assessment: in-class assignments, take home tasks, quiz, final assessment test in-class

The course gives the theoretical basis and practical fundamentals for numerical simulation and analytical modelling of fluid flow in petroleum reservoirs. The partial differential equations required for modelling of single-phase and multi-phase fluid flow in porous media are derived. The governing systems are used for development of several analytical models which serve for reservoir evaluation and analysis. A particular attention is given to empirical functions of transport properties and phase equilibrium that the models contain and which are input functions into reservoir simulators. The numerical methods for solving the basic governing equations using finite difference methods are presented. Input data requirements and applications of simulation models for history matching and prediction of field performance

will be discussed. Practical applications are directed to commercial reservoir simulator Eclipse.

PETROENG 3005 Reservoir Characterisation and Modelling

3 units - semester 1

Intensive short course of integrated lectures and computer-based worked examples

Restriction: Students in specified programs only, please check relevant Academic Rules

Available for Non-Award Study

Assumed Knowledge: Introductory petroleum geology, rock properties and formation evaluation, yr 12 high-school level maths, basic probability and statistics, competency in Excel

Assessment: mid-course test, assignment, exam

The objective of this course is to teach the basic science, technology and related assumptions involved in carrying out an integrated reservoir characterisation study. It will prepare students to understand and interpret techniques that underlie commercial software (but will not teach software usage itself). The emphasis is on providing students with knowledge of a 'toolkit' for, but not a prescriptive approach to, the ultimate goal of constructing 3D static models.

The course has three main components: 1) Data sources, quality and analysis, including spatial analysis; 2) Generating 3D models of reservoir properties - classical gridding and mapping, kriging as a data-driven (variogram) form of classical mapping (estimation) and a means of data integration. Simulation techniques are introduced as a means of modelling uncertainty resulting from heterogeneity; 3) Scaling of grids and property models for the purpose of reservoir simulation is the final topic. The integration and application of all the major ideas is illustrated by a case study.

PETROENG 3007 Well Testing and Pressure Transient Analysis

3 units - semester 1

36 hours lectures, 24 hours tutorials

Restriction: for students in specified programs only, please check Academic Rules of the program in which you are enrolling

Available for Non-Award Study

Assessment: Assignments, exam

Well test objectives and concepts; fluid flow equation and fundamental solution; classical methods: drawdown and buildup analyses, bounded reservoirs; gas well testing; type curves and derivatives; complex systems: multi-layer, dual-porosity, hydraulic fractures; interference and pulse testing; drill-stem testing; test design, equipment and operations.

PETROENG 3019 Structural Geology and Seismic Methods

3 units - semester 2

Lectures, practicals

Restriction: students in specified programs only, please check Academic Rules of the program in which you are enrolling

Available for Non-Award Study

Assessment: Assignments, exam

Structural Geology: Basic concepts of stress (resolving stresses and Mohr Circle) and rock failure (friction, Coulomb); present-day stresses from oil field data; implications for wellbore stability and water flooding; basic concepts of structural geology; faults; folds; structural traps and fault seal analysis. Seismic Methods: Principles of reflection seismology, such as wave propagation phenomena, and seismic velocity and resolution. Data acquisition and processing methods, mechanics of seismic interpretation. Velocity anomalies and depth conversion. Techniques for evaluating reservoir and fluid properties, such as seismic attributes, DHIs and AVO, and time lapse seismology.

PETROENG 3020 Production Engineering and Optimisation

3 units - semester 1

Lectures, tutorials, group projects

Restriction: students in specified programs only, please check Academic Rules of the program in which you are enrolling

Available for Non-Award Study

Assessment: Assignments, project (written & oral presentation)

The aim of this course is to provide familiarisation of the principles and applications of various theories and techniques necessary to design, estimate and maximise production performance in a cost effective manner within various constraints from the oil and gas well systems. Attempts will be made to understand how these techniques could be applied in a practical field development project to identify the best way of exploiting petroleum reserves, as well as maximising ultimate production.

This course will address details of reservoir inflow performance, well flowing performance, design of artificial lift systems, familiarisation of petroleum production facilities, and analysis and optimisation of total petroleum production systems using conventional and nodal analysis. Students will also be given opportunity to apply these theories and methods through numerical problem based exercises and practical project assignments. The project assignment may require the use of a commercial simulator.

PETROENG 3023 Well Completion and Stimulation

3 units - semester 2

36 hours lectures, 24 hours tutorials

Restriction: students in specified programs only, please check Academic Rules of the program in which you are enrolling

Available for Non-Award Study

Prerequisite: PETROENG 2010

Assumed Knowledge: Higher Maths, Physics, Chemistry

Assessment: Assignments, exams

The objective of this course is to provide students the broad understanding of petroleum well completion process. The course covers the fundamental principles of the design and evaluation of well completions, casing design in various loading condition with various downhole situations; placement of casing, liners and well tubing; cementing techniques; perforation techniques; gravel

packing; sand control and measurement, use of different sand control devices; fundamentals of fracturing including acid fracturing and hydraulic fracturing, and matrix acidizing This course also covers the broad overviews of various completion techniques, tools, and wellhead types, and surface gathering systems.

PETROENG 3025 Reservoir Engineering

3 units - semester 2

Lectures, tutorials, lab demo

Assumed Knowledge: PETROENG 1001 or PETROENG 1006, PETROENG 2001, PETROENG 2005, PETROENG 2009, MATHS 1012, PHYSICS 1100

Assessment: assignments, exam

Darcy's Law and Applications, Concepts of permeability, Relative permeability, Capillary pressure, Wettability, Material Balance Equations for Different Types of Reservoirs and Drives, Aquifer Behaviour and Water Influx, Immiscible Displacement, Buckley-Leverett theory, Gravity-Stable Displacement, Water and Gas Injection, Coning and Cusping.

PETROENG 3026 Formation Damage in Petroleum Reservoirs

3 units - summer semester

Lectures, tutorials

Prerequisite: MATHS 1012

Assessment: In-class assignments, take home tasks, quiz, final assessment test in-class

The course covers transport of colloids/suspensions in natural reservoirs and its applications to formation damage in injection and production wells, its prediction, mathematical and laboratory modelling, prevention and mitigation. The oil-production processes covered are injectivity decline, re-injection of produced water, invasion of drilling fluid, sand production, gravel pack, sand screens, fines migration, disposal of produced water, IOR. The physics phenomena caused damage include deep bed filtration, external filter cake formation, precipitation of salts, asphaltenes and paraffines, fines migration and liberation, rock deformation and compaction, two-phase flow of suspensions and colloids. Cases of vertical, horizontal, fractured and perforated wells are discussed. Techniques of damage removal and well stimulation are presented.

The lectures are accompanied by numerous training exercises and field examples.

TECHCOMM 3000 Innovation and Creativity

3 units - summer semester or winter semester

Intensive: 13 hours lectures, 26 hours tutorial, 6 hours workshop

Restriction: At least 2 years full time undergraduate study

Available for Non-Award Study

Assumed Knowledge: Foundations of Entrepreneurship

Individual and group creativity; barriers to creativity and approaches for overcoming these; methods for generating or recognising ideas; alternatives or possibilities to solve

commercial or operational problems; turning creativity into innovation that benefits the customer and the business venture; bringing creativity and innovation into the organisation and building an environment to support these activities; creative scenarios for the future for the organisation.

TECHCOMM 3001 New Venture Planning

3 units - winter semester

Intensive: Lectures and practicals

Restriction: At least 2 years full time UG study

Available for Non-Award Study

Assumed Knowledge: Foundations of Entrepreneurship

Assessment: Individual assignments, group project, journal

The strategic planning process; the business planning framework; feasibility planning; undertaking a strategic analysis; developing strategies for the marketing, production, organisational and financial aspects of the business; innovation strategy planning; financial forecasting for entrepreneurs; business planning in practice; presenting the deal.

TECHCOMM 3006 Energy Management, Economics & Policy

3 units - semester 1

48 hours lectures and tutorials

Available for Non-Award Study

Assumed Knowledge: MECHENG1105 Introduction to Sustainable Energy Engineering, or equivalent

Assessment: Group assignment, individual assignment, exam

National and world economic perspectives on energy; The economics of energy; Problems and current status of energy; International treaties; Australian energy sources; Emerging energy management systems; The national electricity grid; Problems, myths and truths about energy supply politics and policy.

LEVEL IV

C&ENVENG 4003A/B Civil and Structural Engineering Research Project

6 units - full year

120 hours directed study

Restriction: students in specified programs only, please check Academic Rules of the program in which you are enrolling

Prerequisite(s): Students must enrol in Part A in semester prior to Part B

Assessment: evaluation of research including: research report, conference paper, literature review, oral presentations

Students work in groups on a research project under the supervision of an academic staff member.

C&ENVENG 4005A/B Civil and Environmental Research Project

6 units - full year

120 hours directed study

Restriction: students in specified programs only, please check Academic Rules of the program in which you are enrolling

Prerequisite(s): Students must enrol in Part A in semester prior to Part B

Assessment: evaluation of research including: research report; conference paper; literature review; oral presentations.

Students work in groups on a research project under the supervision of an academic staff member.

C&ENVEG 4034 Engineering Management IV

3 units - semester 2

36 hours lectures, workshop sessions, project work

Restriction: students in specified programs only, please check Academic Rules of the program in which you are enrolling

Available for Non-Award Study

Assessment: may include assignments &/or exam - further details available at beginning of semester

This course includes group decision-making, the development of the individual, and the importance of communication and interpersonal skills in the engineering environment. Students gain an understanding of work preferences and personal interactions through self-analysis, experience and reflection. These skills are developed through group projects, presentations and a competitive engineering proposal.

C&ENVEG 4037 Introduction to Environmental Law

3 units - semester 1

24 hours lectures, tutorials plus directed study

Restriction: Available only to Civil and Environmental students

Available for Non-Award Study

Assessment: may include assignments and/or exam—further details available at beginning of semester

The course examines regulatory mechanisms that address environmental problems and focuses particularly upon regulation of development. Included are: a general introduction to the law and the legal system; the nature of environmental problems in Australia; constitutional responsibilities and powers with respect to environmental planning and protection; land-use planning and protection systems; environmental impact assessment; regulation of pollution and waste disposal; and environmental litigation.

C&ENVEG 4068 Computer Methods of Structural Analysis and Design

3 units - semester 1

24 hours lectures, tutorials plus directed study and/or design

Restriction: students in specified programs only, please check Academic Rules of the program in which you are enrolling

Available for Non-Award Study

Assumed Knowledge: C&ENVEG 3001 Structural Mechanics IIIA, C&ENVEG 3007 Structural Design III (Steel), C&ENVEG 3005 Structural Design III (Concrete)

Assessment: may include assignments &/or exam—further details available at beginning of semester

The objective of this course is to make students aware of the mathematical basis of structural analysis software programs and develop a competence in the use of such

programs. Topics include basic theory and formulation of finite element analysis; two and three-dimensional elements; linear analysis of plane and space frameworks; an introduction to non-linear structural analysis. Computer modelling of real structures and practical aspects of computer analysis will be illustrated with a number of examples. Students will use commercial software to solve simple problems.

C&ENVEG 4069 Advanced Reinforced Concrete

3 units - semester 2

24 hours lectures, tutorials, plus 21 hours directed study and/or design

Restriction: students in specified programs only, please check Academic Rules of the program in which you are enrolling

Available for Non-Award Study

Prerequisite(s): C&ENVEG 3001 Structural Mechanics IIIA, C&ENVEG 3007 Structural Design III (Steel), C&ENVEG 3005 Structural Design III (Concrete)

Assessment: design, tutorials, exam

This course is intended to provide students with a deeper fundamental understanding of the behaviour of reinforced concrete (RC) structures. Emphasis will be placed on inelastic behaviour of RC members. Topics covered will include: elastic and inelastic response of RC members; confinement of RC columns; behaviour of RC beams in shear; and use of new and advanced materials in RC

C&ENVEG 4070 Structural Dynamics due to Wind and Earthquakes

3 units - semester 2

24 hours lectures, tutorials, plus directed study and/or design

Restriction: students in specified programs only, please check Academic Rules of the program in which you are enrolling

Available for Non-Award Study

Assumed Knowledge: C&ENVEG 3001 Structural Mechanics IIIA, C&ENVEG 3007 Structural Design III (Steel), C&ENVEG 3005 Structural Design III (Concrete)

Assessment: coursework 40%, final exam 60%

Students will learn in this course how the basic stiffness method of structural analysis for static loading is extended to analyse the dynamic response of structures subject to dynamic loading such as that caused by blast, wind and earthquake. Emphasis will be placed on practical elastic and inelastic analysis techniques. Importantly, simplified methods for characterisation of dynamic loads as 'equivalent' static forces and the treatment of structural damping will also be covered.

C&ENVEG 4071 Special Topics in Civil & Structural Engineering IV

3 units - semester 1 or semester 2

24 hours lectures, tutorials, plus directed study

Restriction: students in specified programs only, please check Academic Rules of the program in which you are enrolling

Available for Non-Award Study

Assessment: may include assignments and/or exam—details at beginning of semester

Advanced topics in civil and structural engineering.

C&ENVEG 4073 **Water Distribution Systems & Design**

3 units - semester 2

24 hours lectures, tutorials, plus 21 hours directed study and/or design

Restriction: students in specified programs only, please check Academic Rules of the program in which you are enrolling

Available for Non-Award Study

Assumed Knowledge: C&ENVEG 2033 Water Engineering II S1, C&ENVEG 2035 Water Engineering II S2, C&ENVEG 3013 Water Engineering IIIA, C&ENVEG 3014 Water Engineering IIIB,

Assessment: exam 60%, tutorial, project work 40%

Water distribution systems analysis. Steady state analysis of pipe networks. Alternative formulations of equations for pipe networks. Computer solution techniques. Water supplies for small communities. Optimisation of pipe networks using genetic algorithms. Water hammer analysis. Pump transients. Water hammer control methods.

C&ENVEG 4075 **Water Resources Optimisation and Modelling**

3 units - Not offered in 2010

24 hours lectures, tutorials, plus 21 hours project work

Restriction: students in specified programs only, please check Academic Rules of the program in which you are enrolling

Available for Non-Award Study

Assumed Knowledge: C&ENVEG 2033 Water Engineering II S1, C&ENVEG 2035 Water Engineering II S2, C&ENVEG 3011 Management & Planning,

Assessment: may include assignments, presentations, projects and/or exam—details at beginning of semester

Topics selection from: Optimisation and computer simulation techniques applied to the planning and management of water resources systems; multiobjective planning; assessment of risk, uncertainty and reliability.

C&ENVEG 4077 **Coastal Engineering and Design**

3 units - semester 2

24 hours lectures, tutorials, plus 21 hours project work

Restriction: students in specified programs only, please check Academic Rules of the program in which you are enrolling

Available for Non-Award Study

Assumed Knowledge: C&ENVEG 2033 Water Engineering II S1, C&ENVEG 2035 Water Engineering II S2, C&ENVEG 3008 Engineering Modelling & Analysis III, C&ENVEG 3013 Water Engineering IIIA, C&ENVEG 3014 Water Engineering IIIB

Assessment: exam 60%, design 30%, tutorials 10%

The course is based on waves and wave theories, tides, sediment transport, nearshore coastal processes, wave generation, ocean outfalls, coastal management.

C&ENVEG 4079 **Deep Foundation Engineering and Design**

3 units - not offered in 2010

24 hours lectures, tutorials, plus 21 hours project work

Restriction: students in specified programs only, please check Academic Rules of the program in which you are enrolling

Available for Non-Award Study

Assumed Knowledge: C&ENVEG 2006 Geotechnical Engineering II,

C&ENVEG 3012 Geotechnical Engineering Design III

Assessment: exam 50%, coursework 50%

Advanced topics in the design of deep foundations, including numerical methods: analysis and design of pile foundations for vertical and/or lateral loading; dewatering of excavations.

C&ENVEG 4081 **Expansive Soils and Footing Design**

3 units - semester 1

24 hours lectures, tutorials, plus 21 hours project work

Restriction: students in specified programs only, please check Academic Rules of the program in which you are enrolling

Available for Non-Award Study

Assumed Knowledge: C&ENVEG 2006 Geotechnical Engineering II, C&ENVEG 3012 Geotechnical Engineering Design III

Assessment: Two design projects (50%), final exam (50%)

The nature, behaviour and distribution of expansive soils in the urban environment. Soil suction and its measurement. The definition, measurement and accuracy of instability index and surface heave. Design of footings on expansive soils using the deemed-to-comply method, the Mitchell and Walsh computer models, and a probabilistic approach. The influence of trees and vegetation on expansive soil behaviour and footing design. Assessment of houses damaged as a result of expansive soil movement. Techniques to mitigate the influence of expansive soils. At the end of this course, students will be able to design residential footings to current practice.

C&ENVEG 4085 **Traffic Engineering and Design**

3 units - semester 1

24 hours lectures, tutorials, plus 21 hours directed study and/or design

Restriction: students in specified programs only, please check Academic Rules of the program in which you are enrolling

Assumed Knowledge: C&ENVEG 3011 Management & Planning

Assessment: may include assignments and/or exam—details at beginning of semester

Elements of the road traffic system. Road hierarchy and functional classification. Design of urban road networks. Introduction to traffic impact analysis. Traffic control devices and systems. Traffic management principles and applications. Local area traffic management. Design of traffic systems. Traffic calming principles. Traffic flow and road capacity analysis.

C&ENVEG 4087 **Environmental Modelling, Management and Design**

3 units - semester 1

24 hours of lectures, plus 21 hours design and private study

Restriction: students in specified programs only, please check Academic Rules of the program in which you are enrolling

Available for Non-Award Study

Assumed Knowledge: C&ENVEG 2068

Assessment: Online quizzes (10%), design projects (60%), exam (30%)

The course addresses the major steps in the development of engineering models, and how they are used for decision-making, with a particular emphasis on water quality and adaptation to climate change. Topics to be covered include one or more of the following: model specification (environmental processes, model complexity, model application), model calibration (gradient methods, genetic algorithms, ant colony optimisation), model validation and stochastic modelling (types of uncertainty, random variables, risk-based performance measures and reliability analysis, including Monte Carlo simulation and the first-order reliability method), artificial neural network modelling, environmental decision-making.

C&ENVENG 4090
Special Topics in Civil and Environmental Engineering IV

3 units - semester 1 or semester 2
 36 hours lectures, tutorials, directed study
 Restriction: students in specified programs only, please check Academic Rules of the program in which you are enrolling
 Available for Non-Award Study
 Assessment: may include assignments & exam—details at start of semester

Advanced topics in civil and environmental engineering.

C&ENVENG 4091
Waste Management Analysis and Design

3 units - semester 2
 24 hours lectures, tutorials, plus 21 hours directed study and/or design
 Restriction: students in specified programs only, please check Academic Rules of the program in which you are enrolling
 Available for Non-Award Study
 Assumed Knowledge: C&ENVENG 2026 Environmental Engineering II, C&ENVENG 3003 Environmental Engineering III/or C&ENVENG 3009 Environmental Engineering & Design III
 Assessment: may include assignments & exam—details at start of semester

Generation, collection and disposal of solid waste; sanitary landfill; incineration; resource conservation and recovery; fuel recovery. Hazardous waste management; types of hazardous waste; treatment technologies; methods of disposal; design project.

C&ENVENG 4092
Wastewater Engineering and Design

3 units - semester 1
 24 hours lectures, tutorials, plus 21 hours project work
 Restriction: students in specified programs only, please check Academic Rules of the program in which you are enrolling
 Available for Non-Award Study
 Assumed Knowledge: C&ENVENG 2033 Water Engineering II S1, C&ENVENG 2035 Water Engineering II S2, C&ENVENG 3013 Water Engineering IIIA, C&ENVENG 3014 Water Engineering IIIB
 Assessment: may include written assignments & exam—details at start of semester

Characteristics of wastewater; primary, secondary and tertiary treatment methods; sludge disposal; project: design of wastewater treatment plant.

C&ENVENG 4096
FRP Retrofitting of Concrete Structures

3 units - semester 1
 24 hours lectures, tutorials, plus 21 hours directed study and/or design
 Restriction: students in specified programs only, please check Academic Rules of the program in which you are enrolling
 Available for Non-Award Study
 Assumed Knowledge: C&ENVENG 3001 Structural Mechanics IIIA, C&ENVENG 3005 Structural Design III (Concrete)
 Assessment: design report, quizzes and/or exam - details at beginning of semester

The maintenance, upgrade, strengthening and stiffening of existing reinforced concrete structures is a large growth area in civil engineering. A new retrofitting technique using externally bonded plates, in particular fibre reinforced polymer (FRP) plates, is being developed and applied in practice worldwide and has been found to be convenient, inexpensive and unobtrusive. The fundamental principles behind this new retrofitting technique, the development of new design rules and their application in practice are described. The course covers: the use of all types of plates such as FRP and steel plates; externally bonded, near surface mounted and bolted plates; all debonding mechanisms; strength, stiffness and ductility of plated beams; plating for strength and serviceability; increasing the flexural and shear strength by plating; and examples of retrofitting of plating in practice.

C&ENVENG 4097
Analysis of Rivers and Sediment Transport

3 units - not offered in 2010
 24 hours lectures, tutorials, plus 21 hours design and or practicals
 Available for Non-Award Study
 Assumed Knowledge: C&ENVENG 2033, C&ENVENG 2035, C&ENVENG 3013, C&ENVENG 3014 or equiv
 Assessment: exam 50%, tutorials/design 30%, practicals 20%

This course will examine advanced topics in open Channel Flow such as curvilinear flows, unsteady flow, super-critical transitions. These will be followed by an introduction to River Mechanics and modelling flow in 2D and 3D situations, such as meandering channels and flow around piers and other structures. The course will then introduce concepts in sediment transport and examine techniques to predict the threshold of motion, sediment transport rates as well as local scour and morphology changes. The lectures will be used to introduce topics and the students will be expected to gain a greater understanding of the material through the design and tutorials and through their own self study.

C&ENVENG 4098
Water Resources Sustainability and Design

3 units - not offered in 2010
 24 hours lectures, tutorials, plus 21 hours design
 Restriction: students in specified programs only, please check Academic Rules of the program in which you are enrolling
 Available for Non-Award Study
 Assumed Knowledge: C&ENVENG 2033, C&ENVENG 2035,

C&ENVENG 3011, C&ENVENG 3013, C&ENVENG 3014

Assessment: essay, short talk, design project, exam

Reliability and sustainability issues of water resources; drought assessment; multi objective evaluation of water resources projects; sustainability assessment and modelling; design project.

C&ENVENG 4099 Structural Response to Blast Loading

3 units - semester 1

24 hours of lectures, tutorials, plus 21 hours directed study

Restriction: students in specified programs only, please check Academic Rules of the program in which you are enrolling

Available for Non-Award Study

Assumed Knowledge: APP MTH 2010 Differential Equations & Statistical Methods (Civil), GEOLOGY 2005 Geology for Engineers, C&ENVENG 2014 Engineering Modelling & Analysis II, C&ENVENG 3008 Engineering Modelling & Analysis III

Assessment: assignments and/or quizzes

With the increased world tension, terrorist bombing attacks are becoming a more and more realistic threat to society. These terrorist attacks usually target populated facilities such as office buildings and hotels, as well as diplomatic and military facilities, resulting in not only enormously economic loss, but also injuries and fatalities, social disruption and psychological impact to society. To reduce the consequences, it is essential to study characteristics of structural response to blast loading and to develop effective blast resistant systems that can be applied to protect the building's occupants. In this course, theory of wave propagation in media is addressed first; then empirical formulae to estimate blast loads around a structure at difference scaled distances are described; after that material models for reinforced concrete and masonry under high strain rate are reviewed; later on characteristics of structural response to blast loading is analyzed and blast design procedures for structural members are introduced; finally retrofitting technologies are developed to strengthen RC and masonry structures against blast loading.

C&ENVENG 4106 Introduction to Geostatistics

3 units - summer semester

36 hours lectures, tutorials, directed study

Assumed Knowledge: Basic geology; elementary statistics (mean, variance, histogram)

Assessment: coursework 50%, examination 50%

Basic introduction to geostatistics with the emphasis on concepts rather than mathematics. Regionalised (or spatial) variables. Quantifying the criteria for estimation sources of errors in estimation, fundamental basis of the geostatistical approach, mean and variance of the estimation error. The variogram calculation, interpretation, linking variogram behaviour with physical causes (geology, sampling). Variances, covariances, Krige's volume-variance relationship.

Extension variances and estimation variances simple calculations in one and two dimensions. Global reserve/resource estimation. Optimal estimation introduction to

kriging. Estimated values and true values reasons for differences and simple ways of accounting for them.

CHEM ENG 4014 Plant Design Project

6 units - semester 2

184 hours lectures, tutorials, practical work

Restriction: students in specified programs only, please check Academic Rules of the program in which you are enrolling

Available for Non-Award Study

Corequisite(s): CHEM ENG 4010

Assumed Knowledge: CHEM ENG 3032

Assessment: assignments, exam

Project: the project involves the economic comparison of alternative processes for the manufacture of a nominated chemical or biological product, the study of a selected process, calculation of material and energy balances, preparation of flow sheets, design of selected plant items, an assessment of factors affecting plant safety and environmental impact, estimation of plant cost and process economics, preparation of a design report and drawing of plant lay-out.

CHEM ENG 4029 Process Design Project (Environmental)

6 units - semester 2

184 hours lectures, tutorials, practical work

Restriction: students in specified programs only, please check Academic Rules of the program in which you are enrolling

Available for Non-Award Study

Corequisite(s): CHEM ENG 4010

Assumed Knowledge: CHEM ENG 3014

Assessment: assignments, exam

Topics comprise sources and estimation of data, costing and economic analysis of alternative proposals, the application of Process Engineering and Operations Research techniques to the selection, sizing, design and optimisation of equipment and processes (including utilities), project scheduling and control, and plant operation and safety considerations. Project: the project involves the economic comparison of alternative processes for the manufacture of a nominated product in the environmental area, the study of a selected process, calculation of material and energy balances, preparation of flow sheets, design of selected plant items, an assessment of factors affecting plant safety and environmental impact, estimation of plant cost and process economics, preparation of a design report and drawing of plant lay-out.

CHEM ENG 4031 Process Design Project (Food, Wine & Biomolecular)

6 units - semester 2

184 hours lectures, tutorials, practical work

Restriction: students in specified programs only, please check Academic Rules of the program in which you are enrolling

Available for Non-Award Study

Corequisite: CHEM ENG 4010, CHEM ENG 4024

Assumed Knowledge: CHEM ENG 3014

Assessment: Assignments, exam

Topics comprise sources and estimation of data, costing and economic analysis of alternative proposals, the application of Process Engineering and Operations Research techniques to the selection, sizing, design and optimisation of equipment and processes (including utilities), project scheduling and control, and plant operation and safety considerations. Project: the project involves the economic comparison of alternative processes for the manufacture of a nominated chemical product, the study of a selected process, calculation of material and energy balances, preparation of flow sheets, design of selected plant items, an assessment of factors affecting plant safety, estimation of plant cost and process economics, preparation of a design report and drawing of plant lay-out.

CHEM ENG 4032 Composite & Multiphase Polymers

3 units - semester 2

Lectures 24 hours, tutorials 12 hours, project 9 hours

Available for Non-Award Study

Assumed Knowledge: CHEM ENG 1003 or CHEM ENG 1009

Assessment: Exams, tutorials, project

This course aims to provide students with a basic understanding of the underlying science and the engineering performance of composites (part A) and multiphase polymer (part B) materials, which form an important class of engineering materials. Topics covered in part A include: composite benefits and applications; types of fibres and polymer matrices; fibre architecture; manufacturing processes; elasticity and stress analysis; strength, modulus and Poisson's ratio of unidirectional composites; short fibre composites; lamination theory; toughness of composites; characterisation of composites and their performance. Topics covered in part B include: thermodynamics of blending; properties of polymer blends and foamed polymer; production and properties of structural foams; and orientated polymers.

CHEM ENG 4033 Pharm Eng Research Project (H)

3 units - semester 2

150 hours investigations and seminars

Assessment: project reports, seminar assessment

Candidates are required to complete satisfactorily an open-ended project and submit a written report on a topic supplied by the School and present a seminar/poster at the end of the semester summarising results.

CHEM ENG 4034 Professional Practice IV

3 units - semester 1

45 hours lectures/workshops

Available for Non-Award Study

Assumed Knowledge: CHEM ENG 3024

Assessment: 50% exam, 50% continuous assessment

The professional practice of chemical engineering, and related disciplines, relies on a broad range of discipline-

specific and transferable professional skills. In this course, advanced topics in the professional practice of chemical engineering are studied. These elements relate to an understanding of the business environment facing professional engineers and include advanced project management, the management of human and physical resources, optimisation, decision-making and an introduction to business management strategies such as 'Six Sigma' or 'Lean Manufacturing'. Advanced topics in process safety and sustainability are also included. In this course students will undertake a series of workshops, lectures, projects and case studies.

CHEM ENG 4035 Pharmaceutical Plant Design Project

6 units - semester 2

184 hours project

Available for Non-Award Study

Assumed Knowledge: CHEM ENG 3025

Assessment: Assignments, examinations

Project: the project involves the economic comparison of alternative processes for the manufacture of a nominated chemical or biological product, the study of a selected process, calculation of material and energy balances, preparation of flow sheets, design of selected plant items, an assessment of factors affecting plant safety and environmental impact, estimation of plant cost and process economics, preparation of a design report and drawing of plant lay-out.

CHEM ENG 4036 Pharm Manufacturing & Packaging Systems

3 units - semester 1

35 hours lectures, 10 hours tutorials

Assessment: final exam 70%, project reports and assignments 30%

This aims of this course is to introduce the fundamental concepts of pharmaceutical manufacturing, quality control and intergraded packaging validation. The course also introduces the requirements for design of facilities, equipment and processes in the pharmaceutical and related industries.

CHEM ENG 4037 Pharm Eng Research Project (N)

3 units - semester 2

150 hours investigations and seminars

Assessment: project reports, seminar assessment

Candidates are required to complete satisfactorily an open-ended project and submit a written report on a topic supplied by the School and present a seminar/poster at the end of the semester summarising results.

CHEM ENG 4038 Particulate Processes & Colloids Science

3 units - semester 1

45 hours lectures and tutorials

Assumed Knowledge: CHEM ENG 2012

Assessment: exam 70%, project reports and assignments 30%

The aims of this course are to introduce particulate process theory, the concepts of surface and colloid science and to investigate applications of colloidal and particulate phenomena in pharmaceutical systems.

CHEM ENG 4039 Environmental Engineering

3 units - semester 1 or semester 2

24 hours lectures, 21 hours tutorials

Available for Non-Award Study

Incompatible: CHEM ENG 4024

Assessment: Examinations 70%; Assignments 30%

The study of air and water pollution; pollutant dispersion; control equipment; primary, secondary and tertiary wastewater treatment; water treatment, landfill and hazardous wastes.

CHEM ENG 4040 Chem Eng Research Elective

3 units - semester 2

150 hours investigations and seminars

Restriction: permission required from Head of School

Assessment: project reports, seminar assessment

Candidates are required to complete satisfactorily an open-ended project and submit a written report on a topic supplied by the School and present a seminar/poster at the end of the semester summarising results.

CHEM ENG 4041 Chemical Engineering Projects IV

3 units - semester 2

108 hours lectures, tutorials and practicals

Incompatible: CHEM ENG 4025

Assessment: Project reports

Students are to undertake 108 hours of practical work on a series of projects based on lectures. Emphasis will be placed on teamwork and project management.

CHEM ENG 4042 Chemical Eng Research Project (N)

3 units - semester 2

150 hours investigations and seminars

Assessment: project reports, seminar assessment

Candidates are required to complete satisfactorily an open-ended project and submit a written report on a topic supplied by the School and present a seminar/poster at the end of the semester summarising results.

CHEM ENG 4043 Special Studies in Chemical Engineering

3 units - semester 1 or semester 2

45 hours lectures and tutorials

Restriction: As prescribed by the Head of School of Chemical Engineering

Available for Non-Award Study

Incompatible: CHEM ENG 4001

Assessment: Assignments, examinations

Special topics in chemical engineering as determined by the Head of the School of Chemical Engineering. The course will be offered from time to time and may be taught by visiting academics.

CHEM ENG 4044 Minerals Processing

3 units - semester 1 or semester 2

35 hours lectures, 10 hours tutorials

Incompatible: CHEM ENG 4004

Assessment: Examination 70%; Tutorials/assignments 30%

The application of Chemical Engineering principles to minerals processing operations including flotation, size reduction, gravity separation, hydrometallurgy, pyrometallurgy and electrometallurgy.

CHEM ENG 4045 Introduction to Nanotechnology

3 units - semester 1

24 hours lectures, 12 hours tutorials, 9 hours practicals

Assessment: Assignments: 40%; Design project: 60%

Background: What is the nanoscale and what makes it different from other scales: why the nanoscale is important; case studies demonstrating non-classical behavior at the nanoscale; health and environmental implications of nanotechnology. Current and emergent nanotechnologies: nanocomposites; biosensors; etc. Top-down manufacture: vapor deposition; etching; lithography; etc. Nanotechnology instrumentation and characterisation: atomic force microscope (AFM); scanning tunneling microscope (STM). Bottom-up manufacture: self assembly; nanofactories. Design and analysis of nanotechnologies: forces at the molecular and nanoscales; molecular and mesoscale modeling.

CHEM ENG 4046 Combustion Processes

3 units - semester 1

45 hours lectures, tutorials

Available for Non-Award Study

Assessment: Assignments, examinations

Basic principles which form the background to combustion phenomena. Topic include explosions in closed vessels, flames and combustion waves, detonation waves in gases, combustion of hydrocarbons, combustion in mixed and condensed phases, high explosives, heating applications, combustion and the environment.

CHEM ENG 4047 Chemical Engineering Research Project (H)

3 units - semester 2

150 hours investigations and seminars

Incompatible: CHEM ENG 4026

Assessment: project reports, seminar assessment

Candidates are required to complete satisfactorily an open-ended project and submit a written report on a topic supplied by the School and present a seminar/poster at the end of the semester summarising results.

CHEM ENG 4048 Biofuels, Biomass and Wastes

3 units - semester 1

45 hours lectures and tutorials

Available for Non-Award Study

Assessment: Assignments, examinations

Fundamental concepts in understanding biofuels/bioenergy systems; renewable feedstocks, their production, availability and attributes for biofuel/bioenergy production; types of biomass derived fuels and energy; thermochemical conversion of biomass to heat, power and fuel; biochemical conversion of biomass to fuel; biodiesel production; environmental aspects of biofuel production; economics & life-cycle analysis of biofuel; value adding of biofuel residues; case studies on biofuel production.

CHEM ENG 4049 Biomolecular Engineering

3 units - semester 1 or semester 2

45 hours lectures and tutorials

Available for Non-Award Study

Incompatible: CHEM ENG 4008

Assessment: Assignments, examinations

Coursework includes fundamentals of microbiology; the growth curve; proteins and enzymes; kinetics of enzyme-catalysed reactions; applied enzyme catalysis; industrial enzyme processes kinetics of substrate utilisation, product formation, bio-mass production in cell cultures and inactivation (death) of cells; design and analysis of biological reactors, sterilisation, bio-applications, product recovery operations and bio-process economics.

CHEM ENG 4050 Chem Eng Application D

3 units - semester 1

36 hours lectures, 9 hours tutorials

Prerequisite(s): Level 2 Maths

Assumed Knowledge: CHEM ENG 3031

Assessment: Final exam 70%; tutorials/assignments 30%

This course covers two parts, transport phenomena and advanced process control. Transport Phenomena deals with transport of momentum, thermal energy and mass by molecular means. The concept of shell balance and equations of change, in both thermal and isothermal systems, is used to obtain key Chemical Engineering transport equations. The advanced process control covers the following topics: Open-loop unstable systems, cascade control and dead time compensation, digital control and z transform, MIMO systems, interaction, RGA.

ELEC ENG 4033 Advanced Telecommunications

2 units - semester 2

24 hours lectures, tutorials

Restriction: students in specified programs only, please check Academic Rules of the program in which you are enrolling

Available for Non-Award Study

Assumed Knowledge: ELEC ENG 4046

Assessment: Written exam, assignments

Third generation mobile systems: W-CDMA implementation and dimensioning. Core network evolution including 2.5G solutions. Orthogonal Frequency Division Multiplexing: principles and implementation including 802.11a OFDM PHY. Ad-hoc networking: principles and implementation including 802.11 IBSS and Bluetooth. Consumer broadband distribution: principles and implementation including DSL and HFC. Satellite communications: principles and applications including link models, system parameters and multiple access (FAMA/DAMA). INTELSAT, Iridium, Globalstar.

ELEC ENG 4035 Communications IV

2 units - semester 1

24 hours lectures, tutorials

Restriction: students in specified programs only, please check Academic Rules of the program in which you are enrolling

Available for Non-Award Study

Assumed Knowledge: ELEC ENG 3015

Assessment: Written exam, assignments

Frequency domain analysis, analogue signal transmission and reception, random processes, effect of noise on analog communication systems. Information sources and source coding, digital transmission in additive white Gaussian noise channel and bandlimited AWGN. Channel capacity and coding, fading multipath channels and spread spectrum communications.

ELEC ENG 4036A/B Design Project

6 units - full year

240 hours practical work

Restriction: students in specified programs only, please check Academic Rules of the program in which you are enrolling

Prerequisite: ELEC ENG 3015, ELEC ENG 3016, ELEC ENG 3017, ELEC ENG 3019A/B, ELEC ENG 3020, ELEC ENG 4036A

Assessment: Performance during project work, written reports, seminar presentations

Each candidate is required to conduct investigations involving the design, development and testing of hardware and/or software. The results are presented in written report form, by seminar and, where appropriate, demonstration of the completed work.

ELEC ENG 4037 Digital Microelectronics

2 units - semester 1

25 hours lectures, project work

Restriction: students in specified programs only, please check Academic Rules of the program in which you are enrolling

Available for Non-Award Study

Assumed Knowledge: ELEC ENG 2008, ELEC ENG 3017 or equiv

Assessment: Project work, written exam, tests during semester

Introduction: (4 lectures) - Fabrication processes and design rules (revisited); transistor models (revisited from third year electronics); layout issues; ASIC design

flow - especially simulators and performance estimation. Digital Microelectronics (13 lectures including 2 quizzes) - Static and dynamic logic families; leaf cell design; VLSI techniques; system partitioning; floor planning; noise margins; interconnect and routing; clock distribution. BiCMOS and GaAs technologies. Project (8 hours) - Group project using layout and simulation tools.

ELEC ENG 4038 **Financial Management for Engineers**

2 units - semester 2

24 hours lectures

Restriction: students in specified programs only, please check Academic Rules of the program in which you are enrolling

Available for Non-Award Study

Assessment: Assignments

This course aims to provide engineers with an introduction to the fundamentals of business decision-making common to all forms of organisation. The course focuses on the requirements of project management, including the need to communicate complex financial arguments effectively. It is designed to provide students with a basic understanding of the fundamental principles of investment and financing decisions in both small and large organisations. The formation of business strategies and related management control functions are also addressed. The course provides students with the theoretical essentials for practical implementation of the main concepts covered.

ELEC ENG 4040 **Management and Professional Practice for Engineers**

2 units - semester 2

24 hours lectures

Restriction: students in specified programs only, please check Academic Rules of the program in which you are enrolling

Available for Non-Award Study

Assessment: Assignments

Innovation: what is innovation; why it matters; sources of innovation; new product development as well as process innovation or continuous improvement; links between strategic planning and innovation. Human resource management: nature of today's organisations, links with corporate strategy and with the capacity to innovate and major human resource management activities. Legal and ethical issues: the nature of contracts, formation of contracts and personal and legal liability; protecting intellectual property; ethics.

ELEC ENG 4041 **Optical Communication Engineering**

2 units - semester 2

23 hours lecture, tutorials

Restriction: students in specified programs only, please check Academic Rules of the program in which you are enrolling

Available for Non-Award Study

Corequisite: ELEC ENG 4035

Assumed Knowledge: ELEC ENG 2008, ELEC ENG 3015, ELEC ENG 3018, ELEC ENG 4044

Assessment: Formal exam

Review of optics and lightwave propagation. Introduction to communication systems. Optical waveguides. Integrated optic waveguide. Dispersion and distortion effects. Single-mode and multi-mode optical fibres. Attenuation characteristics. Practical configurations. Light sources. Light emitting diodes. Laser operation. Laser diodes. Coupling considerations. Optical amplifiers. Light detectors. Photoelectric effects. PIN photodiodes. Avalanche photodiodes. Receiver circuits. Modulation. Analogue modulation formats. Digital modulation formats. Subcarrier techniques and multiplexing. Harmonic distortion and intermodulation. Noise and detection. Thermal and shot noise effects. Signal-to-noise ratios for digital and analogue systems. Thermal-noise limited and Shot-noise limited systems. Receiver design. System design. Analogue and digital point-to-point link design. Fibre distribution networks. Optical storage concepts. Dense Wave Division Multiplexing (DWDM), Compact Disc, DVD and other optical storage.

ELEC ENG 4042 **Power Electronics and Drive Systems**

2 units - semester 2

24 hours lectures, tutorials

Restriction: students in specified programs only, please check Academic Rules of the program in which you are enrolling

Available for Non-Award Study

Assumed Knowledge: ELEC ENG 1006 or ELEC ENG 1008, ELEC ENG 2008 or equiv

Assessment: Written exam, quizzes, semester assignments

Power electronics: characteristics of power electronic devices and classes of power converters. Power supplies (uninterruptible, switchmode). Hard and soft-switching, resonant circuits. Losses and thermal design.

Advanced energy-efficient motor drives: review of motor theory, power electronic control principles, vector and servo drives (stepper, DC, induction, brushless PM and switched-reluctance). Motor and drive selection and application. System design, implementation and control. Computer interfacing, network communication.

ELEC ENG 4043 **Power Quality and Condition Monitoring**

2 units - semester 1

24 hours lectures, tutorials

Restriction: students in specified programs only, please check Academic Rules of the program in which you are enrolling

Available for Non-Award Study

Assumed Knowledge: ELEC ENG 2008

Assessment: Quizzes, semester assignments

This course will address power quality issues and condition monitoring techniques used in industrial systems. A brief overview of power systems and three-phase machines will be given, and the course will cover various issues under two major sections.

Power Quality: EMI in energy systems, types of power quality issues, regulations, standards, prevention techniques, measurements and analysis, case studies and real-time tests.

Condition Monitoring: Importance, history, types and features of faults, test methods, sensors and measurement techniques, traditional and advance diagnostic methods, case studies and real-time tests.

ELEC ENG 4044 RF Engineering IV

2 units - semester 1

24 hours lectures, tutorials

Restriction: students in specified programs only, please check Academic Rules of the program in which you are enrolling

Available for Non-Award Study

Assumed Knowledge: ELEC ENG 3018

Assessment: Written exam, tests

Revision of transmission lines. Microstrip lines. The use of transmission lines for matching and filtering. S matrix circuit theory and amplifier design using S parameters. The design of power amplifiers. Revision of waves (including polarisation and dispersion). Introduction to propagation (reflection, refraction and diffraction). Elementary waveguide theory. Radiation fields. Wire antennas (including loops, dipoles and monopoles). The concepts of effective length, directivity and gain. The Friis equation. Influence of environment upon antenna performance. Broadband antennas. Introduction to array antennas (including the log periodic dipole array). Aperture antennas (including patch designs).

ELEC ENG 4045 Signal Processing IV

2 units - semester 1

24 hours lectures, tutorials

Restriction: students in specified programs only, please check Academic Rules of the program in which you are enrolling

Available for Non-Award Study

Assumed Knowledge: ELEC ENG 2007 Signals & Systems

Assessment: Written exam, in-term assessment

Discrete time signals, decimation, interpolation and analogue signal reconstruction. Discrete and fast Fourier transforms, windowing. Stochastic processes, covariances and power spectrum. Principles of estimation and spectral estimation, averaging and smoothing and quantisation noise. Digital filtering principles, causality and stability, frequency domain filtering and convolutions. FIR digital filters, linear phase and group delay, frequency domain design of digital filters. IIR filters, bilinear transform from s to z plane and mapping analog filters to digital domain. Optimum Weiner filters, LMS adaptive filters and applications. Wavelet transforms, sub-band filters, frequency, scale and localisation and multiresolution.

ELEC ENG 4046 Telecommunications IV

2 units - semester 1

24 hours lectures, tutorials

Restriction: students in specified programs only, please check Academic Rules of the program in which you are enrolling

Available for Non-Award Study

Assumed Knowledge: ELEC ENG 3015

Assessment: Written exam, assignments

Circuit-switched networks: performance, Signalling System #7, ISDN. Cellular networks: TDMA/FDMA cellular concepts, GSM mobility and network management, CDMA cellular concepts and IS-95 implementation. Network dimensioning. Packet-switched networks: queuing theory and packet-switched network theory, performance measures, TCP/IP operation and performance. Internet protocols, architecture and dimensioning. Wireless LAN: 802.11 implementation and 802.11b DSSS PHY. Broadband networks: SDH, ATM, broadband network traffic and resource management.

ELEC ENG 4047 Topics in Electrical and Electronic Engineering

2 units - semester 1 or 2

24 hours lectures, tutorials

Restriction: students in specified programs only, please check Academic Rules of the program in which you are enrolling

Available for Non-Award Study

Assumed Knowledge: as prescribed by Head of Discipline

Assessment: May include tests, written exam, assignment - details at start of semester

Special topics in Electrical and Electronic Engineering, as determined by the Head of the School.

ELEC ENG 4049 Analog Microelectronic Systems

3 units - semester 2

45 hours lectures, tutorials and practical work

Restriction: students in specified programs only, please check Academic Rules of the program in which you are enrolling

Available for Non-Award Study

Assumed Knowledge: ELEC ENG 3017, ELEC ENG3018 or equiv

Assessment: Project work, written exam, tests during semester

Review of fabrication processes, design rules and transistor models. Layout issues; ASIC design flow; simulators and performance estimation; current sources and references; operational and transconductance amplifiers; current mode circuits; data conversion systems; switched capacitor systems; phase locked loops. A major project involving the design of a mixed signal microelectronic circuit.

ELEC ENG 4050 Systems Engineering

2 units - semester 2

30 hours lectures, tutorials

Restriction: Students in specified programs only, please check the Academic Rules of the program in which you are enrolling

Available for Non-Award Study

Assessment: Exam, assignment

The principles of systems engineering. Specification, design, verification, implementation, integration, testing and though-life maintenance of complex systems as in interdisciplinary activity. Systems thinking. Relationship to project management.

ELEC ENG 4051 Introduction to Electronic Defence Systems

2 units - semester 2

24 hours lectures, 6 hours tutorials

Assumed Knowledge: ELEC ENG 3018, ELEC ENG 2007, ELEC ENG 2009

Assessment: Tests, computer-based simulation, assignment

This subject aims to introduce student to the basic operating principles of electronic defence systems such as radar, electronic warfare and satellite navigation systems

ELEC ENG 4052 Special Studies in EEE

3 units - semester 1 or 2

Available for Non-Award Study

Topics as specified by Head of School.

MECH ENG 4100 Advanced Topics in Aerospace Engineering

3 units - semester 2

45 hours lectures, tutorials and practicals

Available for Non-Award Study

Incompatible: May not be presented with MECH ENG 4063

Assessment: Assignments, Final exam

The course focuses on design and analysing the new and advanced types of flying vehicles. It first introduces the methods of calculating the stability, aerodynamic derivatives and handling quality parameters of an aircraft. This is followed by flight test analysing as well as unmanned aerial vehicle design methods. The course is concluded by introducing the satellite, hypersonic vehicle and helicopter design method.

MECH ENG 4101 Biomechanical Engineering

3 units - semester 2

45 hours lectures, tutorials and practicals

Available for Non-Award Study

Assumed Knowledge: MECH ENG 2002

Incompatible: May not be presented with MECH ENG 4057

Assessment: Assignments, laboratory experiments, Final exam

This course will provide an introduction to the fundamentals of the structure and mechanics of the musculoskeletal system with application of mechanics to bone, tendon, cartilage, ligaments and other biological materials. The structure and function of the major joints in the body will be covered, such as the hip, knee and spine as well as multiple joint systems such as the shoulder, wrist and hand. Experimental and analytical methods used to understand the function of joints and artificial joints will be discussed throughout the course. At completion of this course, students will understand the concept of joint biomechanics and their function, and how artificial joints function, why they fail, as well as their limitations and emerging new technologies in the biomechanics field.

MECH ENG 4102 Advanced PID Control

3 units - semester 1

45 hours lectures, 20 hours practicals

Available for Non-Award Study

Assumed Knowledge: MECH ENG 2019, MECH ENG 3028

Incompatible: May not be presented with MECH ENG 4011

Assessment: Tutorials, assignments, laboratories, exams (written and Matlab)

Advanced topics in automatic control system design. Emphasis will be placed on techniques used to accommodate uncertainty in practical systems.

MECH ENG 4103 Advanced Computer Aided Engineering

3 units - semester 1

45 hours lectures, 20 hours practicals

Available for Non-Award Study

Assumed Knowledge: MECH ENG 1001 or 1006

Incompatible: May not be presented with MECH ENG 3034

Assessment: Assignments, final exam

This course introduces the student to a variety of CAD, CAM and CAE packages that are currently available and in common use by the automotive industry. There will be hands on opportunities and the function and theories behind of each piece of software reviewed. Students will be encouraged to familiarise themselves with the operation of the software through problem based assignments.

MECH ENG 4104 Advanced Topics in Fluid Mechanics

3 units - semester 2

45 hours lectures, practical

Available for Non-Award Study

Assumed Knowledge: MECH ENG 2021, MECH ENG 3031

Incompatible: Not presentable with MECH ENG 4023

Assessment: Assignments, Lab experiments, Final exam

The course provides an overview of modern flow measurement and analysis techniques and the methods used to interpret velocity and flow data. The course then introduces the concepts and techniques of flow topology and vortex dynamics, and uses these to describe the flow phenomena associated with fundamental flows, engineering flows and flows in nature. A project is undertaken by each student, involving a literature review, analysis or experiment. Projects are assessed on the basis of a short report and a presentation to the class

MECH ENG 4105 Advanced Vibrations

3 units - Not offered in 2010

45 hours lectures, 5 hours practicals

Available for Non-Award Study

Assumed Knowledge: MECH ENG 3028

Incompatible: May not be presented with MECH ENG 4020

Assessment: Assignments, Lab Experiments, Final Exam

Students will be introduced to advanced multi-degree of freedom system analysis techniques for vibroacoustic systems, including modal analysis, statistical energy analysis and finite element analysis.

MECH ENG 4106 Aerospace Propulsion

3 units - semester 1

45 hours lectures, 5 hours practical

Available for Non-Award Study

Assumed Knowledge: 6 units Level 2 Applied Maths

Incompatible: May not be presented with MECH ENG 4036 or MECH ENG 4037

Assessment: Assignments, final exam

Basic principles of rocket propulsion and rocketry, propellant, nozzle theory and their influence on design of rockets, internal and external ballistics, combustion processes and instability. Fundamentals of rocket motor components and design, solid rocket grain structural behaviour, and plume technology. Introduction to advanced rocket and air-breathing (gas turbines, ramjets, ducted rockets, scramjets) jet propulsion systems. Prediction of thrust, combustion reactions, specific fuel consumption and operating performance. Aerothermodynamics of inlets, combustors, nozzles, compressors, turbines.

MECH ENG 4107 Airconditioning

3 units - semester 2

45 hours lectures, 5 hours practicals

Available for Non-Award Study

Assumed Knowledge: MECH ENG 3028 or MECH ENG 3031

Incompatible: May not be presented with MECH ENG 4013

Assessment: Assignments, Lab experiments, Final exam

Vapour compression cycles; heat transfer in two-phase flow; types, selection and operation of refrigeration plant; psychrometrics; climatic data and its use; load estimation and analysis; constant and variable air volume systems; human comfort and health; cooling and dehumidifying coils; controls; fans and duct systems; system balancing; energy efficiency in buildings.

MECH ENG 4108 Aircraft Design

3 units - semester 1

45 hours lectures, 5 hours practical

Available for Non-Award Study

Assumed Knowledge: MECH ENG 3016

Incompatible: May not be presented with MECH ENG 4062

Assessment: Assignments, final exam

The course focuses on aircraft conceptual design methods and techniques. It firstly introduces the weight estimation methods of an aircraft. It is followed by sensitivity analysis and sizing diagram calculation of target flying vehicle, as well as pros and cons of different layout scheme of aircraft. The course is concluded by presenting design projects and discussing the achieved results by the students.

MECH ENG 4109 Automotive Combustion, Power Train & NVH

3 units - semester 2

45 hours lectures, 5 hours practical

Available for Non-Award Study

Assumed Knowledge: MECH ENG 3017, MECH ENG 2021

Incompatible: May not be presented with MECH ENG 4043

Assessment: Assignments, Experiments, Final Exam

Introduction to Vehicle Refinement, Characteristics of sound, Exterior noise and control, Interior noise and control, Vehicle ride improvement, Introduction to and fundamentals of road vehicle aerodynamics, aero-acoustics, vehicle aerodynamic design, Special topics and Industry lectures.

MECH ENG 4110 Automotive Vehicle Dynamics & Safety

3 units - semester 2

45 hours lectures, 5 hours practicals

Available for Non-Award Study

Assumed Knowledge: MECH ENG 3028

Incompatible: May not be presented with MECH ENG 4044

Assessment: Assignments, final exam

This course will educate students in automotive vehicle dynamics and safety. The course will cover the dynamics of vehicles on the road during normal operation as well as during impact and other crash scenarios. Specific topics include vehicle handling, stability and control, tyre dynamics, suspension design, braking performance, automotive safety, impact dynamics, road safety engineering and safety regulations.

MECH ENG 4111 CFD for Engineering Applications

3 units - semester 1

45 hours lecture, 5 hours practical

Available for Non-Award Study

Assumed Knowledge: MECH ENG 3031,

Incompatible: May not be presented with MECH ENG 4046

Assessment: Assignments, laboratory experiments, final exam

The course will equip the students with the necessary knowledge to use advance computational techniques to solve problems related to flow mechanics. In particular, students will have hands on experience in using computational fluid dynamics to solve engineering problems. Numerical representation of flow behaviour and solution schemes and convergence criteria will be also covered in the course.

MECH ENG 4112 Combustion Technology & Emission Control

3 units - semester 1

45 hours lectures, 5 hours practicals

Available for Non-Award Study

Assumed Knowledge: MECH ENG 2021, MECH ENG 3031, MECH ENG 3020

Incompatible: May not be presented with MECH ENG 4002

Assessment: Assignments, lab experiments, final exam

Combustion presently provides about 80% of global energy and is expected to be a major energy source for many years. At the same time combustion, particularly of fossil fuels, leads to serious pollution problems and is the primary source of human-derived greenhouse gas

emissions. An important aspect of a transition to a more sustainable future is therefore to reduce the emissions from combustion-based plants, and to utilise alternative fuels, including bio-fuels. The aim of the course is to equip candidates with the knowledge and skills necessary to understand, analyse and design modern combustion systems for maximising output and minimising air pollution. Combustion involves both mixing of the fuel and oxidant and the subsequent chemical reactions. The course therefore involves consideration of both combustion aerodynamics and fuel properties. It covers fuel selection, alternative and waste fuels, the design principals involved in reducing pollutant emissions, modelling and safety.

MECH ENG 4113 Computational Acoustics

3 units - semester 1

45 hours lectures, practicals

Available for Non-Award Study

Assumed Knowledge: MECH ENG 3017

Incompatible: May not be presented with MECH ENG 4026

Assessment: Assignments, Lab experiments, Final exam

This course will provide an introduction to the use of computer modelling in environmental, architectural and the general noise level and acoustic performance prediction.

MECH ENG 4114 Corrosion: Principles and Prevention

3 units - semester 2

45 hours lectures, practicals

Available for Non-Award Study

Assumed Knowledge: CHEM ENG 1009

Incompatible: May not be presented with MECH ENG 4061

Assessment: Assignments, Lab experiments, Final exam

Fundamentals of corrosion: free energy of oxidation, oxidation and reduction reactions, Pourbaix diagrams, corrosion kinetics, polarisation curves, passivation. Design against corrosion. Investigating corrosion failures. Atmospheric and general corrosion, bimetallic corrosion. Differential aeration corrosion: pitting, corrosion, MIC. Environmentally assisted cracking, erosion. Case studies into corrosion failures, identifying mechanisms and evaluating mitigation strategies.

MECH ENG 4115 Engineering Acoustics

3 units - Not offered in 2010

45 hours lectures, 5 hours practicals

Available for Non-Award Study

Assumed Knowledge: MECH ENG 3017, 6 units of Level 2 App Maths courses

Incompatible: May not be presented with MECH ENG 4004

Assessment: Assignments, Lab experiments, Final exam

The fundamentals of sound wave description and propagation, the hearing mechanism, acoustic instrumentation, noise criteria, sound source types and

radiated sound fields, outdoor sound propagation, sound power measurement techniques, sound in enclosed spaces, sound transmission loss, acoustic enclosures, mufflers.

MECH ENG 4116 Engineering Management & Quality Systems

3 units - semester 2

45 hours lectures and practicals

Available for Non-Award Study

Incompatible: May not be presented with MECH ENG 4038

Assessment: Assignments, Lab experiments, Final exam

Students will be taught and learn through self directed research the engineering issues of personnel and resource management, project and business management, risk management and the legal aspects pertaining to engineering businesses. The course will cover the principles of quality management and continual improvement, including: Justification for quality management and continual improvement, Overview of quality management system types, TQM, Lean Systems and The Six-Sigma Process, Advanced Product Quality Planning, Design Failure Mode Effect Analysis (DFMEA), Process Failure Mode Effect Analysis (PFMEA), Design Verification Plan and Report (DVP&R) and Case Studies.

MECH ENG 4117 Finance for Engineers

3 units - semester 2

45 hours lectures and practicals

Available for Non-Award Study

Incompatible: May not be presented with MECH ENG 4039

Assessment: Assignments, Lab experiments, Final exam

This course aims to provide engineers with an introduction to the fundamentals of business decision-making common to all forms of organisation. The course focuses on the requirements of project management, including the need to communicate complex financial arguments effectively. It is designed to provide students with a basic understanding of financial statements, capital budgeting, cost behaviour and costing systems.

MECH ENG 4118 Finite Element Analysis of Structures

3 units - semester 1

45 hours lectures, practical

Available for Non-Award Study

Assumed Knowledge: MECH ENG 2002, MECH ENG 2019, MECH ENG 3028

Incompatible: May not be presented with MECH ENG 4059

Assessment: Assignments, Lab Experiments, Final exam

The course will equip the students with the necessary knowledge to use finite element analysis to solve problems related to solid mechanics, dynamics and heat-transfer. In particular, students will have hands-on experience in using finite element analysis software ANSYS and MSC Nastran to solve realistic engineering problems.

MECH ENG 4119 **Fire Engineering**

3 units - semester 2

45 hours lectures and practicals

Available for Non-Award Study

Incompatible: May not be presented with MECH ENG 4042

Assessment: Assignments, lab experiment, final exam

The lectures will cover the following topics: building fire safety fundamentals, basic concepts of fire and explosion, zone and field fire modelling, the history and philosophy of fire related building legislation, the Building Code of Australia, legal issues, fire load, fire development and design calculations, smoke management systems and design calculations, occupant egress and fire brigade access, fire suppression systems, fire brigade intervention, fire induced building collapse, human behaviour at time of fire and performance based fire engineering design solutions.

MECH ENG 4120 **Fracture Mechanics**

3 units - semester 2

45 hours lectures and practicals

Available for Non-Award Study

Assumed Knowledge: MECH ENG 2002, MECH ENG 3030, 6 units level 2 App Mths

Incompatible: May not be presented with MECH ENG 4003

Assessment: Assignments, Lab Experiments, Final exam

The focus of this course is on the principles of linear elastic and elasto-plastic fracture mechanics and their application to engineering design. The material is presented in a conversational, yet rigorous, manner with the focus on basic concepts, models and techniques devised to solve specific engineering problems. The choice of the subject matter was determined largely by needs of aeronautical and mechanical engineering, although it is believed that the subject matter will be found just as useful for automotive, civil engineering and naval architecture.

MECH ENG 4121 **Material Selection & Failure Analysis**

3 units - semester 2

45 hours lectures and practicals

Available for Non-Award Study

Assumed Knowledge: CHEM ENG 1009

Incompatible: May not be presented with MECH ENG 4024

Assessment: Assignments, lab experiments, final exam

To introduce students to various tools that can be used to select the appropriate material for a given application. Examination of various failure modes to allow students to identify these modes in real samples and apply material selection and failure analysis techniques to failure prevention.

MECH ENG 4123 **Advanced Mechatronic & Digital Control**

3 units - semester 2

45 hours lectures, practical

Available for Non-Award Study

Incompatible: May not be presented with MECH ENG 4053

Assessment: Assignments, Final exam

Practice oriented course; design of advanced mechatronics systems; the use of Digital Signal Processors (DSP) and Field-Programmable Gate Arrays (FPGA) in mechatronics applications; Artificial Intelligence (AI) algorithms and AI applications for robotics and mechatronics. Design and analysis of mechatronic systems; microcontroller and high end processors for mechatronic system control; artificial intelligence algorithms and their applications, digital state-space control design.

MECH ENG 4124 **Robotics M**

3 units - semester 1

45 hours lectures, practicals

Available for Non-Award Study

Assumed Knowledge: MATHS 1012, MECH ENG 2019 & 3028

Incompatible: May not be presented with MECH ENG 4027

Assessment: Assignments, Final exam

Classification of robotic systems; transformation of coordinates; robotic arm kinematics and inverse kinematics; Jacobians and robot dynamics; trajectory generation; robotic modelling; control loops for robots; mobile robots, machine vision basics; other robots

MECH ENG 4125 **Stresses in Plates & Shells**

3 units - semester 2

45 hours lectures, practicals

Available for Non-Award Study

Assumed Knowledge: At least 6 units of level 2 APP MTHS courses

Incompatible: May not be presented with MECH ENG 4055

Assessment: Assignments, Final exam

The course examines fundamentals of the theory of surfaces, Kirchhoff Hypotheses, fundamental equations of the classical plate theory, symmetrical bending of circular plates, bending of rectangular plates, anisotropic plates and plates of various shapes, Navier's solution and Levy's method for rectangular plates, special and approximate methods in theory of plates and shells, thermal stresses in plates, theory of edge effect, buckling, membrane theory of shells, bending theory of axisymmetrically loaded circular cylindrical shells and its application to pipes, tanks and pressure vessels, finite element analysis of plate and shell structures.

MECH ENG 4126 **Topics in Welded Structures**

3 units - semester 1

45 hours lectures, practicals

Available for Non-Award Study

Assumed Knowledge: CHEM ENG 1009

Incompatible: May not be presented with MECH ENG 4025

Assessment: Assignments, lab experiments, final exam

This course presents the concepts behind welding and joining technology. These include welding and joining techniques, equipment and consumables, weldability of engineering materials, economics, standards, health and safety, testing and repair. The concepts are then applied to the design and fabrication of engineering components, process plant and structures. The importance of selecting the correct welding process and parameters for a particular application will be demonstrated by investigating several case studies. Since a weld/joint can have a profound effect on the performance of a component depending on the in-service conditions it experiences, the influence of service environment will be investigated. At the end of the course students should have the concepts to assist in the selection of processes and parameters to make appropriately designed, sound joints, fit for service in the operating environment.

MECH ENG 4127 Wind Engineering

3 units - semester 1

45 hours lectures, practical

Available for Non-Award Study

Assumed Knowledge: MECH ENG 3031

Assessment: Assignments, lab experiments, final exam

This course provides an introduction of meteorology to describe the atmospheric boundary layer and the climate of wind. It then demonstrates the application of fundamental fluid mechanics principles to basic bluff body aerodynamics in subsequently determining environmental wind effects and dynamic response of a structure in turbulent wind flow. Use of wind tunnel experimental measurements as well as wind codes and Australian Standard AS/NZS 1170.2:2002 to evaluate design wind speeds and structural response are also included

MECH ENG 4128A/B Aerospace Design Project

6 units - full year

24 hours lectures, 20 hours individual supervision, 180 hours project

Available for Non-Award Study

Incompatible: May not be presented with MECH ENG 4051B

Assessment: Prelim report, exhibition, seminar to present report, final report

The aim of the project is to provide solutions to engineering problems related to industry or to school research, with a primary emphasis on engineering design. Emphasis will also be placed on management and effective communication.

MECH ENG 4129A/B Aerospace Honours Project

6 units - full year

24 hours lectures, 20 hours individual supervision, 180 hours project

Available for Non-Award Study

Incompatible: May not be presented with MECH ENG 4035B

Assessment: Prelim report, exhibition, seminar to present report, final report

The aim of the project is to provide solutions to

engineering problems related to industry or to school research, with emphasis on project management and effective communication.

MECH ENG 4130A/B Automotive Design Project

6 units - full year

24 hours lectures, 20 hours individual supervision, 180 hours project

Available for Non-Award Study

Incompatible: May not be presented with MECH ENG 4048B

Assessment: Prelim report, exhibition, seminar to present report, final report

The aim of the project is to provide solutions to engineering problems related to industry or to school research, with a primary emphasis on engineering design. Emphasis will also be placed on management and effective communication

MECH ENG 4132A/B Mechanical Design Project

6 units - full year

24 hours lectures, 20 hours individual supervision, 180 hours project

Incompatible: May not be presented with MECH ENG 4041B

Assessment: Prelim report, exhibition, seminar to present report, final report

The aim of the project is to provide solutions to engineering problems related to industry or to school research, with emphasis on project management and effective communication.

MECH ENG 4133A/B Mechanical Honours Project

6 units - full year

24 hours lectures, 20 hours individual supervision, 180 hours project

Incompatible: May not be presented with MECH ENG 4007A/MECH ENG 4007B

Assessment: Prelim report, exhibition, seminar to present report, final report

The aim of the project is to provide solutions to engineering problems related to industry or to school research, with emphasis on project management and effective communication.

MECH ENG 4134A/B Mechatronic Design Project

6 units - full year

24 hours lectures, 20 hours individual supervision, 180 hours project

Incompatible: May not be presented with MECH ENG 4050B

Assessment: Prelim report, exhibition, seminar to present report, final report

The aim of the project is to provide solutions to engineering problems related to industry or to school research, with emphasis on project management and effective communication.

MECH ENG 4135A/B Mechatronic Honours Project

6 units - full year

24 hours lectures, 20 hours individual supervision, 180 hours project
Incompatible: May not be presented with MECH ENG 4019A/MECH ENG 4019B

Assessment: Prelim report, exhibition, seminar to present report, final report

The aim of the project is to provide solutions to engineering problems related to industry or to school research, with emphasis on project management and effective communication.

MECH ENG 4136A/B Sports Engineering Design Project

6 units - Not offered in 2010

24 hours lectures, 20 hours individual supervision, 180 hours project

Assessment: Prelim report, exhibition, seminar to present report, final report

The aim of the project is to provide solutions to engineering problems related to industry or to school research, with emphasis on project management and effective communication.

MECH ENG 4137A/B Sports Engineering Honours Project

6 units - Not offered in 2010

24 hours lectures, 20 hours individual supervision, 180 hours project

Assessment: Prelim report, exhibition, seminar to present report, final report

The aim of the project is to provide solutions to engineering problems related to industry or to school research, with emphasis on project management and effective communication.

MECH ENG 4138A/B Sustainable Energy Design Project

6 units - Not offered in 2010

24 hours lectures, 20 hours individual supervision, 180 hours project

Assessment: Prelim report, exhibition, seminar to present report, final report

The aim of the project is to provide solutions to engineering problems related to industry or to school research, with emphasis on project management and effective communication.

MECH ENG 4139A/B Sustainable Energy Honours Project

6 units - Not offered in 2010

24 hours lectures, 20 hours individual supervision, 180 hours project

Assessment: Prelim report, exhibition, seminar to present report, final report

The aim of the project is to provide solutions to engineering problems related to industry or to school research, with emphasis on project management and effective communication.

MECH ENG 4140 Sports Engineering III

3 units - semester 2

48 hours lectures, 6 hours practical

Assumed Knowledge: MECH ENG 2019, 2102, 2002, 3101, 3109, 3108, 3107

Assessment: assignments, final exam, compulsory laboratory experiments

Sports equipment and facilities are an integral part of sportive activity and society. Sophisticated and innovative design of sports equipment and exercise machines enhances the performance of athletes. The huge manufacturing and sales numbers have an impact on the environment.

This course introduces the fundamental concepts of 1) aero- and fluid-dynamics for sports equipment design; 2) the design of sports facilities and stadia; 3) eco- and sustainable design of sports equipment.

Aero- and fluid-dynamics includes sports equipment like balls, apparel, and equipment for aeronautical, water, and transportation sports. Sports facilities design includes exercise machines, management and maintenance, as well as safety, structural and energy issues of stadium design. Ecodesign of sports equipment addresses the ecological impact of equipment manufacturing and disposal on the environment and provides solutions for sustainable design. One topic covers the principle of expert witness reports for legal cases.

MECH ENG 4141 Engineering Management & Professional Practice

3 units - semester 2

48 hours lectures

Incompatible: MECH ENG 4038

Assessment: assignments, final exam

Course details to follow.

MINING 4100A/B Mining Research Project

6 units - full year

5 hours lectures, 120 hours directed study

Restriction: Students in specified programs only—check academic rules of programs

Prerequisite(s): Students must enrol in Part A in semester prior to Part B

Assumed Knowledge: 24 units at levels I, II and III must be completed before entering level IV except by permission of Head of Discipline

Assessment: Conference paper, research report, oral presentation

Students work in groups on a research project under the supervision of an academic staff member.

MINING 4101 Mine Management

3 units - semester 2

24 hours lectures, 12 hours tutorials, 12 hours practicals

Available for Non-Award Study

Assumed Knowledge: C&ENVENG 1011, C&ENVENG 2068

Assessment: Exams, assignments, management game

Management of production, inventory, services, contracts, finance, sales and marketing, personnel, public relations; mining law; health, safety and risk management;

environmental management; introduction to system engineering.

MINING 4102 **Mine Geotechnical Engineering**

3 units - semester 1

24 hours lectures, 6 hours tutorials, 18 hours practicals

Restriction: Students in specified programs only—check Academic Rules

Available for Non-Award Study

Assumed Knowledge: C&ENVENG 2069, C&ENVENG 3071, C&ENVENG 3072

Assessment: Exams and assignments

Rock mass properties; rock slope engineering; mechanics, design, constructions and supports of underground excavations; tailings dam/waste dump constructions.

MINING 4104 **Socio-Environmental Aspects of Mining**

3 units - semester 1 or semester 2

24 hours lectures, 12 hours tutorials, 12 hours practicals

Available for Non-Award Study

Assumed Knowledge: C&ENVENG 1011

Assessment: Exams and assignments

This course provides the future mining engineer with a comprehensive and practical understanding of the socio-environmental impacts, both positive and negative, that mining may have on society.

MINING 4105 **Mineral Processing Engineering**

3 units - semester 1 or semester 2

24 hours lectures, 12 hours tutorials, 12 hours practicals

Available for Non-Award Study

Assumed Knowledge: C&ENVENG 1011

Assessment: Exams and assignments

Mineral dressing and process metallurgy; comminution process—crushing and grinding; concentration techniques; flotation; introduction to pyrometallurgy, electrometallurgy and hydrometallurgy.

MINING 4106 **Hard Rock Mine Design and Feasibility**

3 units - semester 1

12 hours lectures, 36 hours tutorials

Restriction: Students in specified programs only, please check Academic Rules of the program in which you are enrolling

Available for Non-Award Study

Assumed Knowledge: C&ENVENG 3073

Assessment: Technical merit of the design and feasibility study, report and oral presentations. Progress Interviews 30%; Presentations 20%; Final Report 50%

The aim of this course is to introduce students to the principles of mine feasibility studies for metaliferous mine deposit. In this course students should be able to develop skills for optimal mine design, scheduling and preparation of a pre-feasibility study document. Students work in

groups on a mine design and feasibility study project under the supervision of an academic staff member.

MINING 4107 **Surface Mining Systems**

3 units - semester 2

12 hours lectures, 36 hours tutorials

Assumed Knowledge: C&ENVENG 3071

Assessment: Metal project 50%; Coal project 50%

This is an advanced course building on the learning acquired in the Mining Systems course. The students will have the opportunity to further develop their knowledge and skills in the selection and evaluation of surface coal and metaliferous mining systems using a project-based learning approach. This course assumes that students have a good understanding of mining terms and descriptions, have been exposed to surface and underground mining methods and are familiar with mining development, operations and production. Each project is undertaken by a group of 3-5 students.

MINING 4108 **Underground Mining Systems**

3 units - semester 1

12 hours lectures, 36 hours tutorials

Assumed Knowledge: C&ENVENG 3071

Assessment: Metal project 50%; Coal project 50%

This course covers the principles and application of the major underground and surface mining methods, and the design of materials handling and transport systems and infrastructure required to support them.

Specific topics to be covered include: Surface mining methods; Underground mining methods; Materials handling and transport systems; Systems infrastructure and site requirement. Each project is undertaken by a group of 3-5 students.

MINING 4109 **Mining in a Global Environment**

3 units - semester 1

24 hours lectures, 24 hours tutorials

Assumed Knowledge: Socio-Environmental Aspects of Mining

Assessment: Assignment 20%; Group project 50%; Examination 30%

This course provides students with the tools necessary to meet the challenges of working for mining companies as mining engineers and managers in an international (and/or remote Australian) setting. The focus will be on developing countries and an aim will be to draw comparisons between the Australian and international contexts. The course will draw extensively on case studies. It will provide an international perspective of mining; governance and regulatory frameworks; financing; mining companies as agents of change; cross-cultural management; gender; small-scale mining; indigenous communities; health and safety issues; and the influence of China and India.

MINING 4110

Mine Asset Management & Services

3 units - semester 1

36 hours lectures, 12 hours tutorials

Assumed Knowledge: MINING 3071

Assessment: Individual Assignment 1 30%; Group Assignments 50%; Quizzes 20%

Mine maintenance and services are responsible for between 40 and 70 percent of the operating cost of a surface mine, and 20 to 50 percent of the operating cost of an underground mine. The quality of maintenance programs affects the productive capacity of mining operations. In the course of their professional careers, Mining Engineers will find themselves dealing with maintenance and service related issues such as: working with teams to de-bottleneck productive processes; preparing and checking maintenance budgets; administering maintenance contracts; and deciding on mine dewatering or electrical distribution layouts. The course covers the principles of mine maintenance and services, including electrical and compressed air distribution, mine dewatering and mine communications. It covers the design of maintenance systems, including preventive, predictive, proactive and corrective maintenance methods, as well as basic reliability theory and models for optimising maintenance decisions.

MINING 4111

Coal Mine Design and Feasibility

3 units - semester 2

12 hours lectures, 36 hours tutorials

Restriction: Students in specified programs only, please check Academic Rules of the program in which you are enrolling

Available for Non-Award Study

Assumed Knowledge: MINING 3073

Assessment: Technical merit of the design and feasibility study, report and oral presentations. Progress Interviews 30%; Presentations 20%; Final Report 50%

The aim of this course is to introduce students to the principles of mine feasibility studies for coal mine deposit. In this course students should be able to develop skills for optimal mine design, scheduling and preparation of a pre-feasibility study document. Students work in groups on a mine design and feasibility study project under the supervision of an academic staff member.

MINING 4113

Advanced Mine Ventilation

3 units - semester 1 or semester 2

48 hours lectures and practicals

Assumed Knowledge: MINING 3068

Assessment: Mine ventilation design project, report and presentations

This course is concerned with advanced aspects of metalliferous and coal mine underground ventilation practice and environmental control. In addition to taking topics covered in the core Mine Ventilation course to a more advanced level, emphasis is also placed on operational aspects such as controlling complex mine

ventilation networks and planning ventilation requirements to manage both safety and business related risks.

PETROENG 4002

Enhanced Oil Recovery

3 units - semester 1

Intensive short course of lectures, seminars

Restriction: students in specified programs only, please check Academic Rules of the program in which you are enrolling

Available for Non-Award Study

Assumed Knowledge: MATHS 1012, PHYSICS 1100, PETROENG 1001 or PETROENG 1006, PETROENG 2001, PETROENG 2005, PETROENG 2009, PETROENG 3005, PETROENG 3025

Assessment: assignments, exam

This course will cover theory and applications of various EOR processes. Also, students will be exposed to IOR techniques. Application aspects will be demonstrated through exercises and large assignments.

PETROENG 4020A/B

Petroleum Engineering Design Project

6 units - full year

240 hours minimum: project work & discussions, project work presentation

Restriction: students in specified programs only, please check Academic Rules of the program in which you are enrolling

Assessment: major research/study assignment & written report, presentation of project

Students will be assigned a group design project using available field data. A written report and an oral presentation is expected at the conclusion of various projects. Students are expected to work a minimum of eight weeks on their projects.

PETROENG 4022

Integrated Field Development and Economics Project

3 units - semester 2

Lectures, tutorials

Restriction: students in specified programs only, please check Academic Rules of the program in which you are enrolling

Available for Non-Award Study

Assessment: Assignments, project (written & oral presentation)

Field Development Planning for oil and gas fields, gives an overview of the process and methods for developing an optimum plan for developing a petroleum deposit. Key project drive indicators are discussed and it is shown how various disciplines interact in their quest for maximising the value of a project. The course covers all aspects of field development planning, commencing with screening studies, after discovering hydrocarbons, to project sanction. In particular, it is shown that this development phase has the potential to add maximum value, when compared to all other phases of the life cycle, as such it is most critical. Critical aspects are presented in detail in terms of actual case histories. It is shown how a proper balance has to be struck among key elements: reservoirs, wells and facilities, not to mention the balance between minimising costs and maximising recovery. Other key essentials, such as flexibility and risk management are also covered.

The project is based on an actual data set involving an offshore project. The aim is to study the exploration results and to develop a recommendation for the optimum field appraisal plan. When the actual plan and data is revealed, the second part of the project involves the feasibility and derivation of the optimum development plan. Participants work in small teams and have to submit written plans and give presentations in front of a panel.

PETROENG 4027 Decision Making and Risk Analysis

3 units - semester 1

Intensive short course of integrated lectures and computer based examples

Restriction: students in specified programs only, please check relevant Academic Rules

Available for Non-Award Study

Assumed Knowledge: Introductory petroleum geology and engineering, yr 12 high-school level maths, basic probability and statistics, competency in Excel

Incompatible: Cannot be taken in combination with PETROENG 4024, 7009 or 7049

Assessment: mid-course test, assignment, exam

This course teaches the skills required for a key management role - creating value by making decisions that yield optimal returns on the allocation of human and financial resources. The many uncertainties inherent to the oil and gas business (estimating current 'states-of-the world/nature' and predicting future events) create considerable uncertainty in the value that can be realised from resource-allocation decisions. Consequently, there will be a strong emphasis on evaluating the impacts of uncertainty, managing its resultant risks and planning to exploit its up-side potential. Topics to be addressed are the decision-making process, multi-objective decision making, decision-tree analysis, decision criteria, Monte Carlo Simulation and Value of Information & Flexibility. In addition, Utility Theory will be introduced as a means of rationally accounting for risk attitudes and some of the psychological and judgemental aspects of how people respond to uncertainty will be discussed. The techniques learned in this course will also be useful in making personal decisions.

PETROENG 4033 Integrated Reservoir & Project Management

3 units - semester 2

Intensive short course of lectures, seminars

Available for Non-Award Study

Incompatible: PETROENG 4028 and PETROENG 4009

Assessment: assignments, group discussion, exams

This course will be comprised of 2 short course components; Project Management and Integrated Reservoir Management.

Project Management outlines the necessary management processes and control methods required for the successful management of resources, budgets and costs, and schedule. Project management covers all major elements of project management, with emphasis on delivering a project in budget and on time. Areas

covered will include an overview of project management, project initiation, project plan development, project execution and delivery, monitoring and control and project closeout. Key concepts, terms and principles of project management and project management methodology for the whole life cycle of a project will be covered. Students will learn to plan projects, handle multiple stakeholders, build a Work Breakdown Structure, estimate resources, optimise schedules, quality control, manage stakeholder communications, risk planning, tracking and reporting of project status. Students will also gain an appreciation of the roles and skills of the project manager and all team members.

Integrated Reservoir Management aims at bringing together learnings from geology, geophysics, formation evaluation reservoir engineering, wellbore engineering and surface facilities engineering. It will discuss a wide variety of reservoir description, surveillance, interpretation, studies, reserves determination, production forecasting and operational considerations which together constitute Integrated Reservoir Management. It focuses on providing a basis for practical development and implementation of Integrated Reservoir Management and Reserves Optimisation programs with emphasis on cost effectiveness and economic justification.

PETROENG 4034 Petroleum Business and Project Economics

3 units - semester 2

Intensive 49 hours over 7 days

Restriction: students in specified programs only, please check Academic Rules of the program in which you are enrolling

Available for Non-Award Study

Incompatible: PETROENG 3002, PETROENG 4031

Assessment: mid-course test, assignment, exam

Petroleum engineers perform technical work to support the 'business' objectives of the organisation they work for (corporation, government). It is therefore important that they understand that 'business' because it will influence the judgments they make. Economic evaluations provide the main source of the organisation's information by which investment and operational decisions are made regarding the most effective use of resources. There are many subtleties and assumptions that underlie the apparently straight-forward calculations that are often seen. Consequently, a fundamental understanding of the concepts behind economic evaluation and of techniques for performing them within a petroleum context, are essential skills. Topics to be included are: economic and business concepts, cash-flows and petroleum fiscal regimes, time-value of money, discounted cash flow, net present value and other economic metrics, case study and portfolio management. If time permits, there will be an introduction to real options analysis and its application to valuing flexibility and risk.

PETROENG 4035 Reservoirs, Resources and Reserves

3 units - semester 1

Intensive 49 hours over 7 days

Restriction: students in specified programs only, please check Academic Rules of the program in which you are enrolling

Available for Non-Award Study

Incompatible: PETROENG 4007, PETROENG 4003, PETROENG 4032

Assessment: assignments, group discussion, exam

This course comprises two components: 1) Development Geology, and 2) Resources and Reserves.

This course provides participants with a working knowledge of the main techniques (qualitative and quantitative), used by Development geologists in evaluating subsurface reservoir properties. Geological controls on porosity, permeability, relative permeability, and capillarity are discussed. Case histories review conventional methods of determination of net pay in a reservoir and demonstrate some improved techniques using data from core, sidewall core, cuttings, conventional plug measurements (porosity and permeability) in conjunction with capillary pressure data. The course focus will be on conceptual understanding and practical applications using case studies and hands-on exercises.

This course also explains strength and weaknesses of various reserves estimating methodologies, including differences between resources and reserves and differences between reserve estimates used for regulatory reporting and those used for business decision making. Exploration and development views are covered, as are deterministic and probabilistic methods, with the aim of gaining a thorough understanding of various reserves levels and their equivalence in both systems, in terms of proved, proved plus probable, and proved plus probably plus possible. Alternative estimation methods, such as volumetrics, material balance and decline curve analysis. An appreciation will be gained of data limitations and uncertainty and how this is reflected in final volumes and hence risk.

HONOURS

ELEC ENG 4039A/B Honours Project

6 units - full year

240 hours practical work

Restriction: students in specified programs only, please check Academic Rules of the program in which you are enrolling

Prerequisite: ELEC ENG 3015, ELEC ENG 3016, ELEC ENG 3017, ELEC ENG 3018, ELEC ENG 3019A/B, ELEC ENG 3020, ELEC ENG 4039A

Assessment: Performance during project work, written reports, seminar presentations

Each candidate is required to conduct investigations involving theoretical surveys and the design, development and testing of hardware and/or software. The results are presented in written report form, by seminar and, where appropriate, demonstration of the completed work.

MECH ENG 4129A/B Aerospace Honours Project

6 units - full year

24 hours lectures, 20 hours individual supervision, 180 hours project

Available for Non-Award Study

Incompatible: May not be presented with MECH ENG 4035B

Assessment: Prelim report, exhibition, seminar to present report, final report

The aim of the project is to provide solutions to engineering problems related to industry or to school research, with emphasis on project management and effective communication.

MECH ENG 4131A/B Automotive Honours Project

6 units - full year

24 hours lectures, 20 hours individual supervision, 180 hours project

Incompatible: May not be presented with MECH ENG 4047B

Assessment: Prelim report, exhibition, seminar to present report, final report

The aim of the project is to provide solutions to engineering problems related to industry or to school research, with emphasis on project management and effective communication.

MECH ENG 4133A/B Mechanical Honours Project

6 units - full year

24 hours lectures, 20 hours individual supervision, 180 hours project

Incompatible: May not be presented with MECH ENG 4007B

Assessment: Prelim report, exhibition, seminar to present report, final report

The aim of the project is to provide solutions to engineering problems related to industry or to school research, with emphasis on project management and effective communication.

MECH ENG 4135A/B Mechatronic Honours Project

6 units - full year

24 hours lectures, 20 hours individual supervision, 180 hours project

Incompatible: May not be presented with MECH ENG 4019B

Assessment: Prelim report, exhibition, seminar to present report, final report

The aim of the project is to provide solutions to engineering problems related to industry or to school research, with emphasis on project management and effective communication.

MECH ENG 4137A/B Sports Engineering Honours Project

6 units - Not offered in 2009

24 hours lectures, 20 hours individual supervision, 180 hours project

Assessment: Prelim report, exhibition, seminar to present report, final report

The aim of the project is to provide solutions to engineering problems related to industry or to school research, with emphasis on project management and effective communication.

MECH ENG 4139A/B Sustainable Energy Honours Project

6 units - Not offered in 2009

24 hours lectures, 20 hours individual supervision, 180 hours project

Assessment: Prelim report, exhibition, seminar to present report, final report

The aim of the project is to provide solutions to engineering problems related to industry or to school research, with emphasis on project management and effective communication.

PETROENG 4004A/B Petroleum Engineering Honours Project

6 units - full year

240 hours minimum: project work & discussions, project work presentation

Restriction: Honours students only

Assessment: Major research/study assignment & written report, presentation of project - students are expected to work a minimum four weeks on projects

Honours students will choose a research project from a list of available topics. A written report and an oral presentation is expected at the conclusion of various projects. The honours projects are intended to give students a taste for research and will prepare them in part to carry on their studies for a higher degree.

PETROL 4000A/B Honours Petroleum Geology and Geophysics

24 units - full year

Prerequisite: B.Sc. majoring in Geology and/or Geophysics, or equiv.

Assumed Knowledge: Background in some/all of: sedimentology, stratigraphy, structural geology & exploration geophysics; combinations of third year geoscience courses with other appropriate science or maths courses may be acceptable

Assessment: Formal written & oral assessments, marked practical exercises, assignments & seminars - coursework and project thesis

The program comprises three components: (a) five months of coursework, commencing in late January. This provides a thorough grounding in petroleum geoscience. All students take a set of core topics, with additional specialist geology or geophysics units. Details can be found at www.asp.adelaide.edu.au; (b) six-week internship in the petroleum industry, normally commencing in late June; (c) supervised individual research project, which is written up as a thesis, and submitted in early November. Work done during the internship usually forms the basis of the thesis.

Depending on the nature of their previous studies and experience, coursework exemptions, substitutions or additions may be granted or required for some students. Intending students must apply before the end of the year preceding that in which they wish to enrol.

English

LEVEL I

ENGL 1104 Professional English (ESL) I

3 units - semester 1 or semester 2

3 contact hours per week

Incompatible: Not available to students who have completed Yr 12 English Studies or Yr 12 English Communications or equiv (ie native speakers of English), ENGL 2104 Professional English (ESL) II, English for Professional Purposes (ESL) I and II OR ENGL 2016/3016/2046

Assessment: short professional communications 10%, grammar tests 10%, referencing assignment 10%, summary and opinion 15%, job application: CV and cover letter 15%, participation 10%, exam 30%

Professional English (ESL) is a practical course for students who are still developing fluency in written and spoken English, and who wish to improve their expression in the context of business communications. The course is designed for students whose first language is not English. Common business documents are studied, as well as grammar, syntax and style.

ENGL 1105 Film Studies

3 units - semester 2

3 contact hours per week

Assessment: essay, participation, exam

Film Studies provides an introduction to the analysis of narrative films. The course explores a range of aspects of film, including origins, techniques, industry, genre, narrative, and audience. The course examines examples from various film industries, including Australia, America (Hollywood) and other international cinemas.

ENGL 1107 Shakespeare

3 units - semester 2

3 contact hours per week

Available for Non-Award Study

Assessment: participation and journal (25%), close reading exercise (15%), research essay (30%), examination (30%)

This course will look closely at four Shakespeare plays, one each from the major genres of tragedy, comedy, history, and romance. The plays to be studied will vary from year to year depending on participating staff members. Topics covered will include character, form, spectacle, theme, sources, the original conditions of production, and the reproduction of Shakespeare's plays in a contemporary context. Students will be introduced to a range of critical approaches to Shakespeare's plays, and be encouraged to reflect on questions of canonicity, cultural value and authority, and the politics of production and reproduction. Film and TV adaptations of the plays may be used to enhance discussion and reflection. The course is suitable for students with little or no prior

knowledge of Shakespeare and also for those wishing to become more familiar with the playwright's work. It may be studied as a 'one off' course or for the sound basis it will provide for studying some of the advanced courses offered by the Discipline of English, such as Renaissance Writing and Adaptation.

ADVANCED LEVEL

ENGL 2046 English for Professional Purposes

3 units - semester 1

3 contact hours per week

Available for Non-Award Study

Prerequisite: 12 units Level I in any Faculty

Incompatible: ENGL 2016/3016, ENGL 2104/3104

Assessment: Practical writing & research assignments 70%, public speaking exercise 10%, in-class tests 20%

This is a developmental course for students wishing to achieve greater linguistic competence in written expression and/or to enhance fluency and style in the context of business communications. Common business documents are studied, as well as grammar, syntax, report writing, the construction of an argument and editing. Lectures and workshops focus on business letters, job application packages, formal reports and submissions, media releases as well as written, spoken and electronic forms of communication.

ENGL 2052 Modernisms

3 units - semester 1

3 contact hours per week

Available for Non-Award Study

Prerequisite(s): 12 units Level I in any Faculty

Assumed Knowledge: Familiarity with the reading and analysis of literary texts equivalent to first-year English standard.

Assessment: class participation (10%); 500 word short critical assignment (10%); 2000 word essay (40%); equivalent 2000 words exam (40%)

This course first focuses on European literary modernism of the early 20th century, and then addresses some of the varieties of modernism that emerged in North America. Writers to be studied are James Joyce, T S Eliot, D H Lawrence, Virginia Woolf, Franz Kafka, William Faulkner, Nathanael West, and Zora Neale Hurston. Their texts interpreted, represented and expressed the sometimes confusing experience of modernity in different ways, showing a range of ideas concerning politics and aesthetics, tradition and the avant-garde, identity and nation. We will look at modernism's relation to classicism, romanticism and realism, on the one hand, and postmodernism on the other hand, and try to grasp the impact of new ideas about the mind and language, as well as charting ways in which modernist writers reacted to, reflected on, or tried to give shape to the social and

political tumult of their times. A Course Reader will be provided.

Convenor: Dorothy Driver

Teaching staff: Philip Butterss, Dorothy Driver, Heather Kerr, Mandy Treagus

ENGL 2053 Writing and Reconciliation

3 units - winter semester

3 contact hours per week

Available for Non-Award Study

Prerequisite(s): 12 units Level I in any Faculty

Incompatible: ENGL 2034/3034

Assessment: class work consisting of in-class activities and on-line postings 25%, 1,250 word reading and research report 25%, 2,500 word essay 50%

In this course we'll consider the relation between writing and reconciliation. The attention of the world was, not very long ago, massively fixed on the South African Truth and Reconciliation Commission, and the specific focus of our course will be on literature written in the wake of that Commission: fiction and autobiographical non-fiction that in different ways represents historical suffering and trauma in order to find ways of moving beyond it. As part of our inquiry we will also view and discuss two of the many provocative and interesting feature films made so far about the Commission, and will compare them with the less obviously mediated video footage of the Commission itself. As we consider the various representations of this key historical event, our interest will be in addressing the aesthetics and ethics of autobiographical, journalistic and fictional approaches to violence and trauma, as well as the cultural construction of the major concepts involved when we speak about writing and reconciliation. Central to our inquiry will be the following question: How may we understand the role of literature and art in relation to current notions of trauma, justice and truth, gender and racial subordination, forgiveness, repentance, vengeance, and shame?

ENGL 2054 A Festival of Contemporary Writing

3 units - semester 1

3 contact hours per week

Available for Non-Award Study

Prerequisite(s): 12 units Level I from any Faculty

Assumed Knowledge: Level I studies in at least one course offered in the Discipline of English

Incompatible: ENGL 2009/3009

Assessment: portfolio including a report on Writers' Week, book review and selected work from continuous participation in creative writing exercises: 2000 words 50%, piece of creative writing with exegesis or critical essay on contemporary writing: 2500 words 50%

This course is designed as an extension of the Adelaide Festival of Arts Writers' Week. The course introduces and expands upon ideas, debates, writing practices,

cultural concerns and issues of literary production and consumption that currently preoccupy contemporary writers from around the world. It aims to develop awareness of the culture of creative writing as well as skills in imaginative writing (through directed reading related to current Writers' Week authors). It explores the nexus between reading and writing, developing critical awareness through analysis of students' own creative work in relation to the work, ideas and practices of selected writers represented at Writers' Week. Students are required to attend a selection of 'meet the author' sessions and lectures by writers at Writers' Week which is held in Adelaide at the beginning of the semester in which the course is taught.

ENGL 2055

Australian Classics: Literature and Film

3 units - semester 1

3 contact hours per week

Available for Non-Award Study

Prerequisite(s): 12 units at Level 1 in any Faculty

Assumed Knowledge: Level I studies in at least one course offered in the Discipline of English

Incompatible: ENGL 2032/3032

Assessment: 2,500 word seminar paper 50%, exam 50%

This course analyses some key examples of Australian literature and film that have come to be regarded as 'classics'. The course sets literature and film in its original context, examining the social function it might have served for its original audience. In addition, students examine the construction of literary and filmic canons, and ask why these texts attained status as Australian 'classics'. There is an emphasis on how literature and film deals with tensions and conflicts in Australian culture - for both original and subsequent audiences.

ENGL 2056

Dangerous Liaisons: Writing out of Africa

3 units - semester 2

3 contact hours per week

Available for Non-Award Study

Prerequisite(s): 12 units Level I in any Faculty

Assumed Knowledge: Level I studies in at least one course offered in the Discipline of English

Incompatible: ENGL 2015/3015

Assessment: reading journal and class presentations 60%, 2,500 word major essay 40%

This course examines a range of African and diasporic African texts that focus on dispossession and dispersal in the aftermath of the colonial period. Topics include the literary construction of race, gender and identity in the contexts of homelessness at home, slavery, migration and exile. Students will study texts from Botswana, Kenya, Nigeria, South Africa, Tanzania, UK, USA, West Indies and Zimbabwe, using a variety of critical approaches including, where appropriate, postcolonial theory.

ENGL 2057

Hollywood or Bust!

3 units - semester 2

3 contact hours per week

Prerequisite(s): 12 units at level 1 from any Faculty. Students must be 18 years of age at the commencement of classes due to discussion of R rated themes and materials

Assumed Knowledge: Level I studies in at least one course offered in the Discipline of English, preferably Film Studies I

Incompatible: ENGL 2031/3031

Assessment: participation; diagnostic and/or research exercises; essay; exam

This course will cover the Hollywood film industry's history, with reference to developments in film form and key genres. Students will engage with a variety of critical perspectives on the ideological implications of key developments in Hollywood cinema, and will acquire a detailed understanding of the significance of Hollywood as an artistic, industrial and ideological centre. The Hollywood film industry and its products will be considered in an international context.

ENGL 2058

Reading and Writing Poetry

3 units - semester 2

3 contact hours per week

Available for Non-Award Study

Prerequisite(s): 12 units Level I in any Faculty

Assumed Knowledge: Level I studies in at least one course offered in the Discipline of English

Incompatible: ENGL 2029/3029

Assessment: verse exercises 50%, tutorial presentation 10%, exam 40%

This course looks at poetry and how it works. It considers poems from many different periods (from the sixteenth century to the present), in a wide variety of traditional forms (ballad, lyric, sonnet, epic, narrative, ode, dramatic monologue, etc.), using a range of different types of versification (blank verse, common measure, couplets, and so on). Students taking the course can expect to improve their skills in the critical appreciation of poetry; and, on the principle that the best way to learn is by doing, they will be given plenty of opportunity for composing different kinds of verse of the types studied.

ENGL 2060

Self Writing

3 units - semester 1

3 contact hours per week

Available for Non-Award Study

Prerequisite(s): 12 units Level I in any Faculty

Assumed Knowledge: Level I studies in at least one course offered in the Discipline of English

Incompatible: ENGL 2026/3026

Assessment: 2,500 word seminar paper 50%, exam 50%

In this course students will read a range of life narratives in the context of theories of self-representation. The course will focus on variations in the genre of self-writing, and will examine the evolution of autobiographical texts - and the changing significance attributed to the speaking "I" - from St Augustine's Confessions of the 4th century to contemporary models of self-writing. Set texts will include not only those conventionally understood as

autobiography but also those which deliberately blur the line between biography and autobiography (such as Gertrude Stein's *Autobiography of Alice B. Toklas*) and those which are collaboratively produced (such as oral histories). The course will allow students the option of producing a piece of self-writing as part of their assessment. They will develop their skills in reading texts within the context of cultural and literary history, and have the opportunity to explore intersections between critical and creative writing.

ENGL 2061 Body Language

3 units - semester 2

3 contact hours per week

Available for Non-Award Study

Prerequisite(s): 12 units at level I from any Faculty. Students must be 18 years of age at the commencement of classes due to discussion of R rated themes and materials

Assumed Knowledge: Level I studies in at least one course offered in the Discipline of English

Incompatible: ENGL 2037/3037

Assessment: Online and in class participation, essay, exam

The broad aim of this course is to look at texts and topics that raise issues around embodiment and identity using contemporary theories and methodologies from literary and cultural studies. The course is organised around literary texts and cultural topics and the primary focus is on examining these texts and topics. However, students are expected to read widely in literary and cultural studies and to situate their analyses of texts and topics by engaging with theories, methodologies and debates that are introduced in the course. These theories, methodologies and debates will be concerned with identities and how they are constructed in relation to some or all of the following notions as they relate to the body: race (including whiteness); indigenities; gender; sexualities (both heterosexualities and non-heterosexualities) and body modifications.

ENGL 2062 Creative Writing: The Essentials

3 units - semester 2

3 contact hours per week

Available for Non-Award Study

Prerequisite(s): 12 units at level I in any Faculty

Assumed Knowledge: Level I studies in at least one course offered by the Discipline of English

Assessment: 5 x 500 word creative writing exercises (50%), 2000 word piece of developed creative writing (50%) or equivalent for poetry

This course is a practical introduction to creative writing through prose and poetry. It covers ways to begin and develop a sustained and reflective writing practice, including revision and editing. The course consists of a series of exercises designed to develop essential aspects of the creative writer's craft and a selection of connected readings from classical and contemporary literature in a range of approaches, styles and techniques.

ENGL 2204 Professional English (ESL) II

3 units - semester 1 or semester 2

3 contact hours per week

Prerequisite(s): 12 units Level I in any Discipline

Incompatible: Not available to students who have completed Yr 12 English Studies or Yr 12 English Communications or equiv (ie native speakers of English), ENGL 1104 Professional English (ESL) I; English for Professional Purposes (ESL) I and II OR ENGL 2016/3016/2046

Assessment: short professional communications 10%, grammar tests 10%, referencing assignment 10%, summary and analysis 15%, job application: CV and cover letter, and document addressing selection criteria 15%, participation 10%, examination 30%

Professional English (ESL) is a practical course for students who are still developing fluency in written and spoken English, and who wish to improve their expression in the context of business communications. The course is designed for students whose first language is not English. Common business documents are studied, as well as grammar, syntax and style.

ENGL 2214 Advanced Professional English (ESL)

3 units - semester 2

3 contact hours per week

Prerequisite(s): ENGL 1104/2104/2204 Professional English (ESL) I or II

Incompatible: Not available to students who have completed Year 12 English Studies or Year 12 English Communications or equivalent (ie native speakers of English), ENGL 2016/3016/2046

Assessment: public speaking and reflective essay 30%, report or grant application 40%, online job application 20%, participation 10%

Advanced Professional English (ESL) is a practical course for students who wish to further develop their fluency in written and spoken English, and who wish to continue to improve their expression in the context of business communications. The course is designed for students whose first language is not English. Longer and more complex business documents, such as reports and grant applications, are studied, as well as syntax, style and tone, and advanced grammar and punctuation use.

CAPSTONE

ENGL 3100 Concepts of Criticism: Readers, Writers, Texts

3 units - semester 2 (Not offered until 2010)

3 contact hours per week

Prerequisite: 15 units in English, of which no more than 6 may be at Level I

Assessment: Portfolio of selected in-class exercises and seminar preparation: equivalent 2,500 words 50%; 3,000 word essay 50%

This capstone course is designed to give students an understanding and an opportunity to reflect on core skills and methods of the discipline of English. It will be structured as a sequence of blocks giving intensive exposure to key concepts of the critical and analytic processes, working in each case with a combination

of primary literary or film texts, critical material, and theoretical readings. The concepts to be covered will vary from year to year depending on participating staff members, so that each segment of the course will be conducted by a staff member with directly relevant expertise and current or recent research experience in that area of enquiry. Concepts to be discussed may include: genre; ideology; formalism; and text.

HONOURS

ENGL 4401A **Honours English Part 1**

12 units - semester 1 or semester 2

Prerequisite(s): UG degree, major in English, high credit average in courses contributing to major in English or equiv. approved by English Honours Sub-Committee

Assessment: coursework (2 courses), 15000 word thesis

Students wishing to take Honours English should consult the Honours Coordinator prior to commencing Advanced Level courses to ensure that appropriate course choices are made in preparation for Honours.

The work for the Honours year consists of two courses and the writing of a thesis. A list of courses for 2010 will be available from the English Office late in 2009 and students should consult the English Honours Handbook on the Discipline's website.

In some circumstances Honours English can be studied part-time over two years or can be combined with Honours in another discipline.

ENGL 4401B **Honours English Part 2**

24 units - full year

Prerequisite(s): UG degree, high credit average in courses contributing to major in English or equiv. approved by English Honours Sub-Committee

Assessment: coursework (2 courses), 15000 word thesis

Students wishing to take Honours English should consult the Honours Coordinator prior to commencing Advanced Level courses to ensure that appropriate course choices are made in preparation for Honours.

The work for the Honours year consists of two courses and the writing of a thesis. A list of courses for 2010 will be available from the English Office late in 2009 and students should consult the English Honours Handbook on the Discipline's website.

In some circumstances Honours English can be studied part-time over two years or can be combined with Honours in another discipline.

ENGL 4402A/B **Honours Creative Writing**

24 units - full year

Prerequisite(s): undergraduate degree, high credit average in courses contributing to major in English or equiv. approved by

Creative Writing Honours Sub-Committee; presentation of a suitable portfolio of creative writing - see Creative Writing Coordinator for details

Assessment: coursework (2 seminar courses) of 6,000 words each; thesis (12,000 word) piece of creative writing plus 3,000 word exegetical essay

Students wishing to take Honours Creative Writing should consult the Honours Coordinator prior to commencing Advanced Level courses to ensure that appropriate course choices are made in preparation for Honours.

The Honours year in creative writing allows students to extend skills in creative writing demonstrated in the portfolio which is a prerequisite for the course. The portfolio may include creative writing developed and presented in undergraduate studies in English. The work for the year consists of three courses: one a creative writing workshop and the others courses that focus on the reading and analysis of literary texts in which you prepare for your exegetical essay, which explores the cross-flow between critical and creative writing and reading. In the second semester students complete a major piece of creative writing and accompanying exegetical essay. Students should consult the 2009 Creative Writing Honours Handbook for further information although some details have changed - see the Discipline's website for further information.

In some circumstances Honours Creative Writing can be studied part-time over two years.

Environmental Biology

LEVEL I

ENV BIOL 1002 **Ecological Issues I**

3 units - semester 2

3 x 1 hour lectures per week, 3 hour practical per fortnight, up to 3 field trips

Incompatible: ENV BIOL 1002RW

Assessment: Exam, written assignments

The principal aim of this course is to provide students with the knowledge that will enable them to participate actively in a rational debate about environmental problems. It introduces the 'scientific method' and illustrates its use via laboratory and field practicals that are written up as reports. The lectures cover the significant environmental issues of: resource utilisation and waste, ecosystem services and ecological footprints, global cycles, Australian landscapes and soils, biodiversity, grazing and indigenous knowledge, agricultural problems, invasive species, pests and quarantine, freshwater and marine ecosystems, conservation biology and adaptive management. There is the opportunity to discuss problems via tutorials.

Details of field trips communicated at the start of the course.

ENV BIOL 2005 Ecology for Engineers II

3 units - semester 2

2 x 1 hour lectures, 3 hour practical per week, multiple-day field camp during first week of mid semester break

Restriction: BEngineering, or special permission of Course Coordinator

Incompatible: ENV BIOL 2901A, ENV BIOL 2005 and ENV BIOL 2003

Assessment: Assignments and/or exam - further details available at beginning of semester

This course aims to teach students the core principles of modern ecology, to provide basic skills for the conduct of field studies, and to foster the development of scientific analysis of ecological systems. The topics are integrated into a conceptual framework that will allow students the analysis of real situations. Topics include the description and study of biological populations and communities, the factors that determine their properties and dynamics, the properties of fragmented systems, the patterns and consequences of species diversity, and the biotic and abiotic factors that control the dynamics of ecological systems. Case studies are used to illustrate the underlying theory, and the application of the ecological theory to the management of natural resources for exploitation and conservation. The course is relevant for students interested in furthering their understanding of the basic ecological principles, in the management of rangelands, fisheries, forests, and human made systems, and in the conservation of natural ecosystems.

Details of field trip communicated at start of the course.

ENV BIOL 2500 Botany II

3 units - semester 1

2 x 1 hour lectures, 3 hour practical per week

Assumed Knowledge: BIOLOGY 1101

Incompatible: BIOLOGY 1203RW

Assessment: Exam, practical reports & assignments

A general introduction to the biology of plants. Lectures and practicals cover plant structure, function, classification, diversity, evolution and responses to environmental stress. Provides a valuable basis for future plant-related courses.

ENV BIOL 2501 Evolutionary Biology II

3 units - semester 2

3 x 1 hour lectures per week, 12 x 3 hour practicals/tutorials per semester

Assumed Knowledge: BIOLOGY 1101 and BIOLOGY 1201 or BIOLOGY 1202

Assessment: Practical work, seminar presentations, exam

This course addresses key components of evolutionary biology from the perspective of molecular evolution, from the perspective of individual organisms evolving

attributes to cope with and exploit spatially and/ or temporally variable and different environments, and from a macro-evolutionary perspective. Natural selection, sexual selection, kin selection and inclusive fitness are used to develop an understanding of the behavioural, morphological and physiological adaptations of individual organisms to their environments, as well as an understanding of the interactions and co-evolutionary processes that occur between organisms both intra- and inter-specific (reproductive strategies, mating systems, competition, predator-prey, plant-herbivore, host-parasite, mutualisms, facilitation). Molecular evolution and population genetics provide the mechanics for evolution. Knowledge of these and biogeographic changes are used to develop the ideas of species and speciation, to construct phylogenies, and to interpret the fossil record and patterns of extinction

ENV BIOL 2502 Ecology II

3 units - semester 2

2 x 1 hour lectures, 3 hour practical per week, multiple day field trip during first week of mid semester break

Assumed Knowledge: BIOLOGY 1202

Assessment: Practical, field work, exam

This course introduces the core principles of modern ecology, provides basic skills for the conduction of field studies, and fosters the development of the skills needed for the scientific analysis of ecological systems. The topics are integrated into a conceptual framework that allows students to analyse real situations. Topics include the description and study of biological populations and communities, the factors that determine their properties and dynamics, the patterns and consequences of species diversity, and the biotic and abiotic factors that control the dynamics of ecological systems. Across these topics, the impact of human activities on ecosystem processes is discussed. Case studies are used to illustrate the underlying theory, and the application of the ecological theory to the management of natural resources for use and conservation. The course is relevant for students interested in furthering their understanding of ecological principles, in the management of rangelands, wildlife, fisheries, forests, and human made systems, and in the conservation of natural ecosystems.

Details of field trip communicated at start of the course.

ENV BIOL 2503 Zoology II

3 units - semester 1

3 x 1 hour lectures, 1 x 3 hour practicals per week

Assumed Knowledge: BIOLOGY 1101 and BIOLOGY 1201 or BIOLOGY 1202

Assessment: Practical work, essay, exam

The course begins with the relationship between structure and function. Concepts of phylogeny will be introduced and the enormous diversity of animals will be examined in a phylogenetic framework. The major event in animal evolution as demonstrated by adaptations to parasitism, the marine environment and life on land

will be provided. The section on invertebrate diversity will be concluded with a state-of-the-art lecture on the extraordinary discoveries that are currently being made of new species and even new groups and how scientists determine where they fit in the tree of life. The biology of the vertebrates will follow groups from fishes to terrestrial vertebrates, including the amphibians, reptiles, birds and mammals. We will flavour these with interesting lectures on animal adaptations and some of the major evolutionary hurdles in vertebrate evolution. Topics in animal physiology relevant to both vertebrates and invertebrates will include the flow of energy through organisms, the process of respiration and the function of the nervous and sensory systems as well as muscle function.

LEVEL III

ENV BIOL 3002 Australian Biota: Past, Present and Future III

3 units - semester 2

2 x 1 hour lectures, 4 hour practical per week

Assumed Knowledge: ENV BIOL 2500 (2006), 2501 (2001), 2503 (2000)

Assessment: Exams, tutorials, practical assignments, field excursion

This course examines the origins and evolution of Australia's unique flora and fauna, and the way it has been shaped by historical and more contemporary events. Topics will include continental connections and isolation; past climates and geology; past vegetation assemblages and 'ancient' habitats; the unique Tertiary fauna; the Pleistocene megafauna; the Quaternary 'filter' and how it has shaped the present day biota; composition of the present day flora including the impact of poor soils and fire; the dominance of Myrtaceae and Proteaceae, and their pollination systems; origins and unique aspects of the vertebrate fauna; Australian marine organism, the impact of aboriginal people and the effect of European settlement on the continent's biota. Several major themes will be explored in detail throughout the course, in particular the evolution of pollination systems; adaptations among plants and animals to arid and marine environments, and the evolution of vertebrate reproductive strategies.

ENV BIOL 3003 Ecophysiology of Animals III

3 units - semester 2

2 x 1 hour lectures, 1 hour tutorial, 4 hour practical per week

Assumed Knowledge: 6 units of Level II Environmental Biology courses, SACE Stage 2 Chemistry and/or Physics

Assessment: Quizzes, practical work & essay

This course covers the intersection between three biological fields - physiology, ecology and behaviour, and examines some of the ways animals are adapted to the environments in which they live. In many cases, these are adaptations to severe environments such as deserts, polar regions, high altitude and deep sea, where nature poses apparently insurmountable problems to survival.

The primary approach is to examine the biophysical exchanges between the animal and its environment. Another approach is to look at the physiology of animals with different life styles, and examine their evolutionary strategies for locomotion, digestion, reproduction, thermoregulation, osmoregulation, circulation and respiration.

ENV BIOL 3004 Freshwater Ecology III

3 units - semester 1

2 x 1 hour lectures per week, 4 hour practical per week, field camp up to 5 days

Assumed Knowledge: 6 units of Level II Environmental Biology courses (Science students) and ENV BIOL 2005 or approval of Head for BE students

Incompatible: WRM 7024

Assessment: Assignments, written test

The course provides theoretical understanding and practical implications of the ecology and restoration of freshwater habitats. It distinguishes habitats of lakes, wetlands, streams and rivers by varying circulation types, nutrient cycles and food webs. Complementary practicals will be conducted in order to provide skills for the identification of algae, zooplankton and water plants as well as for monitoring, assessment and management of drinking water reservoirs, urban and floodplain wetlands, and rivers.

This course will include a field camp up to 5 days. Details will be provided at the start of the course.

ENV BIOL 3006 Research Methods in Environmental Biology III

3 units - semester 1

1 x 2 hour lecture per week, 4 hour practical per week

Assumed Knowledge: 6 units of Level II Environmental Biology courses and STATS 1000 or STATS 1003 or equiv

Assessment: Practical work, exam, review assignment

An introduction to systematic methods of collection, analysis and reporting of field and laboratory data, and basic experimental design. Lectures outline the nature of research and the value of experimental methods. Some knowledge of basic statistics is required. Experimental design will be emphasised, and the elements of statistical tests, particularly analysis of variance, will be considered in a biological context. Practical work involves use of computers and software, and generally will complement methods introduced in lectures.

ENV BIOL 3008 Conservation and Restoration III

3 units - semester 2

2 x 1 hour lectures, 3 hour practical per week, 4-5 days fieldwork or a field camp (during semester or mid semester break)

Assumed Knowledge: ENV BIOL 2503/2003 or equiv

Incompatible: ENV BIOL 3023

Assessment: Exams, practical & project assignments

This course will examine theoretical and practical aspects of conservation biology, ecological management and

restoration of natural systems. The course will focus on terrestrial systems. It will cover the effects of introduced herbivores, carnivores, competitors, pathogens, vegetation clearance, habitat fragmentation, habitat degradation, disturbances (e.g. fire) and remedial actions (e.g. revegetation) on Australian flora, fauna and ecological processes (e.g. dryland salinisation, pollination, gene flow, animal dispersal). Edge effects, corridors, succession, endangered species management, conservation genetics, abundant species management, biological and mechanical control of unwanted species, rehabilitation, re-introduction and translocation biology will also be covered.

Establishing adequate and effective monitoring programs, reserve design and risk assessment, as well as social and political factors in decision making will provide a practical element to the course. Students will be expected to conduct a small research project on some current conservation or restoration issue as part of the course.

This course will include 4-5 days of field work either as a series of day trips or as a field camp. Details will be provided at the start of the course.

ENV BIOL 3009 Ecophysiology of Plants III

3 units - semester 2

2 x 1 hour lectures, 4 hour practical per week, multiple day field trip

Assumed Knowledge: ENV BIOL 2006 or PLANT SC 2001WT

Incompatible: ENV BIOL 3009

Assessment: Exam & continuous assessment

This course explores interactions between plants and their environment from a physiological perspective. It will consolidate and extend knowledge of the processes involved in the acquisition and transport of resources by plants and use this knowledge to examine the ways plants have adapted to a range of environments, some of which can be considered as extreme. The course will also look at how plants respond to environmental challenges such as climate change, ozone depletion, salinisation and heavy metal toxicity. Interactions with other organisms will also be examined including mycorrhizas and parasitic plants. Practical work will include small group experiments.

Details of field trip communicated at start of the course.

ENV BIOL 3010 Marine Ecology III

3 units - semester 2

1 x 2 hour lecture per week, 1 x 4 hour practical per week, multiple day field trip

Assumed Knowledge: 6 units of Level II Environmental Biology courses (or equiv) and ENV BIOL 3006

Assessment: Exam, assignments, field trip report

This course will provide an understanding of the patterns of abundance and diversity of marine plants and animals and the processes that structure these patterns. Emphasis is placed on the challenges and solutions to understanding the complexity of marine systems. This course will demonstrate the use of coherent logical procedures and rigorous experimental design to provide practical evidence for the development of theory and

solutions to environmental and conservation problems in coastal habitats. The habitats and organisms used to illustrate lectures are derived from ecological studies of subtidal rocky and coral reefs, intertidal rocky reefs, mangrove forests, salt marshes, seagrass meadows, urban structures and pelagic habitats.

Details of field trip communicated at start of the course.

ENV BIOL 3011 Evolution and Diversity of Insects III

3 units - semester 1

2 hour lecture, 4 hour practical per week

Assumed Knowledge: ENV BIOL 2000 or equiv

Incompatible: ENV BIOL 3011WT

Assessment: Exams, Insect collection

After a brief review covering the internal anatomy of insects and the processes involved in metamorphosis, excretion and reproduction, a number of specific topics will be explored in more detail, including: morphological and biological characteristics of the major insect orders; life histories of selected pest and beneficial species; sociality, caste formation and nest building in termites; sound production methods and functions; feeding mechanisms; adaptations and biology of vertebrate ectoparasites; insects as disease vectors of plants and animals; production and function of silk in insects and arachnids; mimicry and defensive adaptations; sociality and parasitism in the Hymenoptera.

The practical component will examine collecting techniques, identification of adult insects to family level, identification of immature stages and feeding damage. A requirement of the course is the presentation of a well-curated insect collection.

ENV BIOL 3012WT Integrated Catchment Management III

3 units - semester 2

24 hours lectures, 48 hours practical work in field & laboratory

Assumed Knowledge: ENV BIOL 2003 or SOIL&WAT 2005WT or AGRONOMY 2000ARW/BRW

Assessment: Theory, practicals/assignments

This course provides students with an understanding of ecological and hydrological processes governing catchment systems and concepts for the assessment and management of catchment systems. Catchments are characterised by their geology, soils, land use, hydrology and water quality. Management of catchments considers changed land use and vegetation, soil treatment, riparian wetlands, water quality management and environmental flows. A multidisciplinary team of lecturers jointly teach the course. Field practicals are conducted in the Bradbury Catchment of the Mt. Lofty Ranges.

ENV BIOL 3024 Insect Identification and Taxonomy III

3 units - summer semester

Equivalent of 2 x 1 lectures per week (24 h) and equivalent of 7 x 3 h practicals (21 h practicals)

Restriction: Not available to University of Adelaide students - refer

to course ENV BIOL 3011 as an alternative

Available for Non-Award Study

Assumed Knowledge: Equivalent of level 1 & 2 Biology

Assessment: Quizzes, Insect Collection, Theory/Practical Examination

This course takes an evolutionary approach to examining insect diversification, the most species-rich component of terrestrial ecosystems. It covers various aspects of insect systematics and evolution, including the integration of morphology, life history, behaviour and ecology. After a brief review covering the internal anatomy of insects and the processes involved in metamorphosis, excretion and reproduction, a number of specific topics will be explored in more detail, including: morphological and biological characteristics of the major insect orders; life histories of selected pest and beneficial species; sociality; sound production methods and functions; feeding mechanisms; adaptations and biology of vertebrate ectoparasites; insects as disease vectors of plants and animals; mimicry and defensive adaptations; parasitism.

The practical component will examine collecting techniques, identification of adult insects to family level, identification of immature stages and feeding damage. A requirement of the course is the presentation of a well-curated insect collection and attendance at a compulsory residential course.

ENV BIOL 3121 Concepts in Ecology III

3 units - semester 1

2 x 1 hour lectures per week, 7 x 3 hour practicals, multiple day field trip

Assumed Knowledge: ENV BIOL 2502 or ENV BIOL 2003 or equiv

Assessment: Exam, practical assignments

This course addresses advanced ecological concepts, building upon Ecology II, and providing a common anchor to other Ecology courses in Year III. It deals with populations, communities and ecosystems, and examines various approaches to their studies, including experiments and models. It provides both an understanding of theoretical ecology as well as a foundation for ecological applications.

Details of field trip communicated at start of the course.

ENV BIOL 3122 Evolution and Palaeobiology III

3 units - semester 1

2 hour lecture, 3 hour practical per week, 1 day field trip

Assumed Knowledge: ENV BIOL 2501/2001 or equiv

Assessment: Exams, tutorials, practical assignments, field excursion

This course aims to provide advanced understanding of fundamental principles and modern advances in techniques for systematics, evolution and the fossil record, and the application of these to the study of the evolution and conservation of biodiversity. Topics discussed will include: Evolution, phylogeny and evidence; Human evolution; ancient DNA; Evolution of Life History data, adaptations and co-evolution; marine

biogeography, palaeoceanographic transformation and environmental forcing of evolution; stratigraphy, extinction and the origin and diversification of major animal groups; methods for assessing evolutionary relationships, particularly cladistics; molecular approaches to systematics; constructing the tree of life; measuring biodiversity at different scales; phylogenetic approaches to understanding life history and ecology; importance of fossils for understanding relationships and major evolutionary events; bioinformatics; systematics and biogeography.

ENV BIOL 3123 Issues in Evolutionary Biology III

3 units - semester 2

4 - 6 hours project work/seminars per week

Restriction: BSc (Evolutionary Biology)

Assessment: Essays, project assignments

This course comprises advanced level project work and a series of seminars by invited speakers that covers the latest issues as they relate to the two majors in the degree: paleontology/systematics and molecular evolution.

ENV BIOL 3124 Frontiers in Marine Biology III

3 units - semester 1

2 hour lecture, 2 hour tutorial per week

Restriction: BSc (Marine Biology)

Assumed Knowledge: Level I/II BSc (Marine Biology) or equiv

Assessment: Tutorials, assignments

This course is about contemporary frontiers in marine biology, which will be presented by researchers that are actively pushing these boundaries. Each researcher will provide several research examples relating to their particular frontier (lectures and reading material) that will form the basis of lively discussion (tutorials). The exact identity of frontiers change as new issues and government priorities arise, hence topics will change frequently but are likely to include the science and politics of marine protected areas, novel approaches to fisheries biology and management, use of marine parasitologists in improving multi-million dollar aquaculture and fisheries ventures, new possibilities in use of molecular techniques, and the emerging crisis of coastal water pollution locally (South Australia) and globally.

ENV BIOL 3220 Issues in Sustainable Environments III

3 units - semester 2

2 hour seminar/discussion, 3-4 hours project/tutorial per week

Restriction: BSc (Sustainable Environments), BSc (Natural Resources)

Assumed Knowledge: Level I & II BSc (Sust.Env.) or equiv

This course comprises a series of seminars by invited speakers that covers the latest issues as they relate to the three majors in the BSc (Sustainable Environments) program: Conservation and Wildlife Ecology, Land and Water Management and Deep Earth Resources.

ENV BIOL 3221 Research Methods in Marine Biology III

3 units - semester 2

2 hour lecture per week, 4 hour practical per week

Restriction: BSc (Marine Biology)

Assumed Knowledge: Level I/ II BSc (Marine Biology) or equiv

Assessment: Research reports and a poster

This course demonstrates fundamental approaches and specialist techniques required of contemporary investigations in marine biology and ecology. It promotes an awareness of modern research programs of governmental and non-governmental agencies and demonstrates key analytical techniques, many of which are not taught at Australian universities at any undergraduate or postgraduate level. The course combines current thinking (theory) and practical measurement (practice) used to understand natural influences and human domination of top-down processes (e.g. Marine Protected Areas and fishing) and bottom-up processes (e.g. waste water treatment, catchment management) that maintain and disrupt ecosystem function and sustainability. Particular emphasis is placed on temperate coasts for which the Australian population is largest and most dense, coastal-ocean problems most expensive and intense, and career opportunities most diverse and numerous.

HONOURS

ENV BIOL 4000A/B Honours Environmental Biology

24 units - full year

Prerequisite: credit standard in 9 units of Level III courses offered by Environmental Biology or related disciplines, agreement from supervisor appropriate for research project

Assessment: Research thesis, seminar, literature review, research proposal, 2 essays

Interested students should consult the Honours Coordinator during the final year of the degree program. The Honours program normally commences at the beginning of first or second semester

Candidates are expected to study Environmental Biology more deeply in a research exercise and to present the results in a written thesis. In addition to the thesis, students will be assigned essays and a research proposal, all designed to broaden the learning experience relevant to environmental science. There will be emphasis on developing written and oral communication skills that are expected of an environmental scientist.

ENV BIOL 4001A/B Honours Bachelor of Environmental Science (Environmental Biology)

12 units - full year

Prerequisite: credit or higher in at least 2 Level III Environmental Biology or related courses approved by Head of Discipline, agreement from supervisor appropriate for research project

Assessment: Project, average of coursework result

Interested students should consult the Honours Coordinator during the final year of the degree program. The Honours program normally commences at the beginning of first or second semester

Honours Environmental Science (Environmental Biology) students extend their study of Environmental Biology by embarking on a research project that is mutually agreed upon with an appropriate supervisor. The results of this study are presented as a written thesis, incorporating a literature review and a seminar. During the year, students also enrol in 12 units of Level III courses relevant to Environmental Science.

Environmental Studies

HONOURS

ENVT 4401A/B Honours Environmental Studies

24 units - full year

Restriction: B.Environmental Studies (Honours) students only

Prerequisite: Bachelor of Environmental Studies or equivalent

Assessment: 15000-20000 word dissertation; essays/project work for each elective topic totalling 7000-9000 words per topic

Students wishing to take Honours Environmental Studies should consult Honours Coordinator prior to commencing Level II to ensure appropriate course choices are made in preparation for Honours

The course consists of two parts - the first, equivalent to 50% of the course, is a compulsory workshop on research methodology leading to submission of a dissertation. The second part consists of two coursework topics, each equivalent to 25% of the course each studied during a single-semester of lecture/seminars and tutorials/practicals. Details of the Honours coursework topics available each year are given in the Environmental Studies Honours Handbook.

In some circumstances Honours Environmental Studies can be studied part-time over two years or combined with Honours in another discipline.

European Studies

LEVEL I

EUST 1000 Modern Imagination in Europe

3 units - semester 2

3 contact hours per week

Available for Non-Award Study

Assessment: 1200 word essay 30%, journal 10%, participation based on class contribution 10%, class presentation 15%, 2 hour exam 35%

This course introduces students to the expression of the modern condition in major nineteenth- and twentieth-century works of European prose, poetry, and the visual arts. Each of the works/artistic movements is representative, in both its form and content, of the modern predicament. We will explore such themes as

realism, nihilism, absurdism, the boredom and alienation of urban life, fascism, the Holocaust, existentialism and new modes of representation. In the visual arts, we will be looking at French impressionism, German expressionism, cubism and abstractionism, and New Wave cinema. We will be reading classic works such as Camus's *The Outsider*, Flaubert's *Madame Bovary* and Kafka's *The Trial*. In poetry, we will be studying Baudelaire's *Flowers of Evil*, and a selection of Surrealist and Holocaust poems.

ADVANCED LEVEL

EUST 2114 European Film Movements

3 units - semester 2

5 hours per week

Available for Non-Award Study

Prerequisite(s): 12 units Level I Humanities/Social Sciences

Incompatible: EUST 2013/3013

Assessment: 1500 word screening diary 25%, 1000 word tutorial paper 25%, 2500 word essay 50%

This course gives an overview of the principal periods and movements in European Cinema from its early years to the 1960s. Topics to be studied include: Russian Formalism, German Expressionism, French Poetic Realism, Italian Neo-Realism, British Cinema of the 1950s and French Nouvelle Vague. These will be studied through background readings as well as by film analysis that focuses upon a significant film from each period.

HONOURS

EUST 4401A/B Honours European Studies

24 units - full year

Prerequisite: major sequence in European Studies with Level III credit standard, at least full year of a European language

Assessment: 2 x 7000 word seminar papers 25% each and thesis (approx. 15000 words) 50%

A thesis topic would normally be drawn from the central themes explored in European Studies at undergraduate level and would be supervised by a staff member teaching in an area of European Studies. Students also do two seminars (one in each semester) in the area of European Studies.

Food Science & Technology

LEVEL I

FOOD SC 1000RG Introduction to Food Technology

3 units - semester 2

Average 6 hours per week including lectures, tutorials, &/or practicals

Assessment: Written exam, laboratory reports, assignments, report of industry visits

This course provides an overview of the food processing industry at local national and international levels. Emphasis is at the local (South Australian) level and covers many of the key areas of responsibility of a food technologist. A nationally accredited short course - Hygiene for Food Handlers - is included. Food processing techniques, particularly techniques for analysing and preserving food and processing meat, cereals, milk, fruit and vegetables are described. Management operations including total quality management, plant hygiene and sanitation, occupational health, safety and welfare, HACCP, ISO, and legislation are overviewed. The course includes industry tours and guest lectures by industry representatives.

FOOD SC 1001 Consumers, Food and Health

3 units - semester 1

2 hour lecture, 1 hour tutorial per week

Assessment: Assignments, student diary, student led discussion, participation, exam

Overview, social, cultural and economic influences, mass media models, consumers, consumer lifestyles, market segmentation, consumer perceptions of foods, consumers' food concerns, cuisines and population food consumption patterns, the food system, food policies and agencies, food shopping, food labels, biological and social psychological influences on food consumption, appetite mechanisms, satiety, taste aversions. Healthy eating, food composition, dietary guidelines, food groups, functions of principal nutrients, vegetarianism, dietary supplementation, weight control practices, under nutrition, the nutrition transition, obesity and non-communicable disease.

FOOD SC 1002RG Practical Food Production I

3 units - semester 2

1 x 3 hour lecture, 1 x 4 hour practical per week (weeks 3-9 of semester) + 5 x 6 hour practical (5 consecutive days in mid semester break)

Restriction: Bachelor of Food & Nutrition Science

Assumed Knowledge: FOOD SC 1000RG

Assessment: Assignments, oral presentation and exam

This course provides students with the opportunity to manufacture processed food on a large scale under simulated industry conditions. Students will be involved in production runs of one or more of the following foods: cheese, bakery goods, smallgoods, wine and coffee. Students will be expected to implement Good Manufacturing Practices as learned in Introduction to Food Technology and to apply quality management principles. They will also demonstrate an ability to develop food safety systems.

LEVEL II

FOOD SC 2500RG

Food Chemistry II

3 units - semester 2

2 hour lecture, 3 hour practical per week

The chemistry and analysis of food and its components: water, amino acids, peptides and protein, sugars, polysaccharides, lipids, vitamins, minerals. Reactions of food components during processing: Maillard reaction, enzymic browning. Non-microbial contaminants such as heavy metals and pesticides, colour pigments, aroma compounds, sugar and fat replacers.

FOOD SC 2501RG

Food Engineering Principles II

3 units - semester 1

2 hour lecture, 4 hour practical per week

Assumed Knowledge: CHEM ENG 1001

Assessment: Assignment, reports, practical/theory test

Hydronic systems, refrigeration systems, cold storage, psychrometrics, heat loads, heat sterilisation systems, boilers and heat exchange systems, compressed air and vacuum systems, food process engineering principles, corrosion principles, material selection, food processing equipment, programmable controllers, Newtonian and non-Newtonian fluids, food rheology, process mass and energy balances, and safety associated with food engineering systems. Visits will be made to food processing and storage facilities to illustrate the application of food engineering principles.

FOOD SC 2502RG

Food Microbiology II

3 units - semester 2

2 hour lecture, 4 hour practical per week

Assessment: Exam, practical reports, presentation

This course aims to provide instruction in the general principles of food microbiology. It is assumed that students will have received adequate introduction to microbiology per se. The course covers the biology and epidemiology of foodborne microorganisms of public health significance, including bacteria, yeasts, fungi, protozoa and viruses, and food spoilage microorganisms; the microbiology of food preservation and food commodities; fermented and microbial foods; principles and methods for the microbiological examination of foods; micro biological quality control, and quality schemes.

FOOD SC 2503RG

Food Processing Technology II

3 units - semester 1

2 hour lecture, 4 hour practical per week

Assumed Knowledge: FOOD SC 1000RG

Assessment: Exam, practical report, assignment

Food preservation and packaging. Preservation by fermentation, concentration, drying and dehydration and

by chemical agents. Production of a range of foods using these manufacturing techniques and processes. Shelf life and nutritional consequences of preservation. Principles of flexible and rigid packaging of foods. Investigation of packaging types related to use with various food systems and packaging permeability. Passive and active packaging including modified atmosphere packaging and controlled atmosphere storage of foods. Reuse, disposability and printing of packaging. Labelling techniques and legislative requirements for labelling food and beverage products

FOOD SC 2504RG

Sensory Evaluation of Foods II

3 units - semester 2

2 hour lecture, 4 hour practical per week

The role of sensory evaluation in marketing of food and beverages, physiological and psychological factors affecting sensory perception, relationships between sensory properties and product acceptability, measurement of sensory perception, design and conduct of sensory evaluation experiments, difference testing, preference testing, panel selection procedures, taste and aroma profiling, texture profiling, shelf life determination, sensory quality control, product development and optimisation, strategies for developing sensory evaluation programs. A range of food and beverage products will be assessed using the techniques and principles present in the lecture program.

LEVEL III

FOOD SC 3014RG

Food Quality and Regulation III

3 units - semester 1

2 hour lecture, 4 hour practical per week

Assumed Knowledge: FOOD SC 2105RG

The principles of quality assurance, management and total quality management, HACCP (hazard analysis of critical control points) system implementation, flow charts and identification of hazards and critical points, ISO and NATA accreditation. Hygiene and sanitation, including good manufacturing practices, chemistry and application of cleaners and sanitisers, verification of sanitiser action, equipment design to minimise process failure and health risk. Product recall and national and international food legislation including role of FSANZ, Food Standards Code, legislation hierarchy and audit.

FOOD SC 3020AWT/BWT

Research Project B (Food Technology & Management)

12 units - full year

Contact with supervisor by arrangement

Assessment: Thesis, supervisor mark, final presentation

A research project on a food related topic.

FOOD SC 3021RG **Food Product Development III**

3 units - semester 2

2 hour lecture, 4 hour practical per week

Assumed Knowledge: FOOD SC 2105RG

Assessment: To be advised

Product Development: Scale of new product development in market place, concept generation, consumer testing, quality function deployment. Research and Development process. Trends and new techniques in processing, for example extrusion, sous vide, high pressure, electrical and magnetic fields, light pulses, minimal processing, home meal replacements, hurdle technology. Food ingredients and their functions.

FOOD SC 3500RG **Food & Nutrition Science - Industry Placement III**

3 units - semester 1

7 weeks work experience (Part-time employment, Orientation week and 3 day per week for 1st half semester 1)

Prerequisite(s): FOOD SC 2500RG

Assumed Knowledge: AGRIC 2500WT and FOOD SC 2502

Assessment: Business case, daily reflective diary, written report, oral presentation

This course provides students with an opportunity to apply their knowledge and understanding of Food and Nutrition Science in an industry setting. Students gain practical experience of the industry, its management systems and structures providing them with a first hand introduction to a food or nutrition business.

A working understanding of several areas will need to be demonstrated. Hands-on experience of the integration of different aspects of the overall business (eg nutritional composition, HACCP plans, production, marketing, and distribution) and an awareness of occupational health and safety procedures will be gained adding to the understanding of course material studied at levels 1 and 2.

FOOD SC 3502WT **Nutrition III**

3 units - semester 2

1 x 2 hour Lectures, 1 x 1 hour Tutorial, 1 x 2 hour Practical per week

Assumed Knowledge: AGRIC 2500WT

Assessment: Practical Report (s), Assignment, Tutorial Presentation, Written Exam

To provide an overview of the relationship between nutrition research, nutrient reference values and the translation of both of these into government policies (FSANZ) and guidelines aimed at improving the health of a population or subgroup within a population. Critical analysis of scientific literature and lay media nutrition information is an important component of the course. Specific nutrients and food components currently the focus of nutrition research, eg folate and omega 3 fatty acids, are considered. Use of a dietary analysis program to analyse a weighed food record allows comparison of the analysis against current nutrient reference values and

healthy eating guidelines. It also gives students an insight into the advantages and disadvantages of the various methods of collecting dietary intake data.

FOOD SC 3503RG **Food Processing Technology III**

3 units - semester 2

1 x 2 hour lecture, 1 x 4 hour practical per week

Assumed Knowledge: FOOD SC 2503RG

Assessment: Examination, Practical Report, Assignment

This course has an advanced food processing component and overviews the various conventional and emerging non thermal food processing methods available to maximise the nutrition levels in the making of foods that are safe, high quality and with maximum shelf life and convenience. The course explores various advanced methods of food processing technology available in Australia. The course will give students an understanding of the advanced principles of food processing and how to choose a method of preservation in relation to food composition. Occupational health and safety, food safety and food quality aspects of food and beverage processing are an integral component of all coursework.

HONOURS

FOOD SC 4000AWT/BWT **Honours Food Science & Technology**

24 units - full year

40 hours a week

Prerequisite: Credit or higher in 2 relevant Level III courses in the B.Food.Sc.Tech.

Assessment: Thesis, seminars, research proposal; remainder as deemed appropriate to the student's program.

This course comprises a substantial research project of the student's choosing on a topic acceptable to the Discipline of Plant and Food Science, two seminars on that topic, and coursework, essays or other assignments deemed appropriate to the individual student's honours program.

FOOD SC 4001BWT **Honours in Food Science & Technology (TY) Final**

24 units - full year

20 hours per week for 40 weeks over a 2 year period

Prerequisite(s): Credit or higher in relevant Level III courses as approved by the Head of Discipline

Assessment: Thesis, seminars, remainder as deemed appropriate to the student's program

This course comprises a substantial research project of the student's choosing in a topic acceptable to the head of School of Agriculture, Food and Wine, two seminars on that topic, and coursework, essays or other assignments deemed appropriate to the individual student's honours program.

French Studies

LEVEL I

FREN 1002

French IA: Beginners' French

3 units - semester 1

5 contact hours per week

Available for Non-Award Study

Incompatible: not available to students who have obtained more than 14/20 in SACE Stage 2 French (or equiv.)

Assessment: Regular assignments, tests, written exam

This course introduces students to the language and culture of contemporary France. In addition to intensive language training in the four basic skills - listening, speaking, reading and writing - various aspects of French society and culture will be introduced through audio and video extracts and short texts. The emphasis throughout will be on communicative skills, both oral and written.

FREN 1003

French IB: Beginners' French

3 units - semester 2

5 contact hours per week

Available for Non-Award Study

Prerequisite: FREN 1002

Assessment: Regular assignments, tests, written exam

This course continues the intensive language training undertaken in French IA.

FREN 1011

French ISA: Language and Culture

3 units - semester 1

5 contact hours per week

Available for Non-Award Study

Prerequisite: SACE Stage 2 French with scaled score of higher than 14/20 (or equiv)

Assessment: regular tests, language assignments, essays, language exam

This course is designed for students who have studied French at high school to Year 12 level (or equivalent). It consolidates the language skills already acquired and develops reading and research skills in the area of cultural studies. Students examine aspects of French and Francophone culture and society. A lecture series will introduce students to the history of the French language and to the varieties of French spoken around the world today.

FREN 1012

French ISB: Language and Culture

3 units - semester 2

5 contact hours per week

Available for Non-Award Study

Prerequisite: FREN 1011 (or equivalent)

Assessment: Regular tests, language assignments, essays, language exam

This course continues the intensive language training undertaken in French ISA. Students will acquire knowledge of current issues in French society, as well as develop critical and analytic skills to apply to their reading and interpretation of different kinds of texts and other cultural artefacts.

LEVEL II

FREN 2201

French IIA: Language

3 units - semester 1

4 hours per week

Available for Non-Award Study

Prerequisite(s): FREN 1003

Incompatible: FREN 1012

Assessment: regular tests, assignments, language exam

This course builds on and consolidates the language skills acquired in the first year beginners' course. This will involve the development of written language skills - composition, comprehension, translation, grammar - and spoken language skills - speaking, pronunciation, listening.

FREN 2202

French IIB: Language

3 units - semester 2

4 hours per week

Available for Non-Award Study

Prerequisite(s): FREN 2201

Incompatible: FREN 1012 or FREN 2003

Assessment: regular tests, assignments, language exam

This course continues the intensive language training undertaken in French IIA. It similarly aims to develop written language skills - composition, comprehension, translation, grammar - and spoken language skills - speaking, listening, pronunciation.

FREN 2203

French IIA: Culture

3 units - semester 1

3 contact hours per week

Available for Non-Award Study

Prerequisite: FREN 1003

Incompatible: FREN 1012

Assessment: Oral presentation, essay, test

The aim of this course is to develop a deeper understanding and a critical appreciation of France's rich cultural heritage through the study of texts and other cultural artefacts. The course is also designed to develop linguistic skills, taking into account the problems associated with the apprenticeship of reading and analysis in French. Students completing this course will therefore benefit from enhanced reading skills, vocabulary acquisition and writing skills as well as speaking skills. In 2010, the topic for study is Varietes du francais (the history of the French language and its varieties in use throughout the world today).

FREN 2204
French IIB: Culture

3 units - semester 2
3 contact hours per week
Available for Non-Award Study
Prerequisite: FREN 1003
Incompatible: FREN 1012
Assessment: Class presentation, class exercises, test, essay

The aim of this course is to develop a deeper understanding and a critical appreciation of France's rich cultural heritage through the study of texts and other cultural artefacts. The course is also designed to develop linguistic skills, taking into account the problems associated with the apprenticeship of reading and analysis in French. Students completing this course will therefore benefit from enhanced reading skills, vocabulary acquisition and writing skills. In 2010, this course will focus on contemporary French culture and society (La France contemporaine).

FREN 2211
French IISA: Language

3 units - semester 1
3 contact hours per week
Available for Non-Award Study
Prerequisite: FREN 1012
Incompatible: FREN 1003 or FREN 2011
Assessment: Regular tests, assignments, language exam

Language training in spoken and written French builds on the skills and knowledge acquired in first year. The course will include grammar exercises, written expression, oral expression, discourse analysis and translation.

FREN 2212
French IISB: Language

3 units - semester 2
3 contact hours per week
Prerequisite: FREN 2211
Incompatible: FREN 1003, FREN 2201 or FREN 2012
Assessment: Regular tests, assignments, language exam

Language training in spoken and written French builds on the skills and knowledge acquired in French IISA. The course will include grammar exercises, written expression, oral expression, discourse analysis and translation.

FREN 2213
French IISA: Culture

3 units - semester 1
3 contact hours per week
Available for Non-Award Study
Prerequisite: FREN 1012
Incompatible: FREN 1003
Assessment: Class exercises, essays, class presentations

The aim of this course is to develop a deeper understanding and a critical appreciation of France's rich cultural heritage through the study of texts and other cultural artefacts. The course is also designed to

develop linguistic skills, particularly reading and writing skills, but also vocabulary acquisition and speaking skills. In 2010 this course will be devoted to the study of "La Francophonie" (see French Discipline handbook for more details).

FREN 2214
French IISB: Culture

3 units - semester 2
5 contact hours per week
Available for Non-Award Study
Prerequisite(s): FREN 1012
Incompatible: FREN 1003 or FREN 2202
Assessment: class exercises, essays, class presentations, examination

The aim of this course is to develop a deeper understanding and a critical appreciation of France's rich cultural heritage through the study of texts and other cultural artefacts. The course is also designed to develop linguistic skills, particularly reading and writing skills, but also vocabulary acquisition and speaking skills. In 2010 this course will be devoted to the study of French Cinema of the 1970s (see French Discipline handbook for more details).

LEVEL III

FREN 3103WT
Technical French (Oenology)

3 units - semester 2
5 contact hours per week
Restriction: B.Science (Oenology) students only
Assessment: Written and oral assignments, class tests, oral and written exams

This is an intensive French course for beginners, which has been specifically designed for students of oenology. The language component of the course enables students to acquire basic skills in conversation and comprehension, and additional vocabulary lists will be supplied to assist students in acquiring elements of the language of wine culture in France. The reading component will focus on the language of wine production in France and Australia, looking at such topics as winegrowing areas, grape varieties and characteristics, soils and climates, and the wine industry. Students are welcome to suggest areas of interest and documents they wish to study.

FREN 3201
French IIIA: Language

3 units - semester 1
3 contact hours per week
Available for Non-Award Study
Prerequisite: 15 units in French including FREN 2202
Incompatible: FREN 2212 or FREN 3002
Assessment: Regular tests, assignments, language exam

Language training in spoken and written French builds on the skills and knowledge acquired in second year

(beginners' stream). The course will include grammar exercises, written expression, oral expression, discourse analysis and translation.

FREN 3202
French IIIB: Language

3 units - semester 2
3 contact hours per week
Available for Non-Award Study

Prerequisite: FREN 3201
Incompatible: FREN 2212, FREN 3211 or FREN 3003
Assessment: Regular tests, assignments, language exam

Language training in spoken and written French builds on the skills and knowledge acquired in French IIIA. The course will include grammar exercises, written expression, oral expression, discourse analysis and translation.

FREN 3203
French IIIA: Culture

3 units - semester 1
3 contact hours per week
Available for Non-Award Study

Prerequisite: 15 units in French including FREN 2202
Incompatible: FREN 2212
Assessment: Class exercises, essays, class presentations

The aim of this course is to develop a deeper understanding and a critical appreciation of France's rich cultural heritage through the study of texts and other cultural artefacts. The course is also designed to develop linguistic skills, particularly reading and writing skills, but also vocabulary acquisition and speaking skills. This course will be devoted to the study of "La Francophonie" (see French Discipline handbook for more details).

FREN 3204
French IIIB: Culture

3 units - semester 2
4 contact hours per week
Available for Non-Award Study

Prerequisite(s): 15 units in French including FREN 2202
Incompatible: FREN 2212
Assessment: class exercises, essays, class presentations, examination

The aim of this course is to develop a deeper understanding and a critical appreciation of France's rich cultural heritage through the study of texts and other cultural artefacts. The course is also designed to develop linguistic skills, particularly reading and writing skills, but also vocabulary acquisition and speaking skills. This course will be devoted to the study of French Cinema of the 1970s (see French Discipline handbook for more details).

FREN 3211
French IIISA: Language

3 units - semester 1
3 contact hours per week
Available for Non-Award Study

Prerequisite: 15 units in French including FREN 2212
Incompatible: FREN 2202 or FREN 3011
Assessment: Regular tests, assignments, language exam

This course gives tuition in stylistics, advanced grammar and syntax, through regular assignments and class exercises (oral and written). It also seeks to develop research skills for language related questions.

FREN 3212
French IIISB: Language

3 units - semester 2
3 contact hours per week
Available for Non-Award Study

Prerequisite: FREN 3211
Incompatible: FREN 2202 or FREN 3201 and FREN 3012
Assessment: Regular tests, assignments, language exam

This course builds on the work undertaken in French IIISA and gives tuition in stylistics, advanced grammar and syntax, through regular assignments and class exercises (oral and written). It also seeks to develop research skills for language related questions.

FREN 3213
French IIISA: Culture

3 units - semester 1
4 contact hours per week
Available for Non-Award Study

Prerequisite: 15 units in French including FREN 2212 and FREN 2213 or FREN 2214
Incompatible: FREN 2202

Assessment: Participation and oral presentation 20%, 1,000 word journal 20%, 1,500 word essay 30%, exam 30%

The aim of this course is to develop a deeper understanding and a critical appreciation of France's rich cultural heritage through the study of texts and other cultural artefacts. The course is also designed to develop linguistic skills, particularly reading and writing skills, but also vocabulary acquisition and speaking skills. This course will be devoted to Medieval Studies (see French Discipline handbook for more details).

FREN 3214
French IIISB: Culture

3 units - semester 2
3 contact hours per week
Available for Non-Award Study

Prerequisite: 15 units in French including FREN 2212
Incompatible: FREN 2202 or FREN 3201
Assessment: Class exercises, essay, class presentation, exam

The aim of this course is to develop a deeper understanding and a critical appreciation of France's rich cultural heritage through the study of texts and other cultural artefacts. The course is also designed to develop linguistic skills, particularly reading and writing skills, but also vocabulary acquisition and speaking skills. This course will be devoted to the topic: Techniques of Translation (see French Discipline handbook for more details).

HONOURS

FREN 4401A/B

Honours French Studies

24 units - full year

Prerequisite: BA degree, credit average in courses contributing to major in French Studies or equiv. approved by Head of Discipline

Assessment: Continuous assessment in language program 25%, cultural studies 25%, thesis and oral interview 50%

The content of Honours French Studies is as follows: Language - two hours per week in semesters 1 and 2 focusing on literary translations and advanced written and oral skills; Cultural Studies - three hours per week in each semester on a cultural topic (to be negotiated with the Honours coordinator); a 12,000 word thesis in French and an oral interview on the thesis topic. Students enrolling in French Honours from French III (beginners' stream) may choose to write a 15,000 word thesis in English.

In some circumstances Honours in French Studies can be studied part-time over two years or can be combined with Honours in another discipline.

Gender Work & Social Inquiry

LEVEL I

GWSI 1001/1001EX

Social Sciences in Australia

3 units - semester 1

3 contact hours per week

Available for Non-Award Study

Assessment: 500 word short, critical assignment (15%), 2500 word essay (50%), 1000 word critical assignment (20%); tutorial participation (10%), tutorial presentation (5%) or online discussion board (15%) for external students

The social sciences are a group of disciplines which seek to understand the structure of society. Together they offer a range of approaches to investigating social problems and the dynamics of social change. This introductory course provides an overview of the ways that different social science disciplines contribute to an understanding of Australian society. The course utilises certain case studies of topical issues in contemporary Australia to introduce key concepts of: class/socioeconomic status, gender, ethnicity, family, work and location as structuring aspects of society.

GWSI 1003/1003EX

Gender, Work and Society

3 units - semester 2

3 contact hours per week

Available for Non-Award Study

Assessment: 500 word short, critical assignment (10%), 1500 word tutorial paper (20%), 2500 word essay (50%), tutorial presentation (10%), tutorial participation (10%); External studies - 500 word short, critical assignment (10%), 1500 word minor critical paper (20%), 2500 word major paper (40%), online participation (30%)

Gender, Work and Society is designed to develop your knowledge and understanding of work and the ways in which the practices of work- paid and unpaid- is gendered. Women's and men's experiences are different, and have been since time immemorial. The two genders do different jobs in the workplace and in the home, they work different hours in many places, their training, education, skills and rewards are often different. While there are many differences between men, and between women, gender-based, systematic differences also exist. The course considers their origins and explanations. It examines links between broad societal changes and women's and men's changing roles, especially relating to the economy, education, technology, consumerism, individualism, globalisation, reduction in welfare and the changing patterns of family life. Furthermore the course considers likely developments in employment regarding increasing flexibility, privatisation, contracting out and home work. During the semester the course will cover current issues in the Australian workforce that are receiving media attention such as recent debates about the Industrial Relations system, the 'work-life collision' and the issue of paid maternity leave.

GWSI 1004

Introduction to Gender Studies

3 units - semester 1

3 contact hours per week

Available for Non-Award Study

Assessment: 1500 word essay (30%), 2500 word major essay (50%); tutorial presentation (10%), tutorial participation (10%), online discussion board (20%) for external students

Gender is encountered in every aspect of our lives. It informs public debate, legislation, how much money we earn, who dies younger and our exposure to sexual violence. The course examines contemporary gender relations in Australian society, in our every day lives, the school, the workplace, and the home. To what extent can we explain these relations in terms of women's and men's choices and to what extent in terms of masculinities and femininities, laws and institutions, and the distribution of power and resources in Australian society? The ways that ethnicity, 'race' and class modify and give meaning to gender debates in an Australian and international contest will also be a central concern.

ADVANCED LEVEL

GWSI 2020

Social Theory in Action

3 units - semester 1

3 contact hours per week

Prerequisite(s): 12 units level 1 Humanities/Social Sciences

Assessment: 1500 word critical assignment (20%), 3500 word policy critique (50%), group work (30%)

This course introduces students to the ways that social scientists explain (theorise) the social world. Building on courses from earlier years, students will develop their ability to recognise the theoretical positions that underpin

various approaches to social scientific research and will learn how each theoretical position shapes the: specific research questions asked, the methods used to conduct research, the data gathering and analytical techniques, the nature of the research findings and their potential application. The course is structured around linked modules which introduce social scientific concepts and trace their roots within the writing of key social theorists.

GWSI 2021
Media Images and Representation

3 units - semester 2
 3 contact hours per week
 Available for Non-Award Study
 Prerequisite(s): 12 units level 1 Humanities/Social Sciences
 Assessment: 2000 word print advertisement analysis (40%), 2500-3000 word essay (40%), short in-class quizzes (10%), tutorial participation (10%)

Media literacy is one of the most important skills required to work in the contemporary, highly mediated world. Many of us take for granted the intense bombardment of advertising we experience every day, whilst some people resent advertising and others see it as a field in which they aspire to work. Advertising and information genres such as news, the web and emerging media forms represent the world to us and, at the same time give us a chance to represent our own experiences to others. This course studies the interrelationships of image and text in advertising and information genres on a global stage. It draws from a range of theories, analytical perspectives, and critical skills that inform the fields of media and communication studies.

Students will develop and apply key concepts and approaches in contemporary media analysis and cultural studies including discourse theory, semiotics, theories of representation and approaches to audience response. Issues to be addressed include the production of identity in branding, advertising, celebrity and news and other information media. Students will investigate processes of the production and reading of texts, images, and the relationships between them that produce meaning in different ways, for different audiences, in different contexts. Topics will include image and representation with particular reference to gender and race; celebrity and the fan; popular culture and globalisation; reading and decoding magazine advertisements; 'us' and 'them' in the news; mythmaking, stereotypes and resistance; media concentration and ownership; and changing strategies in advertising, branding, news and other informational media production.

GWSI 2021EX
Media Images and Representation

3 units - semester 2
 online
 Available for Non-Award Study
 Prerequisite(s): 12 units level 1 Humanities/Social Sciences
 Assessment: 2000 word print advertisement analysis (30%), 2500-3000 word essay (40%), online contributions to discussion board (20%), online analysis comprehension exercise (10%)

Media literacy is one of the most important skills required to work in the contemporary, highly mediated world. Many of us take for granted the intense bombardment of advertising we experience every day, whilst some people resent advertising and others see it as a field in which they aspire to work. Advertising and information genres such as news, the web and emerging media forms represent the world to us and, at the same time give us a chance to represent our own experiences to others. This course studies the interrelationships of image and text in advertising and information genres on a global stage. It draws from a range of theories, analytical perspectives, and critical skills that inform the fields of media and communication studies.

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GWSI 2101
Fashion, Work and Identity

3 units - semester 1
 3 contact hours per week
 Available for Non-Award Study
 Prerequisite(s): 12 units Level I Humanities/Social Sciences
 Assumed Knowledge: For international students English language competency to IELTS level 6 advisable
 Incompatible: GWSI 2012/3012
 Assessment: 2500-3000 word essay (45%), 2000-2500 word applied research project (40%), formative research tasks and tutorial participation (15%)

Fashion work and identity employs an interdisciplinary approach to the study of the fashion drawing from labour, gender, and cultural studies perspectives. Various perspectives on the relations of work in the fashion industry - in both the first and developing worlds - will be explored. Issues covered may include: the decline of the Australian textile industries; work in the fashion/modelling industries, including outworkers and guest workers; the rise of maquiladoras in the third world; together with an examination of consumer, labour and community campaigns against sweatshops and the manufacturing processes of specific manufacturers (such as Nike) in relation to corporate social responsibility. The course also covers issues to do with the promotion and consumption of fashion including through magazines, advertising campaigns and catwalk events; various

ethical consumption choices made by consumers; the pleasures and dilemmas of self-presentation and identity construction through clothing in various contexts such as in the workplace or when socialising.

Students will develop critical research and analytical methods informed by cultural, social science and gender studies.

GWSI 2103 **Social Policy and Citizenship**

3 units - semester 2

3 contact hours per week

Prerequisite(s): 12 units Level I Humanities/Social Sciences

Incompatible: GWSI 2016/3016

Assessment: 2000 word essay (40%), 3000 word research project (50%), tutorial participation (10%)

This course explores the social and historical context of understandings of 'the body', gender and health. In particular it investigates the role that the concept of biology and biological difference plays in the construction of gender, and of health/illness. The course presents a range of understandings of embodiment and their relationship to gender. Topics will include the exploration of changing understandings of reproduction, the immune system, heredity and psychosomosis and in doing so will focus on a number of topical health issues such as, infertility, impotence, cancer, obesity, and anxiety disorders. The course complements studies in public health, psychology and social policy. It draws from the disciplines of sociology, anthropology and the history and philosophy of science. It develops qualitative social research skills as an applied social science course.

GWSI 2110 **Social Research**

3 units - semester 2

3 contact hours per week

Prerequisite(s): 12 units Level I Humanities/Social Sciences

Incompatible: GWSI 2015/3015

Assessment: 1500 word short, critical assignment (20%), 1000 word policy analysis (15%), 3000 word individual research project (45%), tutorial participation and in-class group activities (20%)

The aim of Social Research is to develop students' knowledge and understanding of research—how and why it is done - and to expose students to different theoretical perspectives and methodologies employed by researchers in conducting social research. Students will learn new skills including how to formulate a research question, how to design a study, how to obtain and interpret information and to present findings. Students will gain experience in developing and conducting a survey, interview and participant observation, focus groups, content analysis and discourse analysis. Students will also be taught about ethical considerations in social research as well as how such skills are increasingly and widely applicable to the new world of work.

HONOURS

GWSI 4401A/B **Honours Gender, Work and Social Inquiry**

24 units - full year

Prerequisite: UG degree, minimum credit average in courses contributing to major in Gender, Work and Social Inquiry, or equiv. approved by the Discipline

Assessment: 2 coursework topics with written work of approx. 6,500-7,500 words 25% each, 15,000-20,000 word thesis 50%

Students wishing to take Honours in Gender, Work and Social Inquiry should consult the Honours Coordinator prior to commencing Advanced level studies to ensure appropriate course choices are made in preparation for Honours.

The Gender, Work and Social Inquiry Honours program consists of two seminar courses and an Honours thesis of 15,000-20,000 words. A list of Honours seminar courses is available from the Honours Coordinator. We encourage students who are eligible for honours in more than one discipline to consider a joint Honours program with the approval of the Heads of Discipline on advice from their respective Honours Coordinators.

In some circumstances Honours in Gender, Work and Social Inquiry can be studied part-time over two years.

General Practice

LEVEL II

GEN PRAC 2000 **Indigenous Health II**

3 units - semester 1 or 2

3 hour session per week

Restriction: B. Health Sciences & B. Medicine & B. Surgery students only

Assessment: Oral presentation 10%, written tutorial assignment 30%, group presentation 10%, final essay assignment 50%

This course aims to introduce students to an analysis of Indigenous health that draws on inter-disciplinary theoretical frameworks from the social sciences and humanities, including reference to frameworks developed by Indigenous social scientists, writers and artists. Students will explore historical, social and cultural contexts and their application to an analysis of particular Indigenous health problems. They will also gain an understanding of issues connected to identity and cultural diversity as they relate to developments in the relationship between the health professional and the indigenous subject. Furthermore, students will complete the elective with an increased understanding of some of the underlying historical, social and cultural issues, and their relationship to health and wellbeing as defined by Indigenous people.

This course includes a field trip within South Australia, during which student will interact with local Indigenous people, be exposed to Indigenous art, music and culture, and visit Indigenous health services.

HONOURS

GEN PRAC 4000AHO/BHO Honours Primary Health Care

24 units - full year

Restriction: B.Med.Sc. students, appropriately qualified B.Hlth.Sc. students, or permission of Head of Department

Assessment: To be advised at start of year

Students requiring further information concerning syllabuses and work required for the Honours degree of Bachelor of Medical Science are advised to consult the Head of the appropriate department as early as possible.

GEN PRAC 4100AHO/BHO Honours Primary Health Care (Two Year) Final

24 units - full year

Restriction: BMSc students or appropriately qualified BHSc students or permission of the Head of Discipline

Assessment: To be advised at start of year

Students requiring further information concerning syllabuses and work required for the Bachelor of Medical Science (Honours) or Bachelor of Health Science (Honours) are advised to consult the Head of the appropriate department as early as possible.

Genetics

LEVEL II

GENETICS 2107 Genetics IIA (Med Surg)

3 units - semester 1

2 x 1 hour lectures, 2 hour tutorial per week

Restriction: Bachelor of Medicine and Surgery

Assessment: Exam, tutorial assessment

This course aims to provide a broad understanding of some of the foundation concepts of genetics. We begin with examining different patterns of inheritance and the nature of linkage and genetic recombination, move onto discussing the nature of mutations, their use in analysis of biological processes, and the connections between genotype and phenotype. Other topics include bacterial genetics and regulation of gene expression in prokaryotes and eukaryotes.

GENETICS 2510 Genetics IIA: Foundation of Genetics

3 units - semester 1

2 x 1 hour lectures, 1 x 2 hour tutorial per week, 1 x 4 hour practical per fortnight

Available for Non-Award Study

Prerequisite(s): BIOLOGY 1101 and BIOLOGY 1201 or BIOLOGY 1202 - Students who enrolled in BIOLOGY 1101 only should contact the course coordinator to request permission to enrol

Incompatible: GENETICS 2102 and GENETICS 2511

Assessment: Exam, tutorial and practical component assessment

Genetics IIA aims to provide a broad understanding of some of the foundation concepts of genetics. We begin with examining different patterns of inheritance and the nature of genetic linkage and recombination, and discuss mutations and the connection between genotype and phenotype. Further topics include the regulation of gene expression in prokaryotes and eukaryotes.

The practical component for this course draws from the MBS Prac A, Prac B and Prac C series. Refer to Current Students Online Enrolment information at www.sciences.adelaide.edu.au for information about enrolling in these practicals.

GENETICS 2511 Genetics IIA: (Biomedical Science)

3 units - semester 1

2 x 1 hour lectures, 2 hour tutorial per week, 4 hour practical per fortnight

Restriction: BSc (Biomedical Science)

Prerequisite: BIOLOGY 1101 and BIOLOGY 1201

Incompatible: GENETICS 2510

Assessment: Exam, tutorial and practical component assessment

Genetics IIA (Biomed.) has the same lecture program as Genetics IIA: Foundation of Genetics. It aims to provide a broad understanding of some of the foundation concepts of genetics. We begin with examining different patterns of inheritance and the nature of genetic linkage and recombination, and discuss mutations and the connection between genotype and phenotype. Further topics include the regulation of gene expression in prokaryotes and eukaryotes.

The practical component for this course draws from the MBS Prac A, Prac B and Prac C series. Refer to Current Students Online Enrolment information at www.sciences.adelaide.edu.au for information about enrolling in these practicals.

GENETICS 2520 Genetics IIB: Function and Diversity of Genomes

3 units - semester 2

2 x 1 hour lectures, 2 hour tutorial per week, 4 hour practical per fortnight

Available for Non-Award Study

Prerequisite: BIOLOGY 1101 and BIOLOGY 1201 or BIOLOGY 1202. Students who enrolled in BIOLOGY 1101 only should contact the course coordinator to request permission to enrol

Assumed Knowledge: GENETICS 2510

Incompatible: GENETICS 2202 and GENETICS 2521

Assessment: Exam, tutorial and practical component assessment

Genetics IIB aims to build an appreciation of the power of genetic analysis. Building on the foundation concepts developed in Genetics IIA, topics include concepts in human genetics and genetic dissection of developmental processes. Genetics IIB also provides a foundation to modern genetics analysis of evolutionary processes, including the genetics of populations.

The practical component for this course draws from the MBS Prac A, Prac B and Prac C series. Refer to Current Students Online Enrolment information at www.sciences.adelaide.edu.au for information about enrolling in these practicals.

GENETICS 2521

Genetics IIB: (Biomedical Science)

3 units - semester 2

2 x 1 hour lectures, 2 hour workshop, 2 hour tutorial per week

Restriction: BSc (Biomedical Science)

Prerequisite: BIOLOGY 1101 and BIOLOGY 1201 or BIOLOGY 1202

Assumed Knowledge: GENETICS 2511

Incompatible: GENETICS 2520

Assessment: Exam, tutorial and workshop component assessment

Genetics IIB (Biomed.) has the same lecture program as Genetics IIB: Function and Diversity of Genomes. It aims to build an appreciation of the power of genetic analysis. Building on the foundation concepts developed in Genetics IIA, topics include concepts in human genetics and genetic dissection of developmental processes. Genetics IIB also provides a foundation to modern genetics analysis of evolutionary processes, including the genetics of populations.

The workshop component is unique to Genetics IIB (Biomed.) and focusses on combining researching the scientific literature with both written and oral communication skills. The mix of individual and group assignments research the cloning of the gene causing particular human genetic diseases.

LEVEL III

GENETICS 3110

Advanced Molecular Biology IIIA (Genetics)

6 units - semester 1

3 x 1 hour lectures per week, 1 hour tutorial & 3 x 4 hour practicals per fortnight

Restriction: BSc (Molecular Biology)

Prerequisite(s): BIOCHEM 2510 & 2520 (2102/2202) and GENETICS 2510 & 2520 (2102/2202)

Incompatible: BIOCHEM 3000 & 3125, GENETICS 3111

Assessment: Written exam on lecture material, written & oral reports on practicals and tutorials

This course combines lectures from GENETICS 3111 with practical exercises and/or laboratory placements in professional research laboratories. It includes a special set of tutorial/Problem Based Learning (PBL) exercises, not offered in any other course, which are designed to provide students with a perspective of how cutting-edge molecular biology principles and techniques are applied to major research questions. The PBL segment of course will include aspects of biochemistry, genetics, microbiology/immunology and chemistry. This course will illustrate that cross-disciplinary approaches are essential in modern research.

GENETICS 3111

Genes, Genomes and Molecular Evolution III

6 units - semester 1

3 x 1 hour lectures per week, 1 hour tutorial & 3 x 4 hour practicals per fortnight

Available for Non-Award Study

Prerequisite: GENETICS 2510 and GENETICS 2520 or Equiv

Incompatible: GENETICS 3110

Assessment: Exam, practical component, written reports

The DNA molecules that comprise the informational basis of inheritance in living organisms are collectively referred to as the genome. In this course the organisation, origin and mechanisms of change of prokaryotic and eukaryotic genomes are explored using cytogenetic and molecular genetic analyses. Topics include - structure and function of genomes and chromosomes; chromosomes in disease; genomics; genome evolution; interactions between nuclear, mitochondrial and chloroplast genomes; mechanisms for the generation and maintenance of diversity in eukaryotes; the roles of natural selection and chance as drivers of molecular evolution; molecular phylogeny.

GENETICS 3210

Advanced Molecular Biology IIIB (Genetics)

6 units - semester 2

6 x 1 hour lectures, 1 hour tutorial, 3 x 4 hour practicals per fortnight

Restriction: BSc (Molecular Biology)

Prerequisite: BIOCHEM 2510, BIOCHEM 2520, GENETICS 2102 and GENETICS 2202

Assumed Knowledge: GENETICS 3110

Incompatible: BIOCHEM 3225 and GENETICS 3006

Assessment: Written exam on lecture material, written and oral reports on practicals and tutorials

This course combines lectures from GENETICS 3211 Gene Expression and Human & Development Genetics with practical exercises and/or laboratory placements in professional research laboratories. It includes a special set of tutorial/Problem Based Learning (PBL) exercises, not offered in any other course, which are designed to provide students with a perspective of how cutting edge molecular biology principles and techniques are applied to major research questions. The PBL segment of course will include aspects of biochemistry, genetics, microbiology/immunology and chemistry. This course will illustrate that cross-disciplinary approaches are essential in modern research.

GENETICS 3211

Gene Expression & Human Developmental Genetics III

6 units - semester 2

6 x 1 hour lectures, 1 hour tutorial, 3 x 4 hour practicals per fortnight

Available for Non-Award Study

Prerequisite: GENETICS 2510 and GENETICS 2520 or Equiv

Assumed Knowledge: GENETICS 3111

Incompatible: GENETICS 3210

Assessment: Exam, practical component, written reports

This advanced genetics course examines the diverse molecular mechanisms that control the expression of genes in prokaryotes and eukaryotes. It continues with a description of the human genome and a description of how genes are regulated during development. Topics include the regulation of gene expression; epigenetic events; the genetic and epigenetic basis of human disease (including cancer); neurogenetics; gene therapy; genetic control of development.

GENETICS 3212 **Gene Expression & Hum Devel Genetics (Biomed) III**

6 units - semester 2

6 x 1 hour lectures, 1 hour tutorial, 3 x 4 hour practicals per fortnight

Restriction: BSc (Biomedical Science)

Prerequisite: GENETICS 2511 and GENETICS 2521 or Equiv

Incompatible: GENETICS 3211

Assessment: Exam, reports of practical component

This advanced genetics course examines the diverse molecular mechanisms that control the expression of genes in prokaryotes and eukaryotes. It continues with a description of the human genome and a description of how genes are regulated during development. Topics include - the regulation of gene expression; epigenetic events; the genetic and epigenetic basis of human disease (including cancer); neurogenetics; gene therapy; genetic control of development.

Subject to availability, the practical component of this course is a placement within a genetic research laboratory which will be arranged by the course convenor.

HONOURS

GENETICS 4000A/B **Honours Genetics**

24 units - full year

Prerequisite: Satisfactory performance in appropriate Level III courses offered by School of Molecular & Biomedical Science - students from other departments/institutions who have passed suitable Level III courses may be considered

Assessment: Details available from School

Intending Honours candidates should consult the Head of Genetics during the final year of the B.Sc.

Candidates are required to give their full attendance for one academic year to a program of study. Each candidate will carry out a research investigation under the supervision of a member of staff. The program will include participation in seminars and discussions on advanced topics, essay writing and a research proposal. Candidates will be required to present the results of their research work in written form.

Geographical & Environmental Studies

LEVEL I

GEST 1001 **Globalisation, Justice and a Crowded Planet**

3 units - semester 2

3 contact hours per week, fieldwork

Available for Non-Award Study

Assessment: tutorial participation and exercises 20%, workshops 20%, essay 20%, exam 40% - total approx 4500 words

This course examines different ways of conceptualising globalisation and investigates the precise nature of local-global relations. Students will be introduced to the political, economic and cultural processes of globalisation and, drawing on local and international case studies, they will consider the social and environmental consequences of these processes for people living in different locations. In particular, the course investigates whether and how processes of globalisation operate to create, maintain and deepen inequality, poverty and injustice amongst individuals, groups, regions and nations. The course also explores population growth and migratory shifts and considers the role that these demographic changes have in broader processes of globalisation.

GEST 1002 **Footprints on a Fragile Planet**

3 units - semester 1

3 contact hours per week, fieldwork

Available for Non-Award Study

Assessment: Fieldwork, tutorial and workshop exercises 30%, essay 30%, exam 30%, class participation 10% - total approx 4500 words

This course examines the heavy footprint humans have placed on Planet Earth. We address, in turn, the main components of the planet and examine the fundamental, natural processes within each. With this grounding we then superimpose the impact of indigenous peoples, and then the excesses of post-industrial humanity, to reveal the consequences of the activities of modern society.

Firstly we review the processes that have led to the configuration of the Planet's continents and then the means by which humans have colonised every corner. We then focus on how the unwise use of natural resources in both the developed and developing nations has resulted in loss of fertile soil and driven an expansion of desertic conditions. We then examine global climate processes and changes humans have made to climates and the atmosphere upon which we rely. Turning to the water cycle, we focus on how the crucial resource of water has been degraded. Finally, the complexities of natural biota and communities are examined with a focus on biodiversity, invasive species, fire and forest management, and the importance of wetlands.

GEST 1003 Economy, Environment and Place

3 units - semester 2

3 contact hours per week

Restriction: Not available to B Economics, B Finance or B Commerce single-degree students

Available for Non-Award Study

Incompatible: GEST 1003 Thinking Economically

Assessment: essay 40%, tutorial participation and exercises 10%, end-of-semester exam 50%

This course is an introduction to economic principles and thoughts with an application to contemporary environmental, social, and geographical issues. The course first introduces basic economic concepts such as opportunity cost, marginal analysis, time preference, and economic growth and stability. The course then demonstrates the application of the economic decision-making principles to public issues. The course presents the mainstream economic way of thinking from philosophical and ethical perspectives and also considers ecological approaches to economic development. Apart from academic resources, newspapers, novels, movies and dramas are used to communicate the subject matter.

GEST 1004 Population and Environment in Australia

3 units - semester 1

3 contact hours per week

Available for Non-Award Study

Assessment: 500 word tutorial paper 15%, tutorial participation 10%, 2,000 word essay 35%, exam 40%

Population and Environment tend to be treated quite separately in Australia yet there are strong and important two-way relationships between them. This course focuses on these interactions and explores their implications for Australia's future. The course begins with a consideration of the theoretical linkages between population and environment and some international dimensions of the relationship before focusing specifically on the Australian context. The contemporary dynamics of population growth, composition and spatial distribution are examined and analysed and the role environmental factors have had in shaping them is explored. Equally too, the impact of population on environment is examined. The constraints that environmental factors, especially water, have placed on the development of the Australian population are investigated. A particular focus is the changing spatial distribution of the population with issues like urbanisation, 'sea change' and rural depopulation and their inter-relationship with the environment being explored. An important focus is on internal and international migration's influence in changing the population size, structure and distribution and how it affects, and is affected by, the environment. Indigenous Australians and their special relationship with the environment is discussed separately. The course then focuses on the issue of climate change and how this is likely to influence Australia's population. There is a strong focus on policy in the latter part of the course and existing policies at national, state and local levels which impinge upon the population-environment relationship are examined. The necessity for developing

policies which integrate demographic, social and economic concerns with environment considerations is stressed.

ADVANCED LEVEL

GEST 2029 Introductory Geographic Information Systems

3 units - semester 1

3 contact hours per week

Prerequisite: 12 units Level I Humanities/Social Sciences or other Faculty

Incompatible: GEST 2022/3022

Assessment: Practical report and assignments 60%, exam 40%

This course provides an introduction to the theory and practice of geographic information systems (GIS). What is geographic data? What is GIS? How is GIS applied in the study of real world issues? This course will introduce some of the basic concepts of GIS, input of data, storage and management of data, modelling geographic data and output from GIS. Concepts such as how to model the complex real world in a computer and the difference between data and geographic data are covered. Lectures cover the basics of GIS, vector and raster data models, geographic data analysis, visualisation techniques and geographic data overlay. Importantly, the focus of this course is in the application of GIS to solving real world problems using examples from environmental issues. The practical sessions build basic skills in GIS such as adding data, visualising data, analysing and modelling data and outputting data using data and examples from the above subject areas.

GEST 2032 Social Science Techniques

3 units - semester 1

2 lectures and 1 workshop per week

Prerequisite: 12 units Level I Humanities/Social Sciences or other Faculty

Incompatible: SOCI 2002 and GEST 2100

Assessment: Workshop participation and exercises, 3 modules of 1200 words each 60%, end-of-semester exam, 3 hour exam 40%

The course aims to provide students with a perspective on the role of social sciences within contemporary society, especially in Australia, and teach a number of basic skills which are expected of professional social scientists in the contemporary world. These skills are an important acquisition for students, whether they seek to gain employment in the public and private sectors or to proceed to higher level research within their chosen social discipline. Students of this course should emerge from it with a sound background in the main sources of social science information and data available in Australia, and the major methods of analysing information from these sources. Computer workshops provide skills in analysis. No prior background or knowledge in computing, mathematics or statistics is assumed. The aim is to teach students a range of techniques of analysis and how to interpret the results.

GEST 2038 Population and Health

3 units - semester 2

2 lectures and 1 tutorial per week

Available for Non-Award Study

Prerequisite(s): 12 units Level I Humanities/Social Sciences or other Faculty

Assessment: tutorial participation 10%, tutorial paper and presentation 20%, essay 30%, exam 40%

This course is aimed at introducing students to geographical and demographic perspectives in the study of health. It is concerned with providing students with the empirical knowledge, theoretical background and analytical studies to understand the linkages between the distribution and determinants of health related states and environment in populations. Such analyses involve both the examination of variations between different types of groups, socio-economic, ethnic, etc., and between different spatial areas with differing environmental characteristics and problems. There will be a particular focus on migration and health. There will also be an emphasis on developing applied skills so that students are familiar with data sources required to study health and environment in populations as well as with the major techniques involved. In particular, students will learn how new technologies in geographical information systems can be used to analyse the spatial patterns of disease and health, the geographical spread of diseases and in planning the allocation of health resources and location of health services. While there is a focus on the Australian situation in the course students will also be introduced to some of the major population and health issues in Asia. There will not only be an emphasis on examination of health and disease patterns in populations but also on planning the interventions needed to address health problems.

GEST 2039 Environmental Management

3 units - semester 2

3 contact hours per week

Prerequisite(s): 12 units Level I Humanities/Social Sciences or other Faculty

Incompatible: GEST 2002/3002

Assessment: tutorial participation and exercises 20%, 2,000 word essay 40%, exam 40%

The course will provide a critical survey of the contemporary field of environmental policy, planning and management in the Australian and international contexts. The course is centrally concerned with understanding deliberate efforts to translate environmental knowledge into action in order to achieve particular outcomes in the way landscapes, societies and/or natural ecosystems are used and managed. It will also consider how the objectives for land and resource use are shaped, fashioned and contested in democratic and non-democratic settings. The course will introduce students to the dominant management models that have been applied historically. This work will set the scene for an analysis of contemporary approaches to environmental policy making,

planning and management. The course will critically examine contemporary thinking on these environmental themes including: sustainable use practices, political-ecology, decentralised environmental management, NGO and community-based approaches, social learning, and regional and urban planning. A feature of the course's examination of contemporary approaches will be in-depth critical analyses of prominent cases of environmental management, including Regional Forest Agreements and the Murray Darling Basin Authority in the Australian context, and the emerging international environmental challenges for climate change adaptation, agro-ecosystems, biodiversity conservation and megacities.

GEST 2040 Environmental Change

3 units - semester 2

3 contact hours per week, fieldwork

Available for Non-Award Study

Prerequisite(s): 12 units Level I Humanities/Social Sciences or other Faculty

Incompatible: GEST 2018/3018

Assessment: 2,000 word field trip report or essay (40%), 2-hour exam (40%), workshop participation and exercise (20%)

This course will introduce students to the global environmental fluctuations of the last two million years as context to recent human-induced change. Our focus is on the interactions between the geological, biological and hydrological processes that have given rise to the landscapes and ecosystems seen today. We then explore the affects of accelerating human impact on the environment and consider extent that the long-term record is useful in understanding recent change and predicting future environmental change. Topics include natural cycles of climate change, sea-level fluctuations, the environmental impact of indigenous peoples, hydrological changes and the waxing and waning of vegetation communities. The past and future impacts of greenhouse warming, pollution, deforestation, river regulation and abstraction and other recent perturbations are then examined in relation to natural rates and magnitudes of change.

GEST 2043 Introduction to Environmental Impact Assessment

3 units - semester 2

3 contact hours per week

Available for Non-Award Study

Prerequisite(s): 12 units Level I Humanities/Social Sciences/Sciences

Incompatible: GEST 2009/3009

Assessment: seminar participation 10%, seminar presentations (group work) 30%, essay 30%, take home exam 30%

This course introduces the methodology of environmental impact assessment (EIA) as a vital tool for sound environmental decision-making. It provides an introduction to the concepts, methods, issues and various stages of the EIA process. The various stages of the EIA process, such as screening, scoping, EIA document preparation, public involvement, review and assessment, monitoring and auditing, appeal rights and decision-making are

examined. The course mainly focuses on EIA in Australia and in particular draws on case studies from South Australia, but also includes other EIA systems of other countries. The variability of EIA systems within Australia and other countries is highlighted.

GEST 2044 **Principles of Environmental Economics**

3 units - semester 1

3 hours per week

Prerequisite(s): 12 units of level 1 courses from any Faculty

Assessment: Tutorial participation and exercises (10%), 3000 word essay (40%), 2 hour exam (50%)

This course is centred around economic policy responses to contemporary local and global environmental issues. The course, intended as an introduction to environmental economics, reviews conventional command-and-control strategies to solve environmental problems and examines an array of pollution control alternatives that are based on market incentives. The primary objective of the course is to enhance understanding of the neo-classical economic concepts, principles and approaches embedded in environmental policy instruments, including the carbon pollution reduction scheme and pollution taxes in Australia. The course also considers ecological approaches to economic development.

GEST 2045 **Governance and Sustainable Development**

3 units - semester 1

6 hours per fortnight

Prerequisite(s): 12 units of level 1 courses from any Faculty

Assessment: 2500 word essay (30%), 1500 word MyUni discussion forum portfolio (30%), case study presentation: policy analysis (30%), seminar participation (10%)

This course explores the crucial link between governance and sustainable development. Sustainable development has emerged as the global norm and dominant approach to reconcile the goals of economic development, environmental quality and social equity. Governance can be understood as the rules, mechanisms, processes and institutions through which important decisions are made and implemented. The course discusses the contested nature of both these concepts, and investigates how both are combined in local, national, regional and international policy-making about environment and development challenges such as poverty, global inequalities, loss of biodiversity, deterioration of global eco-systems, and the threat of climate change to human societies.

Contemporary ecological problems and crises are predominantly a result of ineffective governance. Thus the main purpose of the course is to examine the ways in which state, private sector and civil society interact on national and international levels to address environment and development issues through better governance models and frameworks of sustainability. Major issues and concepts covered in the course include: policy making and policy analysis; 'good governance' and international development; urban governance and sustainability; reflexive governance and learning; gender

and governance; governance of ecological conflicts and disasters; e-governance and sustainability; and global ecological governance in particular in regard to climate change. These issues are explored through case studies from Australia and various other regions of the world.

GEST 2046 **Geographies of Food and Agriculture**

3 units - semester 1

3 hours per week

Prerequisite(s): 12 units of level 1 courses from any Faculty

Assumed Knowledge: A general knowledge of environmental systems and social geography theory will be assumed

Assessment: Workshop attendance (5%), 4000 word essay (60%), oral presentation (5%), 2 hour exam (30%)

The course will examine the geographical components of agricultural development globally in the historic, modern and post-modern eras. Case studies will be drawn from Australian and international contexts to examine humanity's changing relationship with production, supply chain, ecological, economic and socio-cultural systems fundamental to the provision of food. The roles of food and agriculture in the context of societal development will also be discussed. The types of issues that will be introduced include: pre-modern or traditional agriculture; the origin and development of agricultural biodiversity; the relationship between food supply and cultural identity; the agrarian transition/Green revolution; modernisation and the creation of marginalisation; environmental management; new technological development and application; famine; the political-ecologies of agriculture; the emerging alternative roles of agriculture to food production; and the future roles of alternative systems based on diversity and location.

Students will be guided through the development of an in-depth critique of the historical process of agricultural development in a region of their choice. The outcomes of these investigations will be presented in written form as an essay and in oral form as a presentation to their peers. A final examination will allow students to present on their understanding of the course's major themes.

GEST 2048 **Living with Uncertainty: Adapting to Global Change**

3 units - winter semester

12 hours per week for 3 weeks

Available for Non-Award Study

Assessment: 2500 word chart (50%), 2500 word report (50%)

Humans have now become the single biggest agent of environmental change on this planet far outweighing the impact of natural hazards such as volcanic eruptions, earthquakes, tsunamis and cyclones. Our ancestors were constantly living with uncertainty in the sense that they were at the mercy of such extreme events and on several occasions barely survived. Faced with events over which they had little or no control, human societies adapted, migrated or became extinct. These lessons hold true today, with one fundamental difference. There are far more people on this earth today than ever before and our activities are causing seemingly irreversible changes to

the land. Today we are witnessing rapid changes to our rivers, glaciers and oceans, our forests and grasslands, our soils, and even the air we breathe. The outcomes of these changes are often hard to predict. Once again, we are living with uncertainty, and must needs adapt or face the consequences.

GEST 2200 **Environmental Policy and Management Internship**

6 units - semester 2

3 contact hours per week (except during main work experience)

Restriction: B Env Policy & Mgt and B Env Studies students only

Quota will apply

Prerequisite(s): 12 units advanced level Geographical and Environmental Studies courses with minimum credit level pass. GEST 2039 (GEST 2002 prior to 2009) with minimum credit level pass.

Assessment: seminar participation, presentation 20%, 6000 word project report 80%

This course allows students to spend up to two days per week during the semester or, undertake a two week block of concentrated interaction, working as an intern with a community, business/industry or government agency engaged in environmental policy, planning and management activities, or with an individual or group engaged in environmental research. During their internships students can choose or will be assigned specific projects by their 'sponsors' and will prepare reports on the methodology and results of their projects. The course coordinator will assist students to identify suitable sponsors and projects and will monitor student progress in weekly seminars. Students are expected to choose their sponsors and projects in consultation with the course coordinator before the beginning of the semester, as admission to the course will depend on approval of the sponsor and project by the Course Coordinator.

HONOURS

GEST 4401A/B **Honours Geographical & Environmental Policy & Management**

24 units - full year

Prerequisite(s): UG degree, credit average in courses contributing to major in Geography, Environmental Studies or equiv approved by Head of Discipline

Assessment: 15000-20000 word dissertation; essays/project work

Students wishing to take Honours Geographical & Environmental Policy & Management should consult the Honours Coordinator prior to commencing Advanced Level studies

The course consists of two parts: a coursework component and a research component, each worth 50%. In the coursework component, students complete a compulsory unit on research methods and theory. Students can choose from a range of electives which reflect more specialist areas of study in Geography, Population and Environment. In the research component, students conduct a research project under the supervision of a staff member culminating in a research dissertation.

Geology

LEVEL I

GEOLOGY 1100 **Earth's Interior I**

3 units - semester 2

3 x 1 hour lectures, 3 hour practical per week, field work

Incompatible: C&ENVEENG 1007, GEOLOGY 1104, GEOLOGY 2005 and PETROENG 1003

Assessment: Written exams, assignments, practical work

This course provides a global perspective of Planet Earth and the dynamic processes that have modified it over its 4 billion-year history. We explore Earth's place in space and time and examine the operation of its internal chemical and physical processes. Fundamental concepts are developed: the formation and structure of the Earth; the driving forces of plate tectonics and continental drift; earthquakes and volcanoes, the formation and identification of geological materials, mountain building and rock deformation; the development of the geologic timescale. Emphasis is given to the geological evolution of Australia.

GEOLOGY 1103 **Earth Systems I**

3 units - semester 1

3 x 1 hour lectures, 3 hour practical per week, field work

Incompatible: GEOLOGY 1200

Assessment: Written exams, assignments, practical work

This course draws from all fields of geoscience to explore the evolution of Planet Earth. Topics include the evolution of the solar system and the solid earth, the concept of deep time; the Plate Tectonic theory, in which the Earth's plates are colliding, generating earthquakes, volcanoes and mountain belts; the evolution of Earth's atmosphere and oceans; the Earth's climate, including the Earth in space, hydrologic cycle, the carbon cycle and the 'greenhouse effect'; the development and future of our unique Australian landscape and resources.

GEOLOGY 1104 **Geology for Engineers I**

3 units - semester 1

3 x 1 hour lectures, 3 hour practical per week

Restriction: BE (Civil & Struct), BE (Civil & Env), BE (Mining)

Incompatible: GEOLOGY 1100

Assessment: Theory exam, practical work (in class)

This is an introductory course on mineralogy, the major rock groups, plate tectonics and the major geological processes, geophysics, structural geology, the fundamentals of ore deposit geology and metallic and non-metallic exploration. The geology of energy deposits (coal, oil shale, petroleum, hot dry rock and uranium) and environmental matters associated with mining will also be dealt with. There will be laboratory-based

practicals introducing identification of minerals and rocks, geophysical site investigations, and practicals based on case studies.

LEVEL II

GEOLOGY 2500 Sedimentary Geology II

3 units - semester 1

2 x 1 hour lectures per week, 10 x 4 hour practicals per semester, 8 hour field excursion

Available for Non-Award Study

Assumed Knowledge: GEOLOGY 1100 or GEOLOGY 1103

Assessment: Exam, practicals, field report

Sediments, both ancient and recent, cover much of the earth's surface. Sediments are immensely important economically, as the host of petroleum and mineral deposits, and to the environment, as aquifers, sinks for contaminants, and the home to a large part of the biosphere. The sedimentary record is also the ultimate repository of the annals of Earth's history. By deciphering the clues held in this record, geologists have reconstructed the history of the earth surface environment, traced the evolution of life, and determined past climate changes. The sedimentology component of this course will provide a broad background to 1) the description of sedimentary rocks and recognition of sedimentary structures, 2) processes by which sediments are transported, deposited, and converted into rocks, 3) the tectonic setting and features of environments in which sediments accumulate, and 4) use of stratigraphy as a tool in Earth history. The Paleontology component of this course will be an introduction to the fossil record, with an emphasis on the patterns of evolution during the Phanerozoic and the application of biostratigraphy.

GEOLOGY 2501 Structural Geology II

3 units - semester 1

2 x 1 hour lectures, 6 x 4 hour practicals per semester, multiple day field trip

Available for Non-Award Study

Corequisite(s): GEOLOGY 2500

Assumed Knowledge: GEOLOGY 1100 or GEOLOGY 1103

Assessment: Exam, practicals, field reports

How does the Earth respond to applied force? This course looks at how rocks deform, and how we can recognise and use structures within rocks to determine ancient magnitudes and orientations of stress fields. Students will be introduced to techniques of recording and analysing structural data and taught how to map rock sequences in the field and interrogate a region to determine how it formed and what has happened to the area since formation.

GEOLOGY 2502 Igneous and Metamorphic Geology II

3 units - semester 2

3 x 1 hour lectures, 4 hour practical per week, field excursion

Prerequisite(s): GEOLOGY 1100 or GEOLOGY 1103

Assessment: Practical work, examination

Mineralogy (mineral chemistry, classification and structure), minimum optical mineralogy and crystallography required to use the petrographic microscope. Petrography, mineralogy, classification of igneous and metamorphic rocks. Introduction to methods of rock and mineral analysis (XRD, XRF, electron microprobe).

GEOLOGY 2503 Landscape Processes and Environments II

3 units - semester 2

2 x 1 hour lectures, 4 hour practical per week, multiple day field trip

Available for Non-Award Study

Assumed Knowledge: GEOLOGY 1100 or GEOLOGY 1103

Assessment: Field reports, practical work

This course will develop skills and knowledge in 'reading' and understanding landscapes and the associated Earth materials at and near the Earth's surface. The approaches covered are fundamental to environmental geoscience and the management of the Earth's resources. This includes the morphological, geochemical and physical description of pedological and regolith materials such as soils, weathering profiles, sediments, indurated regolith as well as how they interact with other components of the lithosphere, biosphere and hydrosphere. An emphasis will be on describing these materials in the field and collecting field data and its later presentation and interpretation. A field trip to arid zone landscapes such as the Fowlers Gap - Broken Hill region (during mid-year break) provides experience in field mapping and description as well as survey design and sample collection for later laboratory study and data presentation and interpretation. This can be related to both environmental and mineral exploration applications.

Details of field trip communicated at start of the course.

GEOLOGY 2504 Economic & Mine Geology II

3 units - semester 2

3 x 1 hour lectures, 1 x 3 hour practical per week

Restriction: BSc (Mineral Geoscience), BE (Mining)

Assumed Knowledge: CgENVENG 1011, GEOLOGY 1104 or equiv

Assessment: Exam, practical work & assignment/s

The course looks at the major magmatic ore deposits of diamond, nickel, platinum group elements, chromium and vanadium and examples of major hydrothermal ore deposits of base metals, gold, tin, tungsten, uranium, rare earth elements and surficial deposits of iron, manganese, nickel, cobalt, gold and gems. This information will be integrated with introductory material on exploration, exploitation, minerals processing, metals marketing and mine financing.

GEOLOGY 3008 Geophysics III

3 units - semester 2

2 x 1 hour lectures, 5 hours practical work per week

Assumed Knowledge: GEOLOGY 2503 (2008) or PHYSICS 1100 and 1200 or PHYSICS 1101 or MATHS 1011 and 1012 or MATHS 1013 and 2004

Incompatible: GEOLOGY 2002

Assessment: Assignments, exam

Geophysicists are employed in a wide range of industries, including petroleum and mineral exploration, groundwater, contaminants and salinity evaluation, state and government geological surveys, defence science and academic research. This course provides the background for a career in solid-earth, exploration and environmental geophysics. It is split into three sections: (i) seismic methods (ii) electromagnetic methods and (iii) potential field methods (mainly gravity and magnetics). In each section, we start with the underlying mathematical basis and examine applications at global, exploration and environmental scales. The course also involves methods of geophysical data analysis, modelling, visualisation and interpretation through a series of computer laboratories. Students will be introduced to career options through industry visits and involvement with the Australian Society of Exploration Geophysicists. The course is aimed at students from a range of numerate scientific backgrounds including geoscience, physics, engineering, mathematics and computer sciences.

GEOLOGY 3013 Tectonics III

3 units - semester 1

2 x 1 hour lectures, 5 hours practical work per week, multiple day field trip

Assumed Knowledge: GEOLOGY 2500, GEOLOGY 2501 (2007) and GEOLOGY 2502 (2006)

Incompatible: GEOLOGY 3002

Assessment: Exam, practical assignments, seminar, field trip reports

This course will develop knowledge of the Earth as a four-dimensional dynamic system. The megascopic structure of the earth-oceanic and continental crust and lithosphere, and the asthenosphere, will be introduced and compared. The basic dynamic potentials acting on the Earth (heat, gravity) will be examined, and their diverse first order effects explored (isostasy, convection, exhumation, pluming). The concepts of rifting and ocean formation will be examined, as will those of subduction and mantle plumes. Processes of orogenesis will be examined in depth. Recent and Mesozoic evidence (structural, geochemical, geophysical, sedimentological) for the operation of these processes will be examined. We will examine evidence and constraints on interpretation of these processes operating in past geological eras: the Palaeozoic, Proterozoic and Archaean. Emphasis will be placed upon understanding examples from the tectonic evolution of the Australian Plate.

Details of field trip communicated at start of the course.

GEOLOGY 3014 Environmental Geoscience Applications III

3 units - semester 2

2 hour lecture, 5 hour practical per week, up to 8 day field trips

Assumed Knowledge: GEOLOGY 2503 (2008)

Incompatible: GEOLOGY 3009 and GEOLOGY 3011

Assessment: Exam, assignments

This course covers advanced aspects of geological processes in near-surface geological environments and the methods used to quantify these processes in time and space. Current applied environmental issues, such as soil salinity, erosion, coastal degradation and their management will be looked at from the geological perspective. The relevance of the geochemistry of soil and regolith are treated in their application in mineral exploration, contamination control and waste management. Natural geohazards like earthquakes and floods are related to tectonic activities and climatic variation on local, regional and global scales.

Man-made and natural environmental impacts will be critically reviewed and possible solutions will be discussed. These include deep aquifer water storage, CO₂ sequestration, and nuclear waste deposition. Thus the course will draw on the basic principles of sedimentation, erosion and weathering on the earth's surface as well as tectonic, magmatic and geochemical processes. Geomicrobiological principles are introduced as an integrative part of the soil/regolith evolution process. The course will further include up to eight one-day field visits to sites of integrated field work and site inspection in the vicinity of Adelaide.

Details of field trips communicated at start of the course.

GEOLOGY 3015 Environmental Geoscience Processes III

3 units - semester 1

2 hour lecture, 5 hour practical per week, multiple day field trip

Available for Non-Award Study

Assumed Knowledge: GEOLOGY 2503 (2008)

Assessment: Practical & theory exams, practical reports, field reports & assignments

The aim of this course is to provide an understanding of the fundamental principles of geoscience and an appreciation of their application to practical problems. The course is composed of three interlinked strands: environmental geochemistry, landscape processes and landscape evolution. The recognition, description, origin and development of regolith materials and their relation to land form, climate, and lithology will be introduced in the laboratory and reinforced during actual field survey. The aim of this course is to provide an understanding of the fundamental physical, chemical and mineralogical properties of sediments, soils and indurated regolith.

Details of field trip communicated at start of the course.

GEOLOGY 3016 Igneous and Metamorphic Geology III

3 units - semester 1

2 x 1 hour lectures, 5 hours practical work per week

Prerequisite(s): GEOLOGY 2502 (2006) or Geology 2000

Incompatible: GEOLOGY 3004

Assessment: Practical report, exam, practical test

This course is concerned with aspects of the long-term thermal and material history of the earth's lithosphere and mantle. The course has as its foundation the basic skills learnt at level II in Igneous and Metamorphic Geology II. Included amongst the skills learnt in this course are understanding of the governing theory describing high temperature element partitioning between fluids and melts, the thermodynamic theory that governs and predicts sub-solidus mineral growth and reaction and the principles of natural radioactive decay and the application of isotopes to geochronology. Metamorphic Geology: This examines the nature and change of sub-solidus mineral assemblages and textures in rocks. This information provides a sound basis with which to examine orogenic processes. Igneous Geology: This section examines the physical controls on the generation and differentiation of silicate melts within the earth and the contribution these processes have made to the composition of the crust and mantle through time. Part of this section of the course is devoted to case studies of magma generation in key tectonic settings on the current earth and the extrapolation of this knowledge back through time.

GEOLOGY 3017 Petroleum Exploration III

3 units - semester 1

2 x 1 hour lectures, 5 hours practical work per week

Assumed Knowledge: GEOLOGY 2500 and GEOLOGY 2501 (2007)

Assessment: Exam, practical reports

This course introduces the unifying concept of a petroleum system and shows how it may be used in the exploration of sedimentary basins for their oil and gas resources. The course has three inter-related themes: sequence stratigraphy, seismic methods and applied organic geochemistry. The basic principles of sequence stratigraphy are outlined including how cyclical stratigraphic patterns reflect changes in sediment supply and accommodation. The building blocks of sedimentary sequences (facies successions, key surfaces and stacking patterns) are highlighted, and how these are displayed on seismic sections and well logs. The history of the development of modern seismic and sequence stratigraphy is discussed. Current sequence stratigraphic models for siliciclastic and carbonate depositional settings in different types of basins are introduced, but the emphasis is on the flexible and pragmatic application of stratigraphic concepts and principles.

The second module covers the seismic techniques (refraction and reflection) that play a crucial role in delineating the sub-surface architecture of basins, in particular hydrocarbon kitchens, migration pathways, reservoirs and traps. The final module examines the use of geochemistry as a tool in petroleum exploration. Specific topics include source rock evaluation; the generation and migration of hydrocarbons; and the geological controls on crude oil consumption.

GEOLOGY 3018 Mineral Exploration III

3 units - semester 2

2 hour lectures, 5 hours practical work per week, multiple day field trip

Assumed Knowledge: GEOLOGY 2502 (2006)

Incompatible: GEOLOGY 3003 and GEOLOGY 3006

Assessment: Exam, field report, practical report

This course covers genetic processes and geological setting of economic mineral deposits, and the exploration strategies employed by industry. Mineralising processes are seen in the framework of the tectonic, petrogenetic and geochemical evolution of the Earth's crust on local, regional and global geological scales. Thus, we will draw upon igneous and metamorphic petrology, geochemistry, sedimentary facies analysis, and the science of soils, weathering and diagenesis in the setting of evolving landscapes.

Mineral exploration will be examined in terms of the physical and chemical characteristics of mineral deposits, and their geophysical and geochemical detection, with an emphasis on exploration strategies in regolith-covered environments. We will also discuss the tightly interrelated issues of economics of natural resources, environmental conservation and rehabilitation, and social impacts of the mining industry. Practical work includes ore microscopy, quantitative analytical methods, thermodynamic calculations, geophysical field methods, as well as an introduction to exploration software packages. The course will include at least three days of integrated geochemical and geophysical fieldwork, with industry visits to South Australian mineral deposits, PIRSA and mineral exploration companies in Adelaide.

Details of field trip communicated at start of the course.

GEOLOGY 3019 Field Geoscience Program III

3 units - semester 2

15 days fieldwork

Corequisite(s): GEOLOGY 3013 and GEOLOGY 3016

Assumed Knowledge: GEOLOGY 2500, GEOLOGY 2501 (2007) and GEOLOGY 2502 (2006)

Assessment: Field work, mapping report, literature review

This course provides a comprehensive introduction to independent geological mapping and the construction of geological maps. You will develop the skills required to interpret and solve geological relationships at a variety of scales, and synthesise them into four-dimensional models that describe the geological evolution of terrains. These skills include hand specimen and outcrop geology, mapping and stratigraphic analysis at a range of scales, aerial photo interpretation, remote sensing and the integration of geophysical datasets into geological mapping and interpretation. Thus, the course will draw upon the principals of structural geology and combine them with an understanding of sedimentary, igneous and metamorphic rock systems. Fieldwork will focus on the Precambrian terrains of southern and central Australia,

however the acquired skills will be transferable into any aged geological system.

This course will include 15 days of field work. Details will be provided at the start of the course.

GEOLOGY 3020 **Reservoir Geoscience Project III**

3 units - semester 1

Restriction: B.Science (Petroleum Geoscience)

Prerequisite: GEOLOGY 2500

Corequisite: GEOLOGY 3017

Assessment: Project report based on practical exercises & field work

A detailed knowledge of the reservoir rocks is fundamental to understanding the petroleum system. This course aims to give students hands-on experience in reservoir characterisation and its application in the petroleum industry. Topics covered will include the analysis and characterisation of reservoir rocks from drill cores and wireline logs, comparison of core samples with outcrop analogues and upscaling of this data to the field scale.

HONOURS

GEOLOGY 4000A/B **Honours Geology**

24 units - full year

Prerequisite: major in Geology or cognate area, Credit standard in Level III Geoscience or related courses - applicants with less than Credit standard may be accepted with approval of Head of Discipline

Assumed Knowledge: Level III courses in Geology & Geophysics

Assessment: Coursework related, research project related

Candidates may be required to attend course programs in specialised earth science topics. Candidates will undertake supervised individual research projects. Specific research programs will be generated for each individual candidate, usually involving field and laboratory work and literature review. This will require their full time. Candidates will be required to present a series of seminars, to prepare a poster and a manuscript on their research. An interstate study tour is normally held early in the year. Intending Honours students must apply, before the end of the year preceding Honours enrolment, to the Head of Geology and Geophysics or nominee for approval of candidature. For detailed information see: www.ees.adelaide.edu.au/prospective/honours/programs/geology.html

GEOLOGY 4001A/B **Honours Geophysics**

24 units - full year

Prerequisite: major in Geophysics or cognate area with approval of Head of Discipline, Credit standard in Level III Geoscience or related courses - applicants with less than Credit standard may be accepted with approval of Head of Discipline

Assumed Knowledge: Other Level III courses offered by Geology & Geophysics

Assessment: Coursework related, research project related

Students with a different background to that stipulated may be accepted at discretion of Head of Discipline or nominee. Candidates will be required to attend a core program of geophysics courses. These include some combination of signal analysis, airborne geophysics, electrical and EM techniques, seismic processing, seismic interpretation, and geophysical field work. Honours students may, after consultation with the Head or nominee, also be required to take some level III courses in Geology and Geophysics, Applied Mathematics or Physics and Mathematical Physics which they did not take in third year. In addition, candidates will undertake supervised individual projects; possible topics should be discussed with the Head or nominee before the end of the preceding year. Special programs of reading and laboratory studies will be laid down and each candidate will be required to give all the time not required for lectures or in the field to work in the laboratory. Candidates will be required to contribute to a series of seminars. Intending Honours students must apply, before the end of the year preceding that in which they wish to enrol, to the Head of Discipline of Geology and Geophysics or nominee for approval of their proposed programs of study.

GEOLOGY 4002A/B **Honours Environmental Geoscience**

24 units - full year

Prerequisite: major in Environmental Geoscience or cognate area, Credit standard in Level III Geoscience or related courses - applicants with less than Credit standard may be accepted with approval of Head of Discipline

Assumed Knowledge: Other Level III courses offered by Geology & Geophysics

Assessment: Coursework related, research project related

Candidates may be required to attend course programs in specialised Environmental Geoscience topics. Candidates will undertake supervised individual research projects. Specific research programs will be generated for each individual candidate, usually involving field and laboratory work and literature review. This will require their full time. Candidates will be required to present a series of seminars, to prepare a poster and a manuscript on their research. An interstate study tour is normally held early in the year. Intending Honours students must apply, before the end of the year preceding Honours enrolment, to the Head of Geology and Geophysics or nominee for approval of candidature. For more detailed information see: www.ees.adelaide.edu.au/prospective/honours/programs/geology.html

GEOLOGY 4003A/B **Honours Bachelor of Environmental Science (Geology)**

12 units - full year

Prerequisite: Credit or higher in at least 2 Level III courses approved by Head of Discipline, Geology & Geophysics

Assessment: Research proposal, literature review, seminars, thesis 60%, average of 4 specified Level III courses 40%

Intending candidates should consult the Head of Discipline and potential supervisors during third year and be prepared to begin studies at the beginning of February or July (mid year intake)

A modest research project of student's choosing (on topic acceptable to Discipline) normally taken at same time as coursework (4 Level III courses - 12 units - relevant to student's Honours project and approved by Head of Discipline).

German Studies

LEVEL I

GERM 1002

German IA: Beginners' German

3 units - semester 1

4 contact hours per week

Available for Non-Award Study

Incompatible: except with permission, SACE Stage 2 German or equiv

Assessment: homework, class tests, end of semester test, oral exam

With no previous knowledge of German assumed, special emphasis will be placed on speaking and comprehension, then on reading, writing and grammar. It is expected that each student will spend at least eight hours of private study reviewing work done in class and preparing for lessons. Aspects of German culture will be a component of language instruction throughout the semester.

GERM 1003

German IB: Beginners' German

3 units - semester 2

4 contact hours per week

Available for Non-Award Study

Prerequisite(s): GERM 1002 or equivalent

Incompatible: except with permission, SACE Stage 2 German or equivalent

Assessment: homework, class tests, end of semester test, oral exam

This second semester course is a sequel to German IA: Beginners' German. It is expected that each student will spend at least eight hours of private study reviewing work done in class and preparing for lessons. Aspects of German culture will be a component of language instruction throughout the semester.

GERM 1011

German Studies ISA

3 units - semester 1

4 contact hours per week

Available for Non-Award Study

Prerequisite(s): SACE Stage 2 German or equivalent with scaled score of more than 14/20 or equivalent

Assessment: language - homework, class tests, end of semester tests, tutorial participation; other - essays, end of semester tests or working papers, balance of achievement in all areas required to pass course

The aim of this course is to introduce students to the life and language of German-speaking countries, to make them

more skilled at speaking and writing the language and more informed about contemporary German culture. Three out of four hours are devoted to practical language instruction in formal language classes and small tutorial groups, and one hour per week to cultural and historical studies. Students with outstanding qualifications in language may, with the permission of the Discipline Convenor, take the language components of the course at a more advanced level. Further information on course content can be obtained from the discipline of German Studies.

GERM 1012

German Studies ISB

3 units - semester 2

4 contact hours per week

Available for Non-Award Study

Prerequisite(s): GERM 1011 or equivalent

Assessment: language - homework, class tests, end of semester tests, tutorial participation; other - essays, end of semester tests or working papers; balance of achievement in all areas required to pass course

The aim of this course is to introduce students to the life and language of German-speaking countries, to make them more skilled at speaking and writing the language and more informed about contemporary German culture. Three out of four hours per week are devoted to practical language instruction in formal language classes and small tutorial groups, and one hour per week to cultural and historical studies. Students with outstanding qualifications in language may, with the permission of the Course Coordinator, take the language components of the course at a more advanced level. Further information on course content can be obtained from the discipline of German Studies.

LEVEL II

GERM 2021

German in Germany

3 units - summer semester

Jan - Feb 2010 at Stuttgart Winter University

Prerequisite(s): 24 units at Level I or equivalent

Assessment: As specified for specific language and culture courses taken as part of the Stuttgart Winter University program

This course consists of six weeks of full-time study at Stuttgart Winter University. The course is divided into two components running concurrently: (a) an intensive language course and (b) a cultural/historical program. There will also be visits to museums and art galleries as well as to other significant cultural centres. For details, contact the German Studies discipline or the International Office.

GERM 2030

German Special Topic II

3 units - semester 1 or 2

4 contact hours per week

Restriction: Not available to students who have completed Level I German

Prerequisite: Sem 1 - 12 units Level I Humanities/Social Sciences;
Sem 2 - Language topic (Sem 1)

Incompatible: GERM 2008

Assessment: As for German I/IS

This course offers the opportunity for students in second year to complete a first level German language course. It is particularly appropriate for prospective postgraduates or Honours students who need to develop a reading ability of the German language for research purposes. Students intending to do semester 2 of this topic must normally have completed semester 1.

GERM 2203

German IIA: German Language and Society

3 units - semester 1

3 contact hours per week

Available for Non-Award Study

Prerequisite(s): GERM 1003 German IB or equivalent

Incompatible: GERM 2002

Assessment: Homework, class tests, end-of-semester test, conversation tutorial (participation, performance, presentation)

Building on the language sections of German IA and IB, this course is aimed to further develop students' proficiency in the four language skills - listening, speaking, reading and writing - through a combination of readings and reproductive and creative exercises. It also aims to enhance students' intercultural understanding through the use of authentic texts that focus on aspects of contemporary society in German-speaking countries and promote comparison and discussion.

GERM 2204

German IIB: German Language and Society

3 units - semester 2

3 contact hours per week

Available for Non-Award Study

Prerequisite(s): GERM 2002 German IIA or equivalent

Incompatible: GERM 2003

Assessment: Homework, class tests, end-of-semester test, conversation tutorial (participation, performance, presentation)

Building on German IIA, this course is aimed to further develop students' proficiency in the four language skills - listening, speaking, reading and writing - through a combination of readings and reproductive and creative exercises. It also aims to enhance students' intercultural understanding through the use of authentic texts that focus on aspects of contemporary society in German-speaking countries and promote comparison and discussion.

GERM 2211

German IISA: German Language and Society

3 units - semester 1

3 contact hours per week

Available for Non-Award Study

Prerequisite(s): GERM 1012 German ISB or equivalent

Incompatible: GERM 2011

Assessment: Homework, mid-semester test, end-of-semester test, conversation tutorial (participation, performance, presentation)

Building on the language sections of German ISA and ISB, this course is aimed to further develop students' proficiency in the four language skills - listening, speaking, reading and writing - through a combination of readings and reproductive and creative exercises. It also aims to enhance students' intercultural understanding through the use of authentic texts that focus on aspects of contemporary society in German-speaking countries and promote comparison and discussion.

GERM 2212

German IISB: German Language and Society

3 units - semester 2

3 contact hours per week

Available for Non-Award Study

Prerequisite: GERM 2011/2211 German IISA or equivalent

Incompatible: GERM 2012

Assessment: Homework 20%, mid-semester test 25%, end-of-semester test 35%, conversation tutorial (participation, performance, presentation) 20%

Building on German IISA, this course is aimed to further develop students' proficiency in the four language skills - listening, speaking, reading and writing - through a combination of readings and reproductive and creative exercises. It also aims to enhance students' intercultural understanding through the use of authentic texts that focus on aspects of contemporary society in German-speaking countries and promote comparison and discussion.

GERM 2221

German Cultural Studies IISA

3 units - semester 1

3 contact hours per week

Available for Non-Award Study

Prerequisite(s): GERM 1012 or equivalent

Assessment: Class participation, oral presentation, essay

The aim of this course is to develop students' understanding and critical appreciation of German culture through the study of texts, written and visual, in the framework of their social and historical context. Students will not only develop their cultural understanding, but also their reading and analytical skills and their language proficiency. In 2010 the focus of this course will be German Popular Culture, Past and Present.

For details of course content, students should consult the web or the discipline handbook.

GERM 2222

German Cultural Studies IISB

3 units - semester 2

3 contact hours per week

Available for Non-Award Study

Prerequisite(s): GERM 1012 or equivalent

Assessment: Class participation, oral presentation, reading journal, essay

The aim of this course is to develop students' understanding and critical appreciation of German culture through the study of texts, written and visual, in the framework of their social and historical context. Students will not only develop their cultural understanding, but also their reading and analytical skills and their language proficiency. In 2010, the focus of this course will be 'A German Childhood'.

For details of the course content, students should consult the web or the discipline handbook.

GERM 2223 German Cultural Studies IIA

3 units - semester 1

3 contact hours per week

Available for Non-Award Study

Prerequisite(s): GERM 1003 or equivalent

Incompatible: GERM 1011, GERM 2002

Assessment: Mid-semester test, seminar presentation, written presentation, end-of-semester test

For Germans in the East and the West, the path into the 21st century has been full of turning-points and events which have shaped the generations. This course provides an overview of essential facts about politics, society and culture from 1945 to the present. The accompanying seminar will provide students with the opportunity to study topics in more depth through the discussion of various texts associated with the historical milestones presented in the lectures.

GERM 2224 German Cultural Studies IIB

3 units - semester 2

3 contact hours per week

Available for Non-Award Study

Prerequisite(s): GERM 1003 or equivalent

Incompatible: GERM 1012, GERM 2003

Assessment: Mid-semester test, seminar presentation, written presentation, end-of-semester test

This course is designed to extend students' understanding of contemporary Germany. Information will be provided mainly in English but lectures will include film and print material in German and guest speakers will speak in German so students are gradually exposed to more complex issues in German and are thus given the opportunity to improve their listening and comprehension skills. The accompanying seminar will provide students with the opportunity to study topics in more depth through the discussion of various texts associated with issues presented in the lectures.

LEVEL III

GERM 3021 German in Germany

3 units - summer semester

January - February 2009 at Stuttgart Winter University

Prerequisite: GERM 2204 or GERM 2212 or equivalent

Assessment: as specified for specific language and culture courses taken as part of the Stuttgart Winter University program

This course consists of six weeks full time study at Stuttgart Winter University. The course is divided into two components running concurrently: (a) an intensive language course and (b) a cultural/historical program. There will also be visits to museums and art galleries as well as to other significant cultural centres. For details, contact German Studies or the International Office.

GERM 3030 German Special Topic Level III

3 units - semester 1 or 2

4 contact hours per week

Restriction: Not available to students who have completed German language at any level

Prerequisite: Sem 1 - 12 units Level II Humanities/Social Sciences; Sem 2 - Language topic (Sem 1)

Incompatible: GERM 3008

Assessment: As for German I/IS

This course offers the opportunity for students in third year to complete a first level German language course. It is particularly appropriate for prospective postgraduates or Honours students who need to develop a reading ability of the German language for research purposes. Students intending to do semester 2 of this topic must normally have completed semester 1.

GERM 3203 German IIIA: German Language & Society

3 units - semester 1

3 contact hours per week

Available for Non-Award Study

Prerequisite(s): GERM 2204 or equivalent

Incompatible: GERM 3002

Assessment: Homework, mid-semester test, end-of-semester test, conversation tutorial (participation, performance, presentation)

Building on the language sections of German IIA and IIB, this course is aimed to further develop students' proficiency in the four language skills - listening, speaking, reading and writing - through a combination of readings and reproductive and creative exercises. It also aims to enhance students' intercultural understanding through the use of authentic texts that focus on aspects of contemporary society in German-speaking countries and promote comparison and discussion.

GERM 3204 German IIIB: German Language and Society

3 units - semester 2

3 contact hours per week

Available for Non-Award Study

Prerequisite(s): GERM 3203 or equivalent

Incompatible: GERM 3003

Assessment: Homework, mid-semester test, end-of-semester test, conversation tutorial (participation, performance, presentation)

Building on the language sections of German IIIA, this course is aimed to further develop students' proficiency

in the four language skills - listening, speaking, reading and writing - through a combination of readings and reproductive and creative exercises. It also aims to enhance students' intercultural understanding through the use of authentic texts that focus on aspects of contemporary society in German-speaking countries and promote comparison and discussion.

GERM 3211

German IIISA: German Language and Society

3 units - semester 1

3 contact hours per week

Prerequisite(s): GERM 2212 or equivalent

Incompatible: GERM 3011

Assessment: Homework, mid-semester test, end-of-semester test, conversation tutorial (participation, performance, presentation)

Building on the language sections of German IISA and German IISB, this course is aimed to consolidate and expand students' German competence and refine their skills in written and oral communication on more complex topics. It also aims to enhance students' intercultural understanding through the use of authentic texts that focus on aspects of contemporary society in German-speaking countries and promote analysis and discussion at a more advanced level.

GERM 3212

German IIISB: German Language and Society

3 units - semester 2

3 contact hours per week

Available for Non-Award Study

Prerequisite(s): GERM 3211 or equivalent

Incompatible: GERM 3012

Assessment: Homework, mid-semester test, end-of-semester test, conversation tutorial (participation, performance, presentation)

Building on the language sections of German IISA, this course is aimed to expand students' German competence and refine their skills in written and oral communication on more complex topics. It also aims to enhance students' structural understanding through the use of authentic texts that focus on aspects of contemporary society in German-speaking countries and promote analysis and discussion at a more advanced level.

GERM 3221

German Cultural Studies IIISA

3 units - semester 1

3 contact hours per week

Available for Non-Award Study

Prerequisite(s): GERM 2212 or equivalent

Assessment: Class participation, presentation, essay

The aim of this course is to develop students' understanding and critical appreciation of German culture through the study of texts, written and visual, in the framework of their social and historical context. Students will not only develop their cultural understanding, but also their reading and analytical skills and their language proficiency. In 2010 the focus of this course will be Epochs in German-speaking Cultural History.

For details of the course content, students should consult the web or the discipline handbook.

GERM 3222

German Cultural Studies IISB

3 units - semester 2

3 contact hours per week

Available for Non-Award Study

Prerequisite(s): GERM 2212 or equivalent

Assessment: Class participation, presentation, essay

The aim of this course is to develop students' understanding and critical appreciation of German culture through the study of texts, written and visual, in the framework of their social and historical context. Students will not only develop their cultural understanding, but also their reading and analytical skills and their language proficiency. In 2010 the focus of this course will be Great Texts of German Literature.

For details of the course content, students should consult the web or the discipline handbook.

GERM 3223

German Cultural Studies IIIA

3 units - semester 1

3 contact hours per week

Available for Non-Award Study

Prerequisite: GERM 2204 or equivalent

Assessment: Class participation 10%, oral presentation 10%, 1,500 word reading journal 30%, 3,000 word essay 50%

This course offers students in the beginners' stream their first exposure to in-depth analysis of German texts, both written and visual. Guidance will be given on basic methods of textual interpretation and contextualised activities and the gradually increasing level of textual and linguistic complexity will enable students to practise and develop their reading and interpretative skills throughout the semester. While all the texts considered will be studied within the framework of their particular historical and social context, the major focus will be on developing reading strategies and encouraging students to read widely within the topic area. The precise material treated in the course may change from year to year. For details of course content, students should consult the web or the discipline handbook.

GERM 3224

German Cultural Studies IIIB

3 units - semester 2

3 contact hours per week

Available for Non-Award Study

Prerequisite(s): GERM 2204 or equivalent

Assessment: class participation, presentation, reading journal, essay

The aim of this course is to develop students' understanding and critical appreciation of German culture through the study of texts, written and visual, in the framework of their social and historical context. Students will not only develop their cultural understanding, but

also their reading and analytical skills and their language proficiency. In 2010 the focus of this course will be 'A German Childhood'.

For details of course content, students should consult the web or the discipline handbook.

HONOURS

GERM 4401A/B **Honours German Studies**

24 units - full year

Prerequisite(s): Undergraduate degree, credit average in courses contributing to a major in German Studies or equiv approved by German Studies

Assessment: 12000 word dissertation in German, Advanced course in language, Option

Requirements: students will write a dissertation on some aspect of German Studies. Choice of topic should be made not later than the middle of the second semester in the preceding year. Students must also attend advanced courses in language, together with one option. Both thesis topics and options should be chosen in consultation with the Honours Coordinator.

Students may obtain Faculty permission to combine German Studies with another discipline for the Honours degree. They should consult the Honours Coordinator in German Studies as soon as possible, so that a suitably modified program of study can be arranged. A 15,000 word thesis will then be written in English. In some circumstances Honours in German Studies can be studied part-time over two years. Please see the German Studies handbook for further details.

Health Sciences

LEVEL 1

EXCHANGE 1001HSC **Exchange Studies - Health Sciences**

9 units - semester 2

HONOURS

HLTHINFO 4000A/B **Honours Health Informatics**

24 units - full year

History

LEVEL 1

HIST 1105 **Europe, Empire and the World 1492-1914**

3 units - semester 1

3 contact hours per week

Available for Non-Award Study

Assessment: 2 essays, exam, tutorial participation

This course will consider world history from the rise of Europe until World War I. The course will focus on regions/nations such as Europe, Japan, China, Latin America, North America, Africa and the Middle East in the early modern and modern periods. We will discuss the evolving relationship between Europe and the world but also chart the continuity of autonomous traditions in non-Western cultures. Since European culture has such dramatic influence in this period, topics such as the Reformation, the Scientific Revolution and Industrialisation will be a particular focus. Alongside the momentous we will consider the mundane: changes in daily lives of ordinary people. We will study the interaction between 'high culture' and 'low culture', and examine ways in which ordinary men and women shaped and responded to the emerging modern world.

HIST 1106 **The Twentieth Century: A World in Turmoil**

3 units - semester 2

3 contact hours per week

Available for Non-Award Study

Assessment: three essays, two quizzes, and tutorial performance

This course will introduce you to key issues in the history of the twentieth century. The issues with which the course deals are central to an understanding of the most turbulent century in the world's history - and to your understanding of the world in which you live.

The course provides a general introduction to global history. It also prepares students for the wide variety of more specialised upper-level courses in European, American, British, Australian and Asian history.

The course is designed to complement 'Europe, Empire and the World', the Department's semester 1 course at Level One (HIST 1105).

The goal of the course is to provide students with a university-level introduction to the history of the twentieth century, and to introduce students to important themes in the discipline of history. Students who successfully complete the course will acquire basic knowledge about the history of the twentieth century and develop their skills as writers and historians. They will learn to evaluate historical evidence, analyse historical problems, and make coherent arguments, both orally and in writing.

HIST 1107 Indigenous Culture & History

3 units - winter semester

9 hours per week for 4 weeks (plus field trips)

Available for Non-Award Study

Quota applies

Assessment: seminar paper, essay

This course will introduce students to Indigenous culture and history. It will consider traditional Aboriginal Society practices and structures, including Indigenous religion and beliefs (kinships, lore and the Dreaming), and relationships to the land and environment. It will then introduce policies and events that have affected Aboriginal society since colonisation, including policies that led to the Stolen Generation, welfare and church practices, Protector practices, social policies of segregation, and policies of self determination. Students will undertake a number of local field trips which will provide a range of experiences of traditional Aboriginal Dreaming Stories, Aboriginal Art/Artefacts, and Aboriginal Political Activism.

ADVANCED LEVEL

HIST 2051 Australia and the World

3 units - semester 1

3 contact hours per week

Available for Non-Award Study

Prerequisite(s): 12 units Level I Humanities/Social Sciences

Incompatible: HIST 2004/3004

Assessment: 2,500 word research essay, 1,000 word museum exhibition project, 2 hour exam

Australians have variously been described as a nation of sporting champions, yet we lose more often than we win; of 'battling' when we live in relative wealth; and of settling in the 'outback' while we sprawl into cities. We've been characterised as a 'classless' society and an equal one, which is at odds with the experience of many women and unemployed people. We've been introduced as descendants of convicts and 'Poms' when our families are just as likely to have emigrated from Eastern Europe or Asia or lived on this land for thousands of years. Students in this course will learn how each of these descriptions have been evoked for a purpose. They are used by politicians willing to appeal to a particular constituency, and by opponents in debates about federation, immigration, aboriginal rights, welfare, the status of women, and the possibility of Australia becoming a republic. In this course, the trajectory of these debates, which have shaped Australian identity, will be explored in addition to the social effects of the 1930s Depression, the legacy of the Menzies and Whitlam Governments, Australia's participation in war and its place in the global village. Students will have the opportunity to recall our long-felt deference to Britain, our more recent acceptance of our Aboriginal heritage, our brief flirtation as an Asian nation, and our current 'coalition' with the United States, and ponder where our future might lay.

HIST 2052 Migrants and the Making of Modern Australia

3 units - semester 1

3 contact hours per week

Available for Non-Award Study

Prerequisite: 12 units Level I Humanities/Social Sciences

Incompatible: HIST 2045/3045

Assessment: 2,500 word research essay, 1,000 word 'museum exhibition' project, 2 hour exam

The Tampa crisis, widespread fears of 'people smuggling', and the revelations about the condition of asylum seekers in detention centres have reignited the debate about Australia's immigration policy and the way that we treat refugees. There is a perception that Australia has already 'done its bit' in generously accepting waves of displaced persons and refugees since World War II, and that further large-scale intakes will destabilise the Australian economy and threaten our 'way of life'. Yet, others argue that Australia's post-war Displaced Persons Scheme was self-serving and oriented towards sourcing cheap labour for dangerous public works projects, and that while Australia opened its border to Asians and East-Europeans for the first time, our preference was always for British migrants who continued to constitute the overwhelming majority of new arrivals. From this perspective, the Australian government's current stringent migrant and refugee intake quota simply reflect the continuation of a long-standing and generally hard-hearted immigration policy. We will examine these different points of view, alongside the testimony of migrants and refugees who left behind everything and everyone they knew to make a new life in Australia.

HIST 2053 Medieval Europe: Crusades to the Black Death

3 units - semester 1

3 contact hours per week

Available for Non-Award Study

Prerequisite(s): 12 units Level I Humanities/Social Sciences including 3 units Level I History

Incompatible: HIST 2042/3042

Assessment: Tutorial participation 15% 1,000 word minor essay 15%, 2,500 word Major essay 40%, 2-hour exam 30%

A study of the civilisation of Western Christendom with particular emphasis on the High Middle Ages, c. 1050-1350. Lecture and tutorial topics will be from the following: The fall of the Roman Empire; The conversion of Europe; Vikings, Saracens and Magyars; the real Dark Ages? Feudal and manorial systems; The agricultural, urban and commercial revolutions; Models of Christendom; the papacy and the Holy Roman Empire; The medieval church: popular religious culture: saints, relics and pilgrimages; The medieval reformation: monastic revival: The apostolic life, the Friars, medieval heresy. Vernacular culture: epics and romances; Occitan culture; courtly love and Arthurian legends; War and Society: chivalry and the just war. The Crusades, the rise and fall of the crusading ideal; The Mediterranean dimension: impact of Arabic and Byzantine worlds on Latin culture. Christianity v Islam; A Twelfth-Century

Renaissance? Recovery of law and philosophy, rise of scholasticism, monastic and university learning, Gothic art and architecture; Decline: demographic crisis, the Black Death, bastard feudalism, The Hundred Years' War.

HIST 2054

Reel History: World War II in Film

3 units - semester 2

3 contact hours per week (plus viewing of films)

Available for Non-Award Study

Prerequisite(s): 12 units Level I Humanities/Social Sciences including 3 units Level I History

Incompatible: HIST 2029/3029

Assessment: Tutorial attendance and participation (20%); research essay (40%); 2-hour Exam (30%); two film reviews (10%)

The aim of this course is to explore the relationship between the past and its representation on film with particular emphasis on World War II. It takes various aspects of the history of the war to examine how film has represented, reconstructed and interpreted the mid-twentieth century crisis. The course compares films with more traditional historical texts and sources in order to chart how filmmakers have constructed the war. Why did some aspects of the war draw more attention than others? How did different people address the same subjects? Who has been responsible for shaping our understanding of the war and why was so much invested in its recreation on the screen? Students will address such questions and should complete the course with an understanding of the influence of film on popular perceptions of the war and an awareness of the dynamic process of remembering and forgetting history that is inherent in the production of historical films.

HIST 2055

Food and Drink in World History

3 units - semester 2

3 contact hours per week

Prerequisite: 12 units of Level I Humanities/Social Sciences

Incompatible: HIST 2048/3048

Assessment: 1,500 word mid-semester essay 30%, 3,000 word final essay 60%, tutorial participation and 500 word presentation 10%

Food and drink are essential for our survival, but what does thinking about the food/drink reveal about history and about ourselves? The aim of this course is to explore food/drink in world history, and to pose the following question: what can food/drink tell us about a society at a particular time? The course will allow you to develop your abilities to think critically about everyday practices such as cooking, eating, drinking and meals, and to locate them within their historical context so you can reflect on the roles that such practices have played in the development of various societies. How have food/drink been used to display status? What rituals are associated with drinking and why? What makes a 'national cuisine'? How have changing gender roles influenced the family meal? Has globalisation negatively influenced our eating habits? How do we make 'ethical' food choices? Students should complete the course with an understanding of the role of food/drink over the course of history; an appreciation

of the economic, social, and political contexts that have influenced practices associated with the production and consumption of food/drink; and the ability to engage in independent research on an issue relating to the history of food/drink.

HIST 2062

Modern America: Civil War to Iraq

3 units - semester 2

3 contact hours per week

Available for Non-Award Study

Prerequisite: 12 units Level I Humanities/Social Sciences including 3 units Level I History

Assessment: Tutorial participation 10%, 800 word essay 20%, 300 word bibliography 5%, 3,500 research essay 35%, final exam 30%

This course will chart the emergence of American imperialism and American freedom. It will analyse the simultaneous creation of an American global empire, a development often viewed with distrust by ordinary people in Africa, Latin America, and Southeast Asia, and the development of liberal reform movements within the nation including the New Deal, Johnson's Great Society programs of the 1960s, and the Civil Rights Movements for women, African-Americans, and for Gay and Lesbian peoples. American popular culture will be analysed at various junctures of the course to illustrate the tensions between American as imperialist and American as a liberal, and sometimes radical, nation of reform. Blues, Jazz, and Rock and Roll have all aided twentieth-century emancipatory projects, but American culture was also put into the service of Cold Warriors in the 1950s and can be viewed as at the centre of American materialism and extreme individualism. Along the way we will view these developments from the perspective of a diverse range of Americans, as well as non-Americans who were increasingly under the influence of American economics and culture.

HIST 2063

Early Modern Europe

3 units - semester 2

3 contact hours per week

Check with School for Non-Award Study

Prerequisite(s): 12 units Level I Humanities/Social Sciences including 3 units Level I History

Assessment: Library exercise 10%, online quiz 10%, 3,000 word essay 50%, class test 20%, tutorial participation 10%

The sixteenth and seventeenth centuries are often claimed by historians to represent the transition between the medieval and modern worlds. The aim of this course is to examine this notion that the early modern era witnessed the rise of modernity. It will do so by discussing the 'key' transformations, including the Black Death, Renaissance, Reformation and Scientific Revolution, but also those aspects of the period which do not seem that modern, like the witch hunts. Through lectures, tutorials and a particular emphasis on primary documents, students will be challenged to consider just what constitutes 'modern' and 'medieval' thought and practice. Moreover, the notion of 'great events' in history and how aptly labels like 'renaissance' periodise our study of the past will be

considered. In addition, through videos, art and extracts from their writings, the images, sounds and words of da Vinci, Luther, Copernicus and the witches will bring this fascinating period of history alive.

HIST 2068

Uniting the Kingdoms: Britain 1534–1707

3 units - semester 2

3 contact hours per week

Prerequisite(s): 12 units Level I Humanities/Social Sciences

Incompatible: HIST 2002/3002

Assessment: tutorial participation 15%, 1,000 word Minor Essay 15%, 2,500 word Major essay 40%, 2-hour exam 30%

This course examines England in the sixteenth and seventeenth centuries and its development from a European backwater to the beginning of its emergence as a global power. Particular attention is paid to the British context: the impact of English imperialism on its Anglo-Celtic neighbours, the absorption of Wales, the conquest and colonisation of Ireland, and the conflicts with Scotland which led to the union of 1707.

HIST 2070

History of the Indigenous Peoples of Australia B

3 units - semester 2

3 contact hours per week

Available for Non-Award Study

Prerequisite(s): 12 units Level I Humanities/Social Sciences including 3 units Level I History

Incompatible: 2043/3043

Assessment: Tutorial participation 10%, Tutorial attendance and participation 10%, 2,000 word minor essay 30%, 3,000 word research essay 50%

The aim of this course is to give students an understanding of the Aboriginal experience of life in twentieth century Australia. Topics include government policy, institutionalisation, Aboriginal art and literature, and Aboriginal political movements. A central concern of the course will be to present Aboriginal perspectives. It should be noted that while this is a history course it is interdisciplinary in nature. As well as examining conventional historical issues it will also look at literature, art and film. This diversity of approaches will be reflected in a wide range of tutorial exercises and essay topics.

HIST 2072

Slavery and Emancipation in the Atlantic World

3 units - semester 1

3 contact hours per week

Available for Non-Award Study

Prerequisite(s): 12 units Level I Humanities/Social Sciences of which at least 3 units must be in History

Incompatible: HIST 2044/3044

Assessment: tutorial participation 10%, short essay 15%, bibliography 5%, research essay 40%, final exam 30%

This course will introduce students to slavery and emancipation around the Atlantic basin. The course will cover the period of European colonial expansion through the beginnings of decolonisation, from the fifteenth century through the nineteenth century. The international

focus will allow us to consider how the institution of slavery shaped life in Europe, Africa, and the Americas. Much of the course will involve comparing New World slave societies and tracing their development over time. To accomplish this task we will analyse a variety of topics related to the slave community: the middle passage, the formation of African and African American culture, the experience of labour, gender and family life, and resistance. The causes, and various results, of emancipation will occupy our attention in the latter stages of the course beginning with the San Domingue Revolution and extending through emancipation in the United States, Cuba, and Brazil. By the end of the course students will have a strong background in one of the essential topics in modern history.

HIST 2074

Islam, Army and State: Indonesia since 1945

3 units - semester 1

3 contact hours per week

Available for Non-Award Study

Prerequisite(s): 12 units Level I Humanities/Social Sciences of which at least 3 units must be in History

Incompatible: HIST 2022/3022

Assessment: tutorial participation 10%, Quiz 10%, 3,000 word research essay 40%, 2-hour exam 40%

Current developments in Indonesia have dominated Australian media coverage of Asia during the last few years. Timor, the fall of Suharto, the crisis in Aceh, democratisation and - above all - the potential radicalisation of Islam - all have drawn attention to the need to understand the recent history of our nearest neighbour to the north.

This course encourages students to range over political, social and economic events in Indonesia's recent past, from feminism and its relation to the growth of Indonesian nationalism to the fall of the New Order regime of President Suharto in 1998 and its early twenty-first century aftermath. It will examine the water-shed decade of the 1940s when war and revolution shattered the Dutch colonial regime; the inter-twined history of Indonesia's first President, Sukarno, the Army and the Communist Party, whose destruction by the army in 1966 at the height of the Cold War in Asia paved the way for Sukarno's removal from power and the rise of Suharto; the role of the Indonesian army in post-independence politics; and the social and political history of Islam in Indonesia over recent decades.

HIST 2076

Portraiture and Power

3 units - semester 2

3 contact hours per week

Prerequisite(s): 12 units Level I Humanities/Social Sciences

Assessment: 800 word visual analysis 20%, 1,500 word minor essay 30%, 3,000 word major research essay 40%, tutorial participation 10%

This course complements and expands conventional studies of power in historical and political textual sources by analysing the representation of people in the enduring

genre of portraiture in past and present visual culture. It focuses on the origins and evolution of the portrait in early modern Europe (1500-1800) during which time the human likeness in art reaches a high point of development. It also examines the complex relationship between artists, sitters and viewers. Close examination of the formats, symbolism and function of portraits reveals them as a valuable (primary) source of historical, social, cultural, political, religious, and economic significance. Students are provided with a unique opportunity to develop understanding of key art historical concepts, methods and theories that enable them to critically analyse the construction, dissemination, reception, and agency of portraits across time and place.

HIST 2077
Is America really in decline?

3 units - winter semester

36 hours (1 x 2 hour lecture per day x 12; 1 x 1 hour tutorial per day x 12)

Available for Non-Award Study

Prerequisite(s): 12 units at Level I in Humanities/Social Sciences, or equivalent

Assessment: One 3,200-4,000 word research essay 70%, one 900-1,200 word minor essay 20%, tutorial participation 10%

2008 was an election year in the United States and interest has reached a new high domestically and internationally in the future of the American government and the American republic. With the extraordinarily unpopular administration of George W. Bush (30% in the polls, a very low number) it is timely and important to examine the origins and future of the American state. This short subject is structured to do exactly that: how did the American state emerge at the end of the 18th century?; what have been the crucial values and themes which have governed its development?; how did it expand within a century from a tenuous state on the eastern seaboard of North America to become a continental power and eventually a world hegemon?; and, finally is it now in decline and what are its prospects for the future under a new administration that came into power in January, 2009? The subject would be run in three hour seminars for three sessions per week over four weeks (36 hours) and the mode of instruction would include lectures, discussion and some films and visual materials. The subject is intended for Advanced students. The objective would be to give the students a concentrated appreciation of the nature and complexities of American history and culture and an insight into the very formidable domestic and foreign policy issues facing America in both the short and long term.

HIST 2078
Power, Passion & Greed: Georgian London 1714–1830

3 units - semester 1

3 hours per week

Available for Non-Award Study

Prerequisite(s): 12 units of level 1 courses from any Faculty. Students must be 18 years of age at the commencement of classes (required for Second Life).

Assessment: 3000 word essay (40%), 1800 word research project (40%), 1000 word reflective journal (10%), participation (10%)

The eighteenth century witnessed the birth of many of the events and ideas associated with modernity such as individual liberty and human rights, freedom of the press, capitalism and consumerism and the Industrial Revolution. This course will consider the significance of such challenges to the old European order and the ramifications for both the lives of those who lived through them and for historical study. In lectures, tutorials and workshops we will explore the world in which these challenges occurred through the lenses of power, passion and greed. Students also have the unique opportunity to explore these issues, and conduct a research project, in a virtual reconstruction of eighteenth-century London in 'Second Life' which brings the sights, sounds and experiences of Georgian London to life and will enrich understanding of the texts and events of this fascinating and colourful period.

HIST 2079
Art Against Society: Censorship & Iconoclasm

3 units - semester 1

3 hours per week

Available for Non-Award Study

Prerequisite(s): 12 units of level 1 courses. Students must be 18 years of age at the commencement of classes due to the discussion of R rated themes and materials

Assessment: Tutorial participation 10%, 1,000 word minor essay 20%, 1,500 word minor essay (30%), 3,500 word research essay (40%)

According to Pablo Picasso art ought to be forbidden to ignorant innocents and never allowed into contact with those not sufficiently prepared - art is dangerous and where it is chaste it is not art. In light of recent controversies concerning religious and sexual transgressions in contemporary visual art within the work of Bill Henson and Andres Serrano, this course will chart the origins of censorship and iconoclasm in early modern European visual culture, particularly during the tumultuous political contexts of the sixteenth and seventeenth centuries throughout the Renaissance/ Reformation and Baroque/Counter-Reformation periods. The course will raise awareness, encourage reflection and stimulate debate around the various ways art has antagonised individuals and (special interest) groups in past and present societies and cultures due to conflicting rights and roles of artists versus viewers and contrasting cultural (museums and galleries), legal and governmental perspectives. Major themes to be discussed in lectures and tutorials will include the function, regulation and destruction of art that offends religion, decorum and morality, while the problematic definitions of blasphemy and obscenity will be systematically analysed by an empathetic approach to understanding art across time and place that insists on the acknowledgment of opposing arguments and different ways of seeing.

HIST 2080
History of the Indigenous Peoples of Australia A

3 units - semester 1

3 contact hours per week

Available for Non-Award Study

Prerequisite(s): 12 units level 1

Incompatible: HIST 2017/3017

Assessment: 1500 minor review essay (30%); 3000 word research essay (40%); 1500 word tutorial presentation (20%); participation (10%)

A history of Aboriginal/European relations in colonial Australia, focussing especially on South Australia. The issues addressed will include land rights, Aboriginal responses to colonisation, frontier violence, government policy and administration, missions, Aboriginal engagement in the colonial economy, and European representations of Aboriginal people. As well as examining 'what happened', the course will also examine how aspects of this history have been remembered in regional communities, and within the national community. Special attention will be given to the analysis of primary source materials, and students will be encouraged to develop an original research project.

HONOURS

HIST 4401A/B Honours History

24 units - full year

Prerequisite: UG degree, credit average of at least 70% in courses contributing to major in History or equiv approved by Head of Discipline

Assessment: coursework (2 topics) in semester 1, 15000 word thesis written in semester 2 (lists of special courses & thesis supervisors are in Honours handbook)

Application forms for admission to Honours and a detailed brochure on the course are available from the History Office; students with questions about the course or eligibility should consult the Honours Coordinator

Honours work includes the writing of a thesis, a common course on the principles and practice of historical research and writing, and an elective. Students may choose their elective from a list published in the Honours handbook.

Honours in History can be studied part-time or can be combined with Honours in another discipline, subject to the approval of the Head of Discipline.

Horticulture

LEVEL III

HORTICUL 3000WT Production Horticulture III

3 units - semester 2

2 hour lecture, 4 hour practical per week

Assumed Knowledge: ENV BIOL 2006 or equiv

Assessment: Exam, assignments

The course examines production of commercial fruit, vegetable and nut crops including limits to production and characteristics for cultivars, management and irrigation, harvesting and marketing. Crops considered

include citrus, apple and pears, grape vines, soft vines (berries), stone fruits, almond, walnut, macadamia, pecan, pistachio, and the tropical fruit, pineapple, banana, mango, lychee and avocado. Vegetables include tomato, potato, brassicas, cucurbits, lettuce and the onion group.

HORTICUL 3001WT Horticulture Systems III

3 units - semester 1

1 x 2 hour lecture, 4 hour practical per week

Assumed Knowledge: ENV BIOL 2006 or equiv

Assessment: Mid-semester exam, final exam, assignments

The importance of horticulture to the community, sustainability and economic value, horticultural production areas and environmental factors involved. Fruit crop growth and its control using cultural and chemical methods. Horticultural propagation methods. The basis of production systems which include horticulture, and systems which combine different types of horticulture. Plant improvement and breeding. The significance of pollination to horticulture.

HORTICUL 3004WT Olive Production and Marketing III

3 units - winter semester

5 x 4 hour lectures, 5 x 4 hour practicals for 2 weeks in mid year break

Assessment: Exams, practical, tour reports, major assignment

This course examines production aspects of olive oil and pickling fruit. Characteristic requirements regarding cultivar selection, climate, soils and location; growing practices plus management of irrigation, pest and diseases; development budget financial planning; harvesting and oil quality assessment; marketing of olives including market evaluation, market plan development in product, pricing, distribution and marketplace decisions. Students are required to participate in field visits to growing/marketing enterprises as arranged.

HONOURS

HORTICUL 4003AWT/BWT Honours in Horticulture

24 units - full year

Prerequisite: Credit or higher pass in appropriate Level III courses offered by a Science Discipline

Corequisite: 2 Level III courses offered by Discipline of Wine & Horticulture -at discretion of Head of Discipline, one may be a relevant course taught by another discipline

Assessment: To be advised

This course is available under the provisions of Academic Program Rule 5.7.2

Intending candidates must consult the Honours Coordinator and potential supervisors during October of the final year of studies for the degree of Bachelor of Science, and should be prepared to commence studies on or about 1 February. After consultation, each candidate must obtain a letter of acceptance from the Head of the Discipline of Wine and

Horticulture. A research project will then be assigned which will be carried out under supervision. The results will be presented in a seminar and research report at the end of the course. A candidate may also be required to prepare an essay, attend lectures and pass an exam.

HORTICUL 4008AWT/BWT Honours in Horticulture (Two Year)

24 units - full year

20 hours per week for 40 weeks over a 2 year period

Prerequisite(s): Credit or higher in relevant Level III courses as approved by the Head of Discipline

Assessment: Thesis, seminars, remainder as deemed appropriate to the student's program

This course comprises a substantial research project of the student's choosing in a topic acceptable to the head of School of Agriculture, Food and Wine, two seminars on that topic, and coursework, essays or other assignments deemed appropriate to the individual student's honours program.

Indonesian

LEVEL II

INDO 2004 Indonesian In-Country

12 units - semester 1 or 2

For students who wish to study at an Indonesian University. Indonesian language and other courses can be studied. For further information contact the Centre for Asian Studies.

LEVEL III

INDO 3004 Indonesian In-Country

12 units - semester 1 or 2

Quota applies

For students who wish to study at an Indonesian University. Indonesian language and other courses can be studied. For further information contact the Centre for Asian Studies.

Information Systems

LEVEL I

ECOMMRCE 1000 Information Systems I

3 units - semester 1 or semester 2

3 hours + 9 hours self-directed study per week

Available for Non-Award Study

Quota may apply

Assumed Knowledge: Basic accounting concepts-students without this are advised to enrol concurrently in ACCTING 1002

Incompatible: COMP SCI 1004 or COMP SCI 1001 or PURE MTH 1002

Assessment: Exam/assignments/tests/tutorial work as prescribed at first lecture

This course is an introduction to Business & Management Information Systems: their role in organisations, particularly in support of strategic and operational decision-making and problem-solving, as well as operations support and management. Systems thinking; systems design & development; management perspectives on the IT support role to business (particularly security & ethics); trends, issues and concerns in IS; and end-user application software including spreadsheets, reporting, and database management, are studied and assessed.

NOTE: This course has an alternative delivery and assessment format that includes labs commencing in week 1 (not 2) and weekly in-class testing in seminars based on required reading and homework.

The first marked assessment occurs in the opening half hour of the first seminar of the semester, based on required preparation for class posted on the class website. In-seminar tests contribute to final grade. It is suggested that, if there is any likelihood of missing the first week of semester that you enrol in this course in the following semester.

LEVEL II

ECOMMRCE 2500 Internet Commerce II

3 units - semester 2

3 hours + 9 hours self-directed study per week

Assumed Knowledge: Fundamentals of World Wide Web, information system development & relational database management systems (eg Microsoft Access) as in Information Systems I

Incompatible: WINEMKTG 3047EX

Assessment: Exam/assignments/tests/tutorial work as prescribed at first lecture

An examination of how businesses use the World Wide Web to interact with consumers. Topics include alternative business models, current Australian practices, commercial benefits and costs, design, construction and management of a web site, integration with a database, HTML and Java Script languages, project management, payment systems, security, international considerations, evaluation and maintenance of a website as part of a marketing plan.

LEVEL III

ECOMMRCE 3500 Electronic Commerce III

3 units - semester 1

3 hours + 9 hours self-directed study per week

Available for Non-Award Study

Assumed Knowledge: Fundamentals of World Wide Web, information system development, relational database design & computerised accounting as taught in Information Systems I

Assessment: Exam/assignments/tests/tutorial work as prescribed at first lecture

An examination of how businesses use computer communications to interact with other organisations including suppliers, customers, financial institutions and government agencies. Topics include communications technologies, private and public networks, electronic data interchange, supply-chain management, current Australian practices, strategic planning for information technology, relationships with other businesses and departments, integration with internal systems, enterprise resource planning software, implementation issues, firewalls and security.

International Business

LEVEL II

INTBUS 2500 International Business II

3 units - semester 2

3 hours + 9 hours self-directed study per week

Assessment: Exam/assignments/tests/tutorial work as prescribed at first lecture

The course introduces students to the basic concepts of international business. Topics include internationalisation theories; the impact of technology on multinational corporations; understanding documentation used in the international business arena; financing multinational operations; and international governance issues. There will be a focus on appropriate theory and the course will aim to provide opportunities for the practical implementation of the main concepts covered.

LEVEL III

INTBUS 3501 Corporate Responsibility for Global Business III

3 units - semester 2

3 hours + 9 hours self-directed study per week

Assessment: Exam/assignments/tests/tutorial work as prescribed at first lecture

This course gives students an insight into how to anticipate and deal with some of the major challenges faced in the international business arena. Topics include: an introduction to the economics and politics of globalisation and the emergence of 'corporate social responsibility'; internal corporate governance issues - how a company identifies new markets, manages risks, overcomes exporting and importing challenges while dealing with trade law and the WTO; external challenges - how a company navigates corporate legal obligations, consumer concerns, labour and human rights issues, poverty, sustainable development and environmental issues.

International Studies

CAPSTONE

INST 3100 International Studies Core Course

3 units - semester 2

3 contact hours per week

Available for Non-Award Study

Prerequisite: 15 units in Politics with no more than 6 units at Level I
Incompatible: INST 2001

Assessment: Closed-book multiple choice test 20%, 1,500 word paper 20%, 3,000 word major essay 50%, participation 10%

The course is designed to draw together a variety of areas dealt with in International Studies. The study of the international system is first and foremost one of perceptions and perspectives. Indeed, the very depiction of the world as a single international system is a facet of perspective. The course sets out to test these boundaries and forms of perception, by first of all examining holistic approaches to looking at the world ('global systems' and 'New World Orders' etc.), and then turning to perspectives from individual states and groups of states. Elements of Politics, Political Economy, History and Area Studies are at the heart of the course, with the theoretical and methodological foundations of how these blend together being a key dimension to its delivery.

Japanese

LEVEL I

JAPN 1001 Japanese IA: Beginner I

3 units - semester 1

4 contact hours per week

Available for Non-Award Study

Prerequisite(s): No assumed knowledge of Japanese is required. This course is for (total) beginners with little or no previous knowledge of Japanese.

Assessment: continuous assessment, exam(s)

The Japanese IA: Beginner I course is designed for students with little or no previous knowledge of Japanese. If you already know hiragana, katakana and approximately 60 basic kanji, you are advised to enrol in Japanese 1B. This course offers instruction and practice in the four skills of reading, writing listening and speaking, while introducing the basic grammar and vocabulary of modern Japanese as well as the basic writing system, hiragana, katakana and beginners kanji. In classes, emphasis will be placed on developing students' basic communication skills in both spoken and written Japanese to build a solid foundation at the beginner level. The aims of the course are: i) to enhance and consolidate the introductory grammar; ii) to expand knowledge and use of vocabulary

in both conversational and written contexts; iii) to develop communication skills/strategies; iv) to become familiar with hiragana, katakana and basic kanji; v) to become efficient and independent language learners.

If you have completed Year 12 SACE Beginners/Continuers Japanese at high school or any equivalent study overseas, you are not eligible to enrol in this course.

Entry points for students with Year 12 SACE scores:
Japanese 1B (Beginners Japanese score 14 or below)
Japanese 2A (Beginners Japanese score 15 or above)
Japanese 2A (Continuers Japanese score 16 or below)
Japanese 3A (Continuers Japanese score 17 or above).

JAPN 1002 **Japanese IB: Beginner II**

3 units - semester 2

4 contact hours per week

Available for Non-Award Study

Prerequisite(s): JAPN 1001 (or equivalent)

Assessment: continuous assessment, exam(s)

The Japanese IB: Beginner II course continues instruction and practice in the four skills of reading, writing, listening and speaking, whilst enabling students to broaden and consolidate their basic knowledge of the Japanese language acquired in Japanese IA. In order to provide a solid foundation at the beginner level in both written and spoken Japanese, literacy skills will be emphasised to further develop towards the elementary level, and communication skills will be reinforced through aural-oral practice in classes.

The basic aims of Japanese IB are: i) to enhance and consolidate the introductory grammar; ii) to expand knowledge and use of vocabulary in both conversational and written contexts; iii) to develop communication skills/strategies; iv) to become familiar with new kanji; v) to become efficient and independent language learners.

If you have completed Year 12 SACE Continuers Japanese at high school or any equivalent study overseas, you are not eligible to enrol in this course.

Entry points for students with Year 12 SACE scores:
Japanese 1B (Beginners Japanese score 14 or below)
Japanese 2A (Beginners Japanese score 15 or above)
Japanese 2A (Continuers Japanese score 16 or below)
Japanese 3A (Continuers Japanese score 17 or above).

LEVEL II

JAPN 2201 **Japanese 2A: Lower Elementary I**

3 units - semester 1

4 contact hours per week

Available for Non-Award Study

Prerequisite(s): JAPN 1002 or equivalent

Incompatible: JAPN 2001

Assessment: continuous assessment, exam(s)

Japanese 2A: Lower Elementary I course continues to build upon knowledge of the grammar, vocabulary and kanji introduced at the lower elementary level, whilst offering instruction and practice in the four skills of reading, writing, listening and speaking. Throughout the course, emphasis is placed on developing students' communication skills in both spoken and written Japanese to consolidate a solid foundation at the lower elementary level. The aims of the course are: i) to build upon and consolidate the lower elementary grammar; ii) to expand knowledge and use of vocabulary in both conversational and written contexts; iii) to develop communication skills/strategies; iv) to become familiar with new kanji characters and their combinations; v) to become efficient and independent language learners.

Entry points for students with Year 12 SACE scores:
Japanese 1B (Beginners Japanese score 14 or below)
Japanese 2A (Beginners Japanese score 15 or above)
Japanese 2A (Continuers Japanese score 16 or below)
Japanese 3A (Continuers Japanese score 17 or above)

JAPN 2202 **Japanese 2B: Lower Elementary II**

3 units - semester 2

4 contact hours per week

Available for Non-Award Study

Prerequisite(s): JAPN 2001/2201

Incompatible: JAPN 2002

Assessment: continuous assessment, exam(s)

Japanese IIB: Lower Elementary II course continues instruction and practice in the four skills of reading, writing, listening and speaking, while further enhancing the knowledge of grammar, vocabulary and kanji at the lower elementary level. To complete the lower elementary grammar, vocabulary and kanji in this course, increased emphasis is placed on developing students' communication skills in both spoken and written Japanese to further consolidate a solid foundation at the lower elementary level. The aims of the course are: (i) to enhance and complete the lower elementary grammar; (ii) to expand knowledge and use of vocabulary in both conversational and written contexts; (iii) to develop communication skills/strategies; (iv) to become familiar with new kanji characters and their combinations; (v) to become efficient and independent language learners.

Entry points for students with Year 12 SACE scores:
Japanese 1B (Beginners Japanese score 14 or below)
Japanese 2A (Beginners Japanese score 15 or above)
Japanese 2A (Continuers Japanese score 16 or below)
Japanese 3A (Continuers Japanese score 17 or above).

LEVEL III

JAPN 3201 **Japanese 3A: Higher Elementary I**

3 units - semester 1

3 contact hours per week

Available for Non-Award Study

Prerequisite: JAPN 2002/2202 or JAPN 1012

Incompatible: JAPN 3001

Assessment: Continuous assessment, exam(s)

Japanese IIIA: Higher Elementary I course continues instruction and practice in the four skills of reading, writing, listening and speaking to further develop students' Japanese language competence at the higher elementary level. Throughout the course, emphasis is placed on enhancing students' communication skills in both spoken and written Japanese to consolidate a solid foundation at the higher elementary level. The aims of the course are: (i) to build and consolidate the higher elementary grammar; (ii) to expand knowledge and use of vocabulary in both conversational and written contexts; (iii) to develop communication skills/strategies; (iv) to develop reading and writing skills using a substantial number of characters and their combinations; (v) to become efficient and independent language learners.

Entry points for students with Year 12 SACE scores:

Japanese 1B (Beginners Japanese score 14 or below)

Japanese 2A (Beginners Japanese score 15 or above)

Japanese 2A (Continuers Japanese score 16 or below)

Japanese 3A (Continuers Japanese score 17 or above).

JAPN 3202

Japanese 3B: Higher Elementary II

3 units - semester 2

3 contact hours per week

Available for Non-Award Study

Prerequisite: JAPN 3201

Incompatible: JAPN 3002

Assessment: Continuous assessment, exam(s)

Japanese IIIB: Higher Elementary II course completes the higher elementary grammar and further extends students' knowledge of vocabulary and Kanji, in order to progress to the intermediate level. Through instruction and practice in the four skills of reading, writing, listening and speaking, increased emphasis is placed on enhancing students' communication skills in both spoken and written Japanese to further consolidate a solid foundation at the higher elementary level.

The aims of the course are: i) to complete the higher elementary grammar and to enhance the knowledge in advance usages of various grammatical combinations; ii) to expand knowledge and use of vocabulary in both conversational and written contexts; iii) to develop communication skills/strategies; iv) to develop reading and writing skills using a substantial number of characters and their combinations; v) to become efficient and independent language learners.

JAPN 3203

Japanese 3B: Practical Japanese

3 units - semester 2

3 contact hours per week

Available for Non-Award Study

Prerequisite(s): JAPN 3001/3201

Incompatible: JAPN 3002

Assessment: Research projects, assignments and tests

The course is a complementary course for Japanese IIIB: Higher Elementary II and, in order to facilitate students' progress from the higher elementary to the intermediate level, this course aims to extend students' language skills by using authentic Japanese language sources, including on-line materials. In this course, emphasis is placed on the application of students' language training developed so far, particularly in the areas of vocabulary, grammar and Kanji, to the retrieval of information on a selection of issues and topics. By the end of this course, students will be equipped with the necessary language skills and linguistic knowledge for accessing a variety of websites written in Japanese, using search engines, online dictionaries, translation tools and so forth. At the same time, emphasis is also placed on developing students' language skills to be able to scan, skim and critically analyse Japanese language texts available on-line, whilst searching for relevant information. In order to develop students' ability to form and express their own opinions using appropriate register in Japanese, a selection of Japanese texts on issues and topics related to Japan and certain aspects of language use, will be used as discussion materials.

JAPN 3211

Intermediate Japanese A

3 units - semester 1

3 contact hours per week

Prerequisite(s): JAPN 2212 Japanese 2SB, JAPN 3202 Japanese 3B, JAPN 3203 Japanese 3B: Practical Japanese

Incompatible: JAPN 2011

Assessment: continuous assessment, exam(s)

This course aims to develop students' Japanese language competence at the (lower) intermediate level. A substantial number of vocabulary, kanji and grammar points at the intermediate level are introduced using function-based textbooks, whilst enabling students to review and integrate their prior knowledge of vocabulary and grammar. This course also offers practical communication practice to build students' ability to converse and discuss on a wide range of topics. At the same time, strong emphasis is placed on developing reading and writing skills using practical materials used for different functions and situations in Japanese.

JAPN 3212

Intermediate Japanese B

3 units - semester 2

3 contact hours per week

Prerequisite(s): JAPN 3211 Intermediate Japanese A

Incompatible: JAPN 2012

Assessment: continuous - small tests and assignments, exam

This course is a continuation of the Intermediate Japanese A (and former Japanese IISA) course and aims to develop students' Japanese language competence from a lower-intermediate to a higher-intermediate level. In this course, a strong emphasis is placed on enhancing students' practical conversational ability so that they will be able to converse and discuss on a wider range of topics. At the

same time, increased emphases will be also placed on developing reading and writing skills.

HONOURS

JAPN 4401A/B

Honours Japanese Studies

24 units - full year

Prerequisite: UG degree with Credit average in courses contributing to major in Japanese or equiv. approved by Head of Discipline

Assessment: advanced level course in Japanese 25%, coursework topic in social science 25%, each with written work of approx. 7200-9000 words or equiv, 15000-17000 word thesis 50% (or 35000-40000 Kanji if written in Japanese)

Students wishing to take Honours in Japanese Studies are encouraged to consult the Honours Coordinator prior to commencing Advanced Level studies to ensure that appropriate course choices are made in preparation for Honours. In order to fulfil the prerequisites, it is necessary to combine the study of language courses with that of Asian studies courses. Entry to Honours is subject to the approval of the Head of Discipline on advice from the Honours Committee. The Honours program consists of three elements: a research thesis, and 2 coursework topics which normally are an advanced level Japanese course, and theory and methodology in Asian studies. Theses written in Japanese are accepted. In some circumstances Honours Asian Studies can be studied part-time over two years or combined with Honours in another discipline. Students wishing to take Honours but who are without prerequisites are advised to consult the Honours Coordinator as soon as possible.

Latin

LEVEL III

LATN 3002

Latin IIIA

6 units - semester 1 (Not offered beyond 2010)

3 contact hours per week

Restriction: Available only to students completing a major in Latin

Available for Non-Award Study

Prerequisite: LATN 2003 or equiv

Assessment: sentences/proses during semester 15%, 3 exams - preparation text & discussion text 30%, unseen translation & translation from English 40%, private reading text 15%

The course aims to: i) enable students to gain complete mastery over the language structure; ii) improve their reading skills over a variety of genres and writing styles; iii) enhance their understanding and appreciation of the literature and culture of the society. One hour per week will be devoted to the study of grammar and syntax, including unseen comprehension and translation from English: in this class, students will be expected to hand up work for assessment. One hour will be spent on a

preparation text, prepared beforehand and translated in class with attention given to grammatical understanding and analysis. One hour per week will be devoted to a discussion text with attention given to literary analysis as well as translation. In addition, a text is to be read privately during the semester, for examination at the end.

LATN 3003

Latin IIIB

6 units - semester 2 (Not offered beyond 2010)

3 contact hours per week

Restriction: Available only to students completing a major in Latin

Available for Non-Award Study

Prerequisite: LATN 3002 or equiv

Assessment: sentences/proses during semester 15%, 3 exams - preparation text & discussion text 30%, unseen translation & translation from English 40%, private reading text 15%

The course aims to: i) enable students to gain complete mastery over the language structure; ii) improve their reading skills over a variety of genres and writing styles; iii) enhance their understanding and appreciation of the literature and culture of the society. One hour per week will be devoted to the study of grammar and syntax, including unseen comprehension and translation from English: in this class, students will be expected to hand up work for assessment. One hour will be spent on a preparation text, prepared beforehand and translated in class with attention given to grammatical understanding and analysis. One hour per week will be devoted to a discussion text with attention given to literary analysis as well as translation. In addition, a text is to be read privately during the semester, for examination at the end.

HONOURS

LATN 4401A/B

Honours Latin

24 units - full year

12 units - semester 1 or semester 2

Prerequisite(s): UG degree, credit average in courses contributing to a major in Latin (or equiv approved by Head of Discipline)

Assessment: 4 x texts each assessed by 1hr exam 10%; 2 x 3000 word assignments on texts 15%; 2 x 300 word seminar papers in Common Course and seminar discussion contributions 20%; proses, exam on unseen and prose translation 13%; 12500-15000 word dissertation 42%

Students wishing to take Honours Latin should consult the Honours Coordinator prior to commencing level II to ensure appropriate course choices are made in preparation for Honours.

The exact arrangement of the course may be varied by the Head of the Discipline in accordance with the interests of the students and the availability of specialised teaching. In some circumstances Honours Latin can be studied part-time over two years or can be combined with Honours in Ancient Greek or another discipline.

Law

LEVEL 1

LAW 1501 Foundations of Law

3 units - semester 1 and 2

36 hours

Incompatible: LAW 1001

Assessment: Typically will include group work in seminars, written assignments during the semester, and an exam

This course provides a foundation in the core legal skills of case reading and analysis, legal research, statutory interpretation and problem solving.

LAW 1502 Law of Torts 1

3 units - semester 1

24 hours

Prerequisite: LAW 1501

Corequisite: LAW 1501

Incompatible: LAW 1007

Assessment: Typically to include group work, participation in seminars, individual and group written work and final exam

This course provides a general introduction to the law of torts with a specific focus on negligence. It considers: general and specific duty categories; standard of care; causation and remoteness; damages; defences; vicarious liability; and an introduction to statutory interpretation and the interaction between statute and common law, with specific emphasis on locating and explaining judicial consideration of the Civil Liability Act 1936 (SA). Students will also be introduced to group work and legal problem solving skills.

LAW 1503 Contracts

6 units - semester 1

60 hours

Prerequisite(s): Law 1501

Corequisite(s): Law 1501

Incompatible: Law 1003

Assessment: Typically to include a take-home exam (mid-semester), and a final exam

The course acquaints students with the common law, equitable and statutory rules relating to enforceable agreements and puts those rules in their practical perspective. Although the course is not concerned with the statutory modifications made with respect to specific classes of contract (eg employment, land, consumer finance, etc), which are dealt with in other courses, an understanding of the basic conception of a contract is vital not just as a starting point for those statutory models but also for an understanding of everyday commercial agreements. The course will explore the influence of concepts such as 'freedom of contract', 'good conscience' and 'good faith' in the development

and application of the law. Reference will also be made to the various regimes for regulating contracts that have an international dimension.

The following topics will be covered: formation; terms and interpretation; privity of contract, agency and assignment of obligations; vitiating factors; statutory remedies for unfair commercial conduct; performance and discharge of obligations; enforcement, compensation and restitutionary remedies.

LAW 1504 Principles of Public Law

3 units - semester 1 and 2

36 hours

Prerequisite: LAW 1501

Corequisite: LAW 1501

Assessment: Typically will include participation in seminars and other activities, written work and exam

An Introduction to the role and content of public law in the Australian Legal System. Selected topics will include: introduction to Federal and State Constitutions, both written and in common law; historical background and theories of constitutionalism, including an introduction to the doctrine of separation of powers and the nature of legislative, executive and judicial power at both Commonwealth and State levels; representative and responsible government, including the relation of citizens and their parliaments and the structure of government administration, and the relation of executive government to the parliaments; courts and parliament and courts and the executive; an introduction to International Law and its relation to the Australian legal system; human rights in Australian and International Law; and introduction to administrative law theory, including basic administrative law principles. It provides a foundation for Australian Constitutional Law and Administrative Law.

LAW 1505 Law of Torts 2

3 units - semester 2

36 hours

Prerequisite: LAW 1502

Incompatible: LAW 1007

Assessment: Typically will include research paper and final exam

This course will build on the foundations of the introduction to Torts in first semester. The aim of the course is to focus on specific areas of torts law, beyond negligence principles, including defamation, recovery for economic loss, intentional torts, breach of statutory duty and concurrent liability (proportionate liability and contribution claims). The course will include a critical analysis of the role of policy in the development of the law and provide an opportunity for students to critically analyse the developments of the law.

The specific skills of legal research and writing will be introduced. Students will be expected to explore legislative enactment through consideration of explanatory memoranda, background papers and Hansard.

LAW 1506 **Property Law**

6 units - semester 2

72 hours

Prerequisite: LAW 1503

Assumed Knowledge: LAW 1502

Incompatible: LAW 1005

Assessment: Typically will include group work, participation in seminars, individual and group written work and final exam

This course will discuss the theoretical nature and justification of property and the important features of the Australian common law and statutory provisions relating to real and personal property, with emphasis being given to the former. The principal aim is to acquaint students with the fundamental proprietary interests and to teach students how to apply the relevant laws and concepts to practical situations where such interests are in dispute. The following topics will be considered: the theoretical nature and justification of common, private and public/state property; ownership and possession of real and personal property; adverse possession and limitation of actions legislation; limits to land (including fixtures, the ownership of airspace and subsoil, land boundaries and encroachments); estates and tenure; legal rights recognised in land (including bare and contractual licences; mortgages; co- ownership); future interests and equitable intervention; creation and enforceability of equitable interests, including assignments of property; the Torrens system of land title registration; leases; easements; and restrictive covenants.

LEVEL II

LAW 2501 **Australian Constitutional Law**

3 units - semester 1

36 hours

Prerequisite: LAW 1501

Corequisite: LAW 1504

Incompatible: LAW 2003

Assessment: Typically will include participation in seminars, interim written assessment and exam

The Australian constitutional system. Selected topics will include: the doctrine of separation of powers; the nature of legislative, executive and judicial power at both Commonwealth and State levels; the legislative power of the Commonwealth, including the process of characterisation and an examination of heads of power specified in s51 and s52; relations between the Commonwealth and the States and the resolution of inconsistencies between laws; the implications in the State and Federal constitutions drawn from representative and responsible government; the Commonwealth and the States as a social and an economic union; and the law relating to constitutional guarantees.

LAW 2502 **Equity**

3 units - semester 1

36 hours

Prerequisite: LAW 1506

Incompatible: LAW 2005

Assessment: Typically to include an interim written assignment & final exam

Historical basis of equity, as well as equitable rights, titles and interests in property, will be considered. The course will examine in detail major equitable doctrines or principles: 1) unconscionable conduct (which include estoppel and unconscionable transactions ; 2) fiduciary relationships; 3) trust: express (which discusses trust accounting), resulting and constructive. In trusts particular reference will be paid to the various types of trusts and the manner and form of their creation and variation. Further, the duties, rights and powers of trustees will be included, as will be the consequences of breach of trust. Particular emphasis will be placed throughout the course upon remedies, both specific and monetary. Other equitable doctrines such as breach of confidence will be considered.

LAW 2503 **Criminal Law and Procedure**

6 units - semester 1

60 hours

Prerequisite: LAW 1501

Assumed Knowledge: LAW 1503

Incompatible: LAW 1004

Assessment: Typically will include an assignment or test (Criminal Procedure), class participation and a final exam

The course in Criminal Law and Procedure opens with an examination of the nature and purposes of the criminal law and the general principles of criminal responsibility at common law and in the Commonwealth Criminal Code. It continues with a consideration of selected issues in criminal procedure, with particular reference to prosecutorial practice and the requirements of fair trial. The procedural section of the course is presented in conjunction with the law of non fatal offences against the person. The topics that follow include a selection of substantive offences: the unlawful homicides, sexual offences and offences of dishonesty. These are followed by an examination of the general defences of self defence, necessity and duress. The extended forms of liability for attempt, complicity and statutory offences of preparation and association are covered before moving to a consideration of strict and absolute liability in state and federal criminal law. The course concludes with an examination of denials of criminal responsibility on the ground of incapacity resulting from infancy, mental illness or impairment, physical or psychological trauma and intoxication.

LAW 2504

Administrative Law

3 units - semester 2

36 hours

Prerequisite(s): Law 1504

Incompatible: Law 2002

Assessment: Typically to include class participation, interim essay and final exam

The 3 main aims of the course are to teach the basic principles which govern review of administrative action by courts and tribunals, to train students to apply those principles in complex fact situations and to provide a critical analysis of that system. A particular focus is placed upon judicial review, including its fundamental concepts of jurisdiction, ultra vires, and procedural fairness. The course will also cover review 'on the merits' by administrative tribunals. The practical significance of the course in substantive areas such as taxation, immigration, welfare and regulation is emphasised.

Topics include: State and Commonwealth avenues of review; the distinction between judicial review and review 'on the merits'; error of law and error of fact; justiciability and standing; procedural fairness; ultra vires and abuse of discretion; jurisdictional error, privative clauses and judicial review remedies.

LAW 2505

Corporate Law

6 units - semester 2

48 hours

Prerequisite: LAW 1501

Assumed Knowledge: LAW 2502

Incompatible: LAW 2004

Assessment: Typically to include exam and essay style assessment

This course deals with the following topics: i) types of commercial/trading associations; ii) incorporation under the Corporations Act including the incorporation process and the types of corporations that may be incorporated; iii) the consequences of incorporation including the concept of corporate personality; iv) the regulation of the internal affairs of a corporation including the role of the corporate constitution and the way in which a corporation is managed and administered; v) dealing with a corporation including the contractual liability of a corporation; vi) share capital and company membership; vii) debt capital including credit and security arrangements; viii) the duties and liabilities of directors and other officers of a corporation; ix) the legal remedies and powers of members of a corporation; x) the regulation of corporations in financial difficulty including the administration and the winding up processes.

LAW 2507

Australian Legal History

3 units - summer semester

24 hours

Prerequisite: LAW 1501

Assumed Knowledge: LAW 1504, LAW 1502, LAW 1503, LAW 1505

Incompatible: LAW 2006

Assessment: Typically will include essay and exam

This course will draw from the historical influences on the evolution of the Australian legal system to federation, with special reference to the continuing effects on the present day ordering of legal activities. Students will be expected to participate in class discussions. The course will draw from the following topics: The legal and philosophical foundations of the British empire, the juridical status of Australian settlement, the status of the Aboriginal people under European law, the English background to the Australian system, frontier law and other original Australian developments, the move to independent legal institutions and the juridical nature of constitution making in Australia. The course will also introduce students to the sources of legal history generally and Australian legal history in particular, as well as basic historical methodology.

LAW 2508

Comparative Law

3 units - semester 1

24 hours

Prerequisite: LAW 1501

Assumed Knowledge: LAW 1503 and LAW 1502

Incompatible: LAW 3016

Assessment: Typically to include optional research essay and end of semester exam

This course will cover the following topics: comparative law as an academic discipline; the world's families of legal systems; comparative evaluation of the merits of differing legal solutions to social problems; legal history and comparative law; the impact of ideological, religious and constitutionally entrenched values upon legal systems; conflicts of values, particularly in multicultural societies; law understood as divine revelation and law as a human creation (exemplified by an analysis of the roots of European and North American law and a survey of the history and present day practice of Islamic law); the impact of the philosophy of the Enlightenment on European and North American law (the theory and practice of human rights and the codification movement in civil law and common law countries); codified and uncodified law, highlighting prominent features of civil law and common law systems, eg, differing standards of interpretation of statute law, the courts' approaches to novel issues and the investigatory civil procedure (civil law) and the adversarial civil procedure (common law). Selected civil law judgments (translated into English) and common law judgments which have similar fact patterns will be compared.

LAW 2509

Commercial Law and the Market

3 units - summer semester

24 hours

Prerequisite: LAW 1503

Incompatible: LAW 2020

Assessment: Typically to include a research essay and class participation

This course examines the relationship between commercial law and the market. The course begins with a basic issue of legal study - how much attention is paid to the law, in this case commercial law. Empirical and theoretical works covering a wide range of industries will be examined to help answer this question. The course will also examine responses to the use of law in the market in light of the purposes of commercial law and the capacities of judges and the legal system to meet these purposes. The course will end with an investigation into the role of law in expanding the range of the market into new areas such as biotechnology and the Web.

**LAW 2511
Environmental Law**

3 units - semester 1
 24 hours
 Prerequisite: LAW 1501
 Assumed Knowledge: LAW 2501
 Incompatible: LAW 2070
 Assessment: Typically to include class participation & written work

An introduction to the concepts and principles which underpin environmental law from the international to the local level. The course will address Constitutional responsibilities and roles relating to the environment; sustainable development and the law; environmental planning through environmental impact assessment and land-use law; environmental protection principles, climate change and renewable energy; water resources law; and the protection of biological diversity.

**LAW 2512
Family Law**

3 units - semester 1
 24 hours
 Prerequisite: LAW 1501
 Assumed Knowledge: LAW 1506
 Incompatible: LAW 2015
 Assessment: Typically to include an essay, final exam, and seminar participation

The law of marriage and divorce within the constitutional context and the Family Law Act. Child welfare including custody, access. Matrimonial property and spousal maintenance. Legal ethics in the practice of Family Law.

**LAW 2513
Human Rights: International & National Perspectives**

3 units - semester 1
 24 hours
 Prerequisite: LAW 1501
 Incompatible: LAW 2085
 Assessment: Typically to include class participation and an essay

The aim of this course is to have students consider the legal, philosophical and sociological underpinnings of human rights; students will be encouraged to think critically about the views they hold and the values reflected in the Australian and international legal systems. The course will focus on the United Nations and its role in

formulating, interpreting and monitoring human rights. A further component of the course will be the protection of human rights in Australia.

**LAW 2514
Intellectual Property Law**

3 units - semester 1
 24 hours
 Prerequisite: LAW 1506
 Incompatible: LAW 2059
 Assessment: Typically to include class participation and an exam

This course aims, through a treatment of laws relating to patents, trademarks, confidential information and copyright, to examine the protection provided by the law in regard to ideas, inventions, information and other forms of creative effort. The course also aims to explore how the law must balance interests and protect investment while taking into account public welfare and technological developments. The course will explore the interrelationship of the different regimes of protection, and will also consider practical issues arising in the commercialisation or exploitation of intellectual property. Students completing this course should have a basic grounding in the law of the area, its limitations, policies, and objectives, including the basic features of the various systems of protection.

**LAW 2517
Minerals and Energy Laws**

3 units - semester 1 or 2
 24 hours
 Prerequisite: LAW 1506
 Incompatible: LAW 2096
 Assessment: Typically to include class participation & written work

The course examines the law and practice relating to the ownership and development of on-shore and off-shore mineral and petroleum resources in Australia. It covers the development of legislation with reference to exploration, extraction and the enforcement of mining and petroleum interests. Community and social issues will be discussed, including the relationship between mining and indigenous people, environmental controls over mining production, health and safety in mining, and the corporate social responsibility of companies operating overseas, including the links between resource exploitation, the environment and human rights. We will look at international boundary disputes, including the dispute over the Timor Sea.

The course will also deal with international and national laws and regulatory mechanisms to address climate change, including national and state legislation to encourage renewable energy resources, and the regulation of specific alternative energy resources such as wind, solar and geothermal energy. The regulation of the electricity industry and the regulation of uranium mining and nuclear energy will also be covered.

**LAW 2518
Moot Court**

3 units - summer semester or semester 1 or 2
 24 hours

Restriction: Students are only able to undertake Moot Court once during their studies.

Team by selection only

Prerequisite: LAW 1501

Assessment: Typically to include preparation of written memorial and Moot presentations

Students are eligible for the subject by application and selection only. Participants in the Moot Court subject will be selected as members of a team(s) of 3-5 students. The team(s) will prepare material for presentation in moot court competitions to be held within the Law School or in state, national or international competition. A team(s) will also be selected for the Sir Harry Gibbs Constitutional Moot Competition and may be selected for participation in other moot competitions. Participation in Moot Court will require students to acquire skills in the drafting of written submissions and in the oral presentation or legal argument.

LAW 2519 **Native Title Internship Program**

3 units - summer semester, semester 1 and semester 2

24 hours

By selection only - selected students will have secured an Aurora Project Native Title Internship

Prerequisite: LAW 1506

Assessment: Typically to include the preparation of a portfolio related to the placement and a research essay

The course places students in "internships" with native title representative bodies and other organisations which deal with native title in Australia for a period of six weeks. The internships enable students to build on their understanding of the theory of native title law by gaining an appreciation of its practical operation. The course aims to give depth and context to students existing knowledge of native title law.

Associated with the internship students will be asked to complete an agreed research task under the supervision of the course coordinator. The research task might involve research into a specific aspect of native title law or procedure. The research task will be negotiated with the student and the course coordinator, and will build on the work the student completes within the host organisation. It is expected that students will also be involved in day-to-day activities of their host organisation and gain a broad understanding of how such organisations operate and of the operation of native title law generally.

LAW 2520 **Public International Law**

3 units - semester 2

24 hours

Prerequisite: LAW 1501

Incompatible: LAW 2520

Assessment: Typically to include a research essay, class participation

The basic course in public international law includes the following topics: The nature, function and relevance of international law, the structure of the international community, the sources of international law, the

relationship between international law and municipal law, the participants in the international legal system, jurisdiction, state responsibility.

LAW 2521 **Property Theory**

3 units - semester 1

24 hours

Prerequisite(s): Law 1506

Incompatible: Law 2074

Assessment: Typically includesto include group work, participation in seminars, individual and group written work and a final essay

This course considers historical and current legal, political and philosophical theories of property and their applicability to social context. Theorists such as John Locke, William Blackstone, JW Harris, CB Macpherson, Stephen Munzer, Margaret Jane Radin, Carol Rose, Joseph William Singer and Laura Underkuffler will be examined. Using these theories of property, the course explores the role and justification of property as law and as theory. The course will make use of inter- and cross-cultural and interdisciplinary resources.

LAW 2524 **Criminology**

3 units - semester 2

24 hours

Prerequisite: LAW 1501

Incompatible: LAW 2122

Assessment: Typically to include a research essay, final exam, and seminar participation

Defining crime and the operation of the criminal justice process. An introduction to the historical and contemporary perspectives on the causes of crime and criminality including: physical and genetic factors; psychological theories; and sociology of crime. An introduction into the analysis and uses of criminal statistics.

LAW 2555 **Principles of Administrative Law**

1 units - semester 2

8 hours

Prerequisite: LAW 2003

Incompatible: LAW 2002

Assessment: Typically to include a written research assignment

This transition course will be offered in the first four weeks of the semester. Enrolment will be restricted to students who have already completed the old curriculum Australian Constitutional Law (Law 2003) but have outstanding the old curriculum Administrative Law (Law 2002).

The primary emphasis will be on the legal and political mechanisms for holding Commonwealth and State governments accountable, the role of the courts in holding governments accountable through the mechanism of judicial review, freedom of information law, and the role of the Commonwealth ombudsmen and the Auditor-General in the accountability framework.

LAW 2556 **Criminal Procedure**

2 units - semester 1

16 hours

Prerequisite: LAW 1004

Incompatible: LAW 3002

Assessment: Typically to include writing a research paper

This transition course will be presented in Weeks 3 [or 4] and 4 [or 5] of the Criminal Law and Procedure course. Enrolment will be restricted to students who have already complete Law of Crime and will not have the opportunity to study Civil and Criminal Procedure in 2009.

The primary emphasis will be on charge selection, charge negotiation and the prosecutorial obligations relating to fair trial. It is anticipated that the Nemer case will be used as a case study, for it usefully straddles: (a) the role and constitution of the DPP's Office; (b) charge selection; (c) reform of the law of offences against the person and (d) guilty plea negotiation.

LEVEL III

LAW 3501 **Dispute Resolution and Ethics**

6 units - semester 1

72 hours

Prerequisite(s): Law 2504 and Law 2505

Incompatible: Law 3002 and Law 3001

Assessment: Typically to include participation in seminar, written work and examination

This course will cover procedures applicable to the resolution of civil disputes, including conciliation, mediation, arbitration and judgment, together with the ethical obligations that lawyers bring to these procedures. Through problem solving and practical role plays students will be critically introduced to the nature of civil process in South Australian and Federal courts and the respective roles and responsibilities of parties (including their legal representatives) and mediators, arbitrators and judges in commencing, continuing and conducting these processes. Particular topics of court adjudication under an adversary system will include: the cost of litigation; initiation and service of process and jurisdiction; joinder of parties and claims; the definition of issues through pleadings and admissions; obtaining evidence through discovery, inspection and interrogatories and the limits imposed by privileges and immunities; interlocutory injunctions; pre-trial conferences; mediation; judgment without trial including settlement; the nature of judgment; rights of appeal; and the enforcement of judgments. Duties owed by lawyers to the law, the court, clients, other lawyers and the community will be considered in theory and in practice, both particularly in relation to dispute resolution and more generally, as well as the concept of professional misconduct and wider questions of a lawyer's personal ethics and conflicting duties and values.

LAW 3502 **Evidence and Proof in Theory and Practice**

6 units - semester 2

72 hours

Prerequisite(s): Law 3501

Incompatible: Law 3003 and Law 3007

Assessment: Typically to include participation in seminar, written work and examination

Through problem solving and practical role plays students will critically analyse the rules of evidence applicable to the proof of facts in South Australian and Federal courts. These rules determine the evidence which will be received by courts in proof of facts, the form in which such evidence must be presented, and the uses to which such evidence can be put. Topics include examination of both the sources and acceptability of evidence, including rules concerning the standards and burdens of proof and technical rules concerning such matters as hearsay, admissions and confessions and *res gestae*. Advocacy exercises will introduce students to the unique adversarial nature of the common law oral evidentiary process and emphasise the lawyer's role and ethical place in that process.

LAW 3506A/B **Adelaide Law Review**

3 units - full year

12 hours a semester

Prerequisite: LAW 1501

Incompatible: LAW 2027 and LAW 2028

Assessment: Typically to include editorial activities, case notes, participation

The Adelaide Law Review has been since 1962 the flagship publication of the Law School. The journal is peer reviewed and is committed to the publication of legal scholarship of the highest quality. The Course will introduce students to legal publishing and editing. Further students will consider the legal journal as a means of legal education. This course will involve students in the production of the annual editions of the journal. Students will consider the role of legal publications, critically analyse submitted material and comment upon a diverse range of legal scholarship. In addition students will develop skills in advanced legal writing, copy-editing and journal production.

LAW 3509 **Anti-discrimination and Equality Law**

3 units - semester 2

24 hours

Prerequisite(s): Law 1501

Assumed Knowledge: Law 1504, Law 2501 and Law 2504

Incompatible: Law 3014

Assessment: Typically will include class participation and essay

The course will cover important aspects of Australian anti-discrimination and equality law at both Federal and State levels. Analysis of the law will be placed in a broader context: justifications for anti-discrimination law

and the principle of non-discrimination will be examined. The scope of existing Federal and State prohibitions on discrimination, and exceptions to prohibitions, will be examined, as will mechanisms for enforcing the legislation and remedies. The course will make clear the assumptions that underlie traditional thinking concerning anti-discrimination legislation, and expose these to critical scrutiny.

LAW 3510 Clinical Legal Education

3 units - summer or semester 1 or 2

24 hours*

Prerequisite: LAW 2504

Assumed Knowledge: LAW 3501

Incompatible: LAW 3080

Assessment: Typically to include placement performance , class participation, project (no word limit) & journal (no word limit)

The course is designed to demonstrate the operation of theoretical and doctrinal law in a legal environment. Students are placed for one day per week in a legal office, supervised by a legal practitioner, and participate actively in all aspects of the work at the office, including case work. The Law School also offers placements at legal advice clinics run by Flinders and Adelaide Law Schools at the Adelaide Magistrates Court. The concurrent seminar program builds on students' experiences on placement, examining issues such as lawyer/client relationships, legal ethics, professionals and professions, justice access, and the role of our legal system in society.

* When offered over summer course entails 2 days of placement each week for 6 weeks between January and end of February.

LAW 3511 Commercial Equity

3 units - semester 2

24 hours

Prerequisite(s): Law 2502

Incompatible: Law 2100

Assessment: Typically to include essay and exam

The penetration of equity into modern commercial life; commercial fiduciaries; equitable security transactions, with particular regard to Romalpa clauses; subrogation and contribution; set-off; marshalling; trusts in a commercial context: trusts and superannuation; the Quistclose trust; the imposition of constructive trusts into commerce; commercial trustees; commercial equitable remedies, particularly Mareva injunctions and Anton Piller orders.

LAW 3514 Human Rights Internship Programme

3 units - summer or semester 1 or 2

24 hours

Prerequisite: LAW 1501

Assumed Knowledge: LAW 2513

Incompatible: LAW 2017

Assessment: Typically to require a portfolio details which will be supplied before commencement of the course.

The course places students in 'internships' with human rights organisations located internationally and nationally for a period of three months. The internships enable students to build on their understanding of the theory of human rights law by gaining an appreciation of its practical operation. The course aims to give depth and context to students' existing knowledge of human rights law.

During the internship, the students will be required to complete an agreed research task under the supervision of a senior person at the chosen human rights organisation. This research task might involve research into a specific area of law or policy for the purpose of a 'test-case' being run in the courts, for the drafting of a report, or the preparation of educational material. The research task will be negotiated by the student and the organisation, with the approval and supervision of the course coordinator. It is expected that students will also be involved in the day-to-day activities of the organisation and gain an understanding of how such organisations operate. Prior to commencement, students will be given orientation to introduce them to the strategies and procedures generally employed by human rights organisations. The seminars will be conducted by the course convener in conjunction with practitioners in the field.

LAW 3519 Remedies

3 units - semester 2

24 hours

Prerequisite: LAW 1506

Incompatible: LAW 2132

Assessment: Typically to include written work & exam

An examination of general law remedies available. Specific topics will include: (i) common law damages (ii) the declaration (iii) the injunction, including an examination of specific problem areas, for example, balance of convenience, interlocutory injunctions and damages in lieu (iv) specific performance (v) compensation (vi) account of profits.

LAW 3522 Disclosure Obligations of Companies

3 units - semester 1

24 hours

Prerequisite(s): Law 1501 and Law 2505

Assumed Knowledge: Law 1503, Law 2502

Incompatible: Law 2097

Assessment: typically to include a research essay and an exam

This course deals with the following topics: i) Continuous Disclosure of Material Investment Information (Corporations Act Ch 1, Part 1.2A and Ch 6CA; ASX Listing Rules); ii) Accounts and Audit Obligations of Companies (Corporations Act Ch 2M); iii) Disclosure When Corporate Securities Offered For Subscription or Purchase (Corporations Act Ch 6D); iv) Constraints on the Marketing of Corporate Securities.

LAW 3523
Company Merger and Acquisition Law

3 units - semester 1

24 hours

Prerequisite(s): Law 1501 and Law 2505

Assumed Knowledge: Law 2502

Incompatible: Law 2097

Assessment: Typically to include optional research essay fully redeemable by primary exam (hypothetical problem-type, no choice of question)

The Regulation of Changes of Control in Companies (Corporations Act Chapters 6 and 6B), The Use of Schemes of Arrangements to Effect Changes of Control (Corporations Act Chapter 5, Part 5.1). Compulsory Acquisitions of Corporate Securities and Compulsory Securities Buy-Outs (Corporations Act Chapters 6A and 6B). Disclosure of Interests in Listed Companies (Corporations Act Chapter 6C).

LAW 3525
Alternative Dispute Resolution

3 units - semester 2

24 hours

Prerequisite(s): Law 1501

Assumed Knowledge: Law 3051

Incompatible: Law 3010

Assessment: Typically will include seminar and discussion board participation; learning exercises and role play participation; reflective journal; research essay, details TBA

The course includes a detailed examination of the theory and practice of ADR methods in the context of an adversarial legal system, to develop an understanding of the operation and implications of various ADR theories and practices and to assess their value. It evaluates the experience in Australia and other common law countries of the development and incorporation of ADR options in dispute resolution, in civil, administrative, family and criminal contexts. The course aims to develop ability to critically assess the legal, social and other issues associated with ADR, and to understand the implications of the operation of those theories in an adversarial legal context.

The course will include a selection from the following topics: the nature of disputes, and psychological, political, cultural, economic and social issues in dispute resolution; acceptance and operation of ADR as a credible alternative to litigation; theory; features and values of various forms of ADR; Justice reform, including the role of the courts and the provision of court annexed ADR, the 'multi-doored' court, and the role and value of judicial decision making; commercial arbitration; ADR and industrial disputes; power and control in dispute resolution; mediation theory; ADR and criminal law; dispute system design; legal rights and responsibilities flowing from ADR outcomes; and ethical issues for ADR practitioners.

The course will include the participation of practitioners and administrators from ADR systems. Students will engage in practical ADR exercises including negotiation and mediation through role plays.

The course may be offered on an intensive or semi intensive basis.

LAW 3526
Insolvency Law

3 units - semester 1

24 hours

Prerequisite(s): Law 1501 and Law 1506

Assumed Knowledge: Law 2502 and Law 2505

Assessment: Likely to include a research plan, research essay and final exam

This course will provide an introduction to the theory, policy and key principles of insolvency law, both as it affects corporations and individuals, and in relation to other bodies of law and practice. The course will focus on the key insolvency procedures including liquidation, administration and receivership in the case of corporations, and in the case of personal insolvency, bankruptcy, debt agreements and other alternatives. The course will examine the role of Government, regulators, the insolvency profession and other 'stakeholders' in insolvency law, as well as examining aspects of comparative and international insolvency, including cross-border insolvency.

LAW 3527
Public Law Internship Programme

3 units - summer semester or semester 1 or semester 2

24 Hours

Prerequisite(s): Law 2504

Assessment: Typically to include the preparation of a portfolio related to the placement and a research essay

The course places students in 'internships' with the office of the SA Ombudsman for a period of 22 days in total. This involves two intensive weeks over non-teaching weeks eg summer or winter break, followed by one day per week over the semester (with each day being a 7.5 hour day). The internships enable students to build on their understanding of the theory of public law by gaining an appreciation of its practical operation. The course aims to give depth and context to students existing knowledge of public law.

The course will begin with an orientation seminar providing an overview of the Ombudsman office to students. Students will be required to complete an agreed research task under the supervision of the course coordinator. The research task might involve research into a specific aspect of the powers of the Ombudsman. The research task will be negotiated with the student and the Course Coordinator, and will build on the work the student completes within the Ombudsman's Office. It is expected that students will also be involved in day-to-day activities of the Ombudsman's Office and gain a broad understanding of how such accountability organisations operate and of the operation of public law generally.

LAW 3599
Law Research Dissertation

6 units - semester 1 or 2

48 hours

Prerequisite: LAW 2504, LAW 2505

Incompatible: LAW 3099

Assessment: 10,000-12,000 word supervised dissertation

Students wishing to write a research dissertation will be selected into this elective upon the basis of their academic records - only available where School can provide appropriate supervision for research proposed

Students are required to write a supervised research dissertation on an approved topic. The dissertation will be written and assessed in accordance with procedures approved from time to time by the Dean of Law.

HONOURS

LAW 3089

Honours Research and Writing

2 units - semester 1

Restriction: approved honours Law students

Assessment: attendance, participation in program & classes, identification of subject of dissertation and conduct of preliminary research, peer review presentation, preparation of synopsis to approval of supervisor

This course will introduce students who have been admitted to the honours dissertation program to advanced legal research and writing. In it students will participate in a structured program that will enable and assist them to identify the subject of their dissertation, and gain the skill necessary to enable them to undertake preliminary preparatory to the writing of the honours dissertation.

LAW 3099

Dissertation Honours Law

6 units - semester 1 or 2

Restriction: approved honours Law students

Prerequisite: LAW 3089

Assessment: 10000-12000 word dissertation

Candidates are required to conduct research on an approved topic and write an honours dissertation. The dissertation will be assessed in accordance with the procedures set out in the Honours Guidelines as determined by the Law School.

Linguistics

LEVEL I

LING 1101

Foundations of Linguistics

3 units - semester 1

3 contact hours per week

Available for Non-Award Study

Assessment: 1000 word essay, 4 practicals, test

Linguistics is the study of human language, its nature, its origins and its uses. This course will give students an

overview of the field of modern linguistics and basic skills in linguistic analysis. Foundations of Linguistics develops understandings of the various subsystems of language including phonology, morphology, syntax, semantics and the lexicon. It also investigates how languages are learned and how they change over time. As language is involved in a large number of human activities, linguistics contributes to many other fields of inquiry, including anthropology, psychology, philosophy, law and the natural sciences.

LING 1102

Language and Ethnography of Communication

3 units - semester 2

3 contact hours per week

Available for Non-Award Study

Assessment: Essay; ethnographic analysis; practical; reading review

This course provides the theoretical foundations and basic methods commonly employed in the analysis of human communication, i.e. meaningful human behaviour. Students will become familiar with ethnographic approaches to describing and understanding complex communicative events. The lectures will be concerned with a range of message forms: spoken, written, non-verbal and extra-linguistic across a range of languages and cultures. The course will discuss interpersonal as well as intercultural communication. On completion of this course students will have the skills to observe and analyse language in use.

ADVANCED LEVEL

LING 2013

Language and Communication Planning

3 units - semester 1

3 hours per week

Available for Non-Award Study

Prerequisite(s): 12 units Level I Humanities/Social Sciences

Incompatible: LING 2030/3030

Assessment: essay (30%), problems (40%), test (30%)

Rapidly changing communication technology, global mobility, the emergence of supranational units such as the EU as well as the rapid decline in the world's linguistic diversity are issues that require planning and management. The coverage of the course ranges from microplanning in private organisations (eg designing standard labelling or form letters) to language policies for Australia or International bodies. As the benefits of planning communication become clearer this subfield of applied linguistic and communication studies is likely to become increasingly important. Students will gain an understanding of the issues and familiarity with a wide range of approaches and practical skills. Special emphasis will be given to the question of maintaining endangered Indigenous language in the area of language globalisation.

LING 2014

Australian Indigenous Languages

3 units - semester 1

3 contact hours per week

Available for Non-Award Study

Prerequisite(s): 12 units level 1 Humanities/Social Sciences

Incompatible: LING 2009/3009

Assessment: Essay/practical investigation (25%), linguistic problems (50%), test (25%)

The course will provide an introduction to Australia's Indigenous languages (including Aboriginal English varieties, koines and creoles), with a particular focus on the Indigenous languages of South Australia. It will investigate structural features of Australian languages (for example, sounds, spellings, vocabularies, grammars, semantics) as well as their place within Australian society. Particular emphasis will be given to attempts to maintain and revive Australia's unique linguistic heritage and the linguistic tools needed for language work.

LING 2037

Language in a Global Society

3 units - semester 2

3 contact hours per week

Available for Non-Award Study

Prerequisite(s): 12 units Level 1 Humanities/Social Sciences

Assessment: Essays 2,500 words, research project report 3,500 words

The impact of globalisation and modern information technology on languages is far-reaching. Next to the disappearance or weakening of the world's 6000 smaller languages, a small number of super languages such as Mandarin, Spanish and English are emerging. The course will examine to what extent the emergence of global languages is due to deliberate political decisions and to what extent it is the unintended outcome of major social and technological change. While the course will pay particular attention to global English and the new Englishes (such as Indian English, Singapore English and Hong Kong English), coverage will also be given to the previous or potential global roles of languages such as Latin, French, Spanish and Chinese (though no knowledge of a language other than English will be assumed or required).

LING 2045

Language Learning

3 units - semester 1

3 contact hours per week

Prerequisite(s): 12 units Level 1 Humanities/Social Sciences

Incompatible: LING 2034/3034

Assessment: Small-scale negotiated investigations involving collection and analysis of data and written research report

In this course students study learning language as a social experience. Students apply practical skills for researching language learning. The course begins with a review of exciting, new research on child language acquisition - how children develop speech and literacy through their social relationships. The language environment in early childhood is absolutely critical for mature language

development. We review local research on development and maintenance of bilingualism and multilingualism, including bringing up children bilingually in monolingual societies. An important topic is adult language learning and second language acquisition with implications for education. The controversial topic of literacy is included as is the analysis of the development of the multiliteracies for living in the so-called information age. We look at learning specialist language- technical and academic discourses and the development of language for conducting practices with applications of new technologies such as T-rays. We study language learning problems such as dyslexia and language-based strategies for dealing with them.

LING 2046

Morphology and Syntax

3 units - semester 2

3 contact hours per week

Prerequisite(s): 12 units Level 1 including LING 1101

Incompatible: LING 2035/3035

Assessment: Practical assignments (45%), examination (25%), morphological analysis (30%)

Morphology deals with the internal structure of words and their meaningful parts. Syntax is concerned with sentence structure - how words are combined together to form phrases, phrases combined together to form larger phrases, clauses and sentences, and how clauses are combined together to form complex sentences. Together, morphology and syntax comprise the core of the grammar of a language. Since grammar is no longer a major focus in schools, most students have little understanding of even the most basic notions such as being able to identify parts of speech, or understanding how large constructions are composed out of smaller units. Being able to identify constituents and agreement constraints will help students to improve and correct their academic writing.

The course will be practical in focus and will teach students essential skills for the linguistic description and analysis of a language. Along with Phonology, this course is essential for all linguistics students and language teachers (English or otherwise).

LING 2047

Language and Meaning

3 units - semester 2

3 contact hours per week

Available for Non-Award Study

Prerequisite(s): 12 units Level 1 Humanities/Social Sciences

Incompatible: LING 2006/3006

Assessment: exercises and essays to a value of 4500 words

Language is embedded in everyday actions as it is used to carry out different functions. The purpose of this course is to investigate the linguistic choices which differentiate uses of language; for example, the differences between spoken and written text, and between academic discourse and informal language. Students will be introduced to functional grammar as a means for exploring how language enables speakers and writers to represent

experience, negotiate social roles and relationships, and pursue rhetorical objectives. They will explore such issues as how styles of language vary according to social context and communicative purpose, why some forms of language are more highly valued than others, how language is used to exercise power and to forge alliances, and how language can be used to persuade, outrage, entertain or annoy. In order to explore these issues, a range of different text types will be investigated, including casual conversation, advertising, news reporting and commentary, student essays, classroom interactions, popular and expert science, political speeches and academic articles.

HONOURS

LING 4401A/B Honours Linguistics

24 units - full year

Prerequisite(s): UG degree, credit average in courses contributing to a major in Linguistics, or equiv. approved by Head of Discipline

Assessment: coursework 50%, thesis 50%. Students are required to attend Linguistic Honours/Postgraduate Seminars (3 contact hours per week)

Students wishing to take Honours Linguistics should consult the lecturers in Linguistics prior to commencing Advanced Level to ensure appropriate course choices are made in preparation for Honours

In some circumstances Honours Linguistics can be studied part-time over two years or be combined with Honours in another discipline.

Management

LEVEL II

COMMGMT 2500 Organisational Behaviour II

3 units - semester 2

3 hours + 9 hours self-directed study per week

Assumed Knowledge: One semester of university study

Assessment: Exam/assignments/tests/tutorial work as prescribed at first lecture

This course draws on individual factors, group processes, and features of the organisational system to understand the behaviour of people at work. Topics include workforce diversity, values, personality, emotions, motivation, group behaviour, work and life stress, conflict, communication, power and politics, organisational culture, structure and work design, and organisational change.

COMMGMT 2501 Management II

3 units - semester 1

3 hours + 9 hours self-directed study per week

Available for Non-Award Study

Assumed Knowledge: One semester of university study

Incompatible: COMMGMT 2008, COMMGMT 2501 or AGRIBUS 2016

Assessment: Exam/assignments/tests/tutorial work as prescribed at first lecture

This course introduces students to the roles and functions of managers. The content includes an introduction to organisations and the need for and nature of management. It examines the evolution of management theory, organisational environments, and corporate social responsibility and ethics. The course also includes a detailed investigation of the four functions of management: planning and decision making, organising, leading and motivating, and controlling.

LEVEL III

COMMGMT 3500 International Management III

3 units - semester 1

3 hours + 9 hours self-directed study per week

Assumed Knowledge: COMMGMT 2008/2501

Assessment: Exam/assignments/tests/tutorial work as prescribed at first lecture

The objective of this course is to provide students with a basic understanding of the fundamental principles and practices of International Management. The course focuses on the foundations of international management, the role of culture, cross-cultural communication and negotiations, MNC strategies and structures, and international human resource management. There will be a focus on appropriate theory and the course will aim to provide opportunities for the practical implementation of the main concepts covered.

COMMGMT 3501 Strategic Management III

3 units - semester 2

3 hours + 9 hours self-directed study per week

Available for Non-Award Study

Assumed Knowledge: All Level I & II courses in relevant degree

Assessment: Exam/assignments/tests/tutorial work as prescribed at first lecture

This course addresses the strategic management of organisations, including the formulation of longer term strategic directions, the planning of objectives and supporting strategies, and the control of strategic implementation. It provides students with an understanding of the approaches and tools for planning and controlling strategy at the organisation and sub-unit levels, as well as experience in case analysis and practical application of planning and control skills. Topics include evaluating the strategic environment, industry and competitive analysis, formulating mission and setting objectives, strategy selection and implementation, and strategic control. Also considered are specialist issues in strategic management such as technology and not-for-profit organisation management, corporate social responsibility and environmental strategies.

COMMGMT 3502 Human Resource Management III

3 units - semester 1

3 hours + 9 hours self-directed study per week

Available for Non-Award Study

Prerequisite(s): COMMGMT 2007 or COMMGMT 2500 (at least 45%)

Assessment: Exam/assignments/tests/tutorial work as prescribed at first lecture

It is generally agreed that, while most serious competitors in any given industry are likely to have attained nearly the same level of technological sophistication, what can set these organisations apart is the quality of their people. Thus, other things being equal, the most effective organisations (in terms of productivity, customer service, reputation etc.) are likely to be those that have the most dedicated and talented employees. Human Resource Management (HRM) is that part of management which is concerned with how organisations can make the most effective use of their human resources - their people - in order to achieve organisational and individual goals. The aim of this course is to provide students with an understanding of contemporary HRM and the important strategic role that it plays in helping an organisation build and maintain competitive advantage. More specifically, the course will examine HR policies, practices, and systems in the areas of: planning and recruitment; employee selection; training and development; performance management; compensation; employee relations; equal opportunity; employee security and safety; employee separation; and international HRM.

COMMGMT 3503 Organisational Dynamics III

3 units - semester 2

3 hours + 9 hours self-directed study per week

Available for Non-Award Study

Prerequisite(s): COMMGMT 2008/2501

Assessment: Exam/assignments/tests/tutorial work as prescribed at first lecture

Organisational Dynamics aims to assist future managers to negotiate the complexities in today's rapidly changing environments so as to optimise their organisations activities toward successful outcomes. This course explores organisational change and dynamics with particular emphasis on the three fundamental influences on modern-day organisations - knowledge, innovation and technology. Managing the confluence of knowledge, innovations and technologies to maximise the organisation's performance requires a comprehensive understanding of the organisation as a system of inter-related parts where synergies, confounding forces and external dynamics are part of the daily management process. This course will introduce the student to the fundamental principles of organisational theory as they contribute to the interpretation and analysis of organisational change and dynamics. It will further facilitate understanding of organisational dynamics in relation to other areas of management including organisational behaviour, human resource management,

international business and strategic management. This course requires a high level of English proficiency to enable students to engage in class simulations of organisational activities in class which require presentations, negotiations and reports.

Marketing

LEVEL II

MARKETNG 2500 Marketing II

3 units - summer semester or semester 1

3 hours + 9 hours self-directed study per week

Available for Non-Award Study

Incompatible: MARKETNG 2009, WINEMKTG 1013WT

Assessment: Exam/assignments/tests/tutorial work as prescribed at first lecture

This course is designed to provide students with an understanding of the principles of Marketing. There will be a focus on the management of the marketing activities and how marketing relates to overall organisational functioning, including the management of exchange processes between business units and consumers and between firms. It will include topics such as environmental analysis, industry and competitor analysis, objective setting, marketing strategies, market mix components, and finally implementation and control mechanisms. Additionally, the course will provide opportunities for the practical implementation of the main concepts covered and the development of problem solving skills through the use of case studies and an audit of a firm's marketing function.

MARKETNG 2501 Consumer Behaviour II

3 units - semester 2

3 hours + 9 hours self-directed study per week

Available for Non-Award Study

Assumed Knowledge: MARKETNG 2009/2500

Incompatible: MARKETNG 3013, WINEMKTG 2033/2502EX

Assessment: Exam/assignments/tests/tutorial work as prescribed at first lecture

This course introduces the theory of consumer behaviour and relates it to the practice of marketing. It will present relevant material drawn from psychology, anthropology, social and behavioural sciences within the framework of the consumer decision process and its main influencing factors.

LEVEL III

MARKETNG 3501 International Marketing III

3 units - summer semester or semester 2

3 hours + 9 hours self-directed study per week

Available for Non-Award Study

Prerequisite(s): MARKETNG 2009/2500

Assumed Knowledge: MARKETNG 2011/2501

Incompatible: WINEMKTG 2014/2503WT

Assessment: Exam/assignments/tests/tutorial work as prescribed at first lecture

International marketing is a rapidly growing area within the disciplines of marketing and international business. Central to international marketing is the response of international rather than domestic buyers in the marketing environment, the types of decisions that are most feasible and the information required in decision making. During this course, the student will gain insights into the pressures created by the international economic, political, legal and cultural environmental influences on marketing planning. This course will enable students to learn analytical skills required to develop international marketing plans and develop the marketing mix elements in the international environment. International marketing is one of five subjects in the marketing discipline and extends the knowledge developed in marketing management into the international rather than the domestic market. The major theories include, pathways of internationalisation, political and economic risk analysis, international strategic planning, cultural distance, product development and branding for international markets, international market entry, distribution strategies and the structure of international organisations. The conceptual material developed during this course will be implemented through class exercises, case studies and a major project.

MARKETNG 3502 **Market Research III**

3 units - semester 1

3 hours + 9 hours self-directed study per week

Prerequisite(s): MARKETNG 2009 OR MARKETNG 2500

Assumed Knowledge: MARKETNG 2011/2501

Incompatible: MARKETNG 3012, WINEMKTG 2011/2501WT

Assessment: Exam/assignments/tests/tutorial work as prescribed at first lecture

This course will provide students with an in depth understanding of market research. Students will be involved in a practical application of market research via a group project which will focus on a real company situation. Students will write a research brief, determine the research methodology and conduct interviews and surveys as required. Students will be responsible for presenting their findings in both written and oral form to their clients.

MARKETNG 3503 **Market Strategy and Project III**

3 units - semester 2

3 hours + 9 hours self-directed study per week

Prerequisite(s): MARKETNG 2009/2500, MARKETNG 2011/2501, MARKETNG 3502

Incompatible: WINEMKTG 2505WT/EX

Assessment: Exam/assignments/tests/tutorial work as prescribed at first lecture

This is a capstone course for students completing

the Bachelor of Commerce (Marketing). The course integrates market theory and management practices, within the context of marketing strategies and different competitive situations. Students will develop a marketing plan for a live client firm, on the basis of market theory, market research and the potential strategic directions available to their client. Students will be responsible for presenting their findings in both written and oral form to their clients.

Mathematics

LEVEL I

MATHS 1008 **Mathematics for Information Technology I**

3 units - semester 2

60 hours lectures, tutorials and computer practicals

Available for Non-Award Study

Assumed Knowledge: SACE Stage 2 Mathematical Studies

Assessment: ongoing assessment 30%, exam 70%

This course provides an introduction to a number of areas of discrete mathematics with wide applicability. Areas of application include: computer logic, analysis of algorithms, telecommunications, gambling and public key cryptography. In addition it introduces a number of fundamental concepts which are useful in Statistics, Computer Science and further studies in Mathematics.

Topics covered are: Discrete mathematics: sets, relations, logic, graphs, mathematical induction and difference equations; probability and permutations and combinations; information security and encryption: prime numbers, congruences.

MATHS 1009 **Introduction to Financial Mathematics I**

3 units - semester 1

60 hours lectures, tutorials and computer practicals

Restriction: not available to students in B. Math Sci, B.Ma.& Comp. Sc. or B Comp Sci

Available for Non-Award Study

Assumed Knowledge: SACE Stage 2 Mathematical Studies

Incompatible: cannot be presented with ECON 1005, MATHS 1011/1012, MATHS 1013/1014

Assessment: ongoing assessment 30%, Final exam 70%

This course provides an introduction to a number of areas of discrete mathematics with wide applicability. Areas of application include: computer logic, analysis of algorithms, telecommunications, gambling and public key cryptography. In addition it introduces a number of fundamental concepts which are useful in Statistics, Computer Science and further studies in Mathematics.

Topics covered: Discrete mathematics: sets, relations, logic, graphs, mathematical induction and difference equations; probability and permutations and

combinations; information security and encryption: prime numbers, congruences.

MATHS 1010 **Applications of Quantitative Methods in Finance I**

3 units - semester 2

64 hours lectures, tutorials and computer practicals.

Restriction: not available to students in B. Math Sci, B.Ma.& Comp. Sc. or B.Comp Sci

Available for Non-Award Study

Prerequisite(s): MATHS 1009

Incompatible: MATHS 1011/1012, MATHS 1013

Assessment: ongoing assessment 30%, exam 70%

Together with MATHS 1009 Introduction to Financial Mathematics I, this course provides an introduction to the basic mathematical concepts and techniques used in finance and business and includes topics from calculus, linear algebra and probability, emphasising their inter-relationships and applications to the financial area; introduces students to the use of computers in mathematics; develops problem solving skills with a particular emphasis on financial and business applications.

Topics covered: Calculus: differential and integral calculus with applications; functions of two real variables. Probability: basic concepts, conditional probability; probability distributions and expected value with applications to business and finance.

MATHS 1011 **Mathematics IA**

3 units - semester 1 or semester 2

66 hours lectures, tutorials and computer practicals

Available for Non-Award Study

Prerequisite(s): SACE Stage 2 Math.Studies & Specialist Maths or MATHS 1013 (Pass)

Assessment: ongoing assessment 30%, exam 70%

This course, together with MATHS 1012 Mathematics IB, provides an introduction to the basic concepts and techniques of calculus and linear algebra, emphasising their inter-relationships and applications to engineering, the sciences and financial areas; introduces students to the use of computers in mathematics; and develops problem solving skills with both theoretical and practical problems.

Topics covered: Calculus - functions of one variable, differentiation, the definite integral, and techniques of integration. Algebra - Linear equations, matrices, the real vector space determinants, optimisation, eigenvalues and eigenvectors; applications of linear algebra.

MATHS 1012 **Mathematics IB**

3 units - summer semester or semester 1 or semester 2

65 hours lectures, tutorials and computer practicals

Available for Non-Award Study

Prerequisite(s): MATHS 1011 (Pass)

Incompatible: MATHS 2004, MATHS 2105

Assessment: ongoing assessment 30%, exam 70%

This course, together with MATHS 1011 Mathematics IA, provides an introduction to the basic concepts and techniques of calculus and linear algebra, emphasising their inter-relationships and applications to engineering, the sciences and financial areas; introduces students to the use of computers in mathematics; and develops problem solving skills with both theoretical and practical problems.

Topics covered: Calculus - Applications of the derivative; functions of two variables; Taylor series; differential equations. Algebra - The real vector space, eigenvalues and eigenvectors, linear transformations and applications of linear algebra.

MATHS 1013 **Mathematics IMA**

3 units - semester 1

66 hours lectures, tutorials and computer practicals

Restriction: This course is not available to students with combined (subject achievement) score of 35 for SACE Stage 2 Math. Studies & Specialist Maths (or equiv).

Available for Non-Award Study

Prerequisite(s): SACE Stage 2 Mathematical Studies

Incompatible: not available to students with combined (subject achievement) score of 35 for SACE Stage 2 Math. Studies & Specialist Maths (or equiv), may not be presented with MATHS 1001 or MATHS 1000A/B or MATHS 1007A/B

Assessment: ongoing assessment 30% exam 70%

This course provides the necessary additional mathematics to prepare students for MATHS 1011 Mathematics IA. The course contains an introduction to basic concepts and techniques of calculus and linear algebra, emphasising their inter-relationships and applications to the sciences and financial areas; introduces students to the use of computers in mathematics; and develops problem solving skills with a particular emphasis on applications.

Topics covered: Calculus - differential calculus with applications; an introduction to differential equations; Algebra - complex numbers; vectors, linear equations and matrices; applications of linear algebra.

STATS 1000 **Statistical Practice I**

3 units - semester 1 or semester 2

60 hours lectures, tutorials and practicals

Available for Non-Award Study

Assumed Knowledge: SACE stage 2 Mathematical Methods or equiv

Incompatible: Cannot be counted with STATS 1004, ECON 1008, STATS 2004, APP MTH 2009, APP MTH 2010 or STATS 1504

Assessment: ongoing assessment 30%, exam 70%

Statistical ideas and methods are essential tools in virtually all areas that rely on data to make decisions and reach conclusions. This includes diverse fields such as medicine, science, technology, government, commerce and manufacturing. In broad terms, statistics is about getting information from data. This includes both the important question of how to obtain suitable data for a given purpose and also how best to extract the

information, often in the presence of random variability. This course provides an introduction to the contemporary application of statistics to a wide range of real world situations. It has a strong practical focus using the statistical package SPSS to analyse real data.

Topics covered: organisation, description and presentation of data; design of experiments and surveys; random variables, probability distributions, the binomial distribution and the normal distribution; statistical inference, tests of significance, confidence intervals; inference for means and proportions, one-sample tests, two independent samples, paired data, t-tests, contingency tables; analysis of variance; linear regression, least squares estimation, residuals and transformations, inference for regression coefficients, prediction.

STATS 1004 Statistical Practice I (Life Sciences)

3 units - semester 1 or semester 2

60 hours lectures, tutorials and practicals

Available for Non-Award Study

Assumed Knowledge: SACE stage 2 Mathematical Methods or equiv

Incompatible: Cannot be counted with STATS 1000, ECON 1008, STATS 2004, APP MTH 2009, APP MTH 2010 or STATS 1504

Assessment: ongoing assessment 30%, exam 70%

Statistical ideas and methods are essential tools in virtually all areas that rely on data to make decisions and reach conclusions. This includes diverse fields such as science, technology, government, commerce, manufacturing and the life sciences. In broad terms, statistics is about getting information from data. This includes both the important question of how to obtain suitable data for a given purpose and also how best to extract the information, often in the presence of random variability. This course provides an introduction to the contemporary application of statistics to a range of real world situations. It has a strong practical focus using the statistical package SPSS to analyse real data relevant to the life sciences.

Topics covered: organisation, description and presentation of data in the life sciences; design of experiments and surveys; random variables, probability distributions, the binomial distribution and the normal distribution; statistical inference, tests of significance, confidence intervals; inference for means and proportions, one-sample tests, two independent samples, paired data, t-tests, contingency tables; analysis of variance; linear regression, least squares estimation, residuals and transformations, inference for regression coefficients, prediction.

STATS 1504 Statistical Practice I (Life Sciences) (Pre-Vet)

3 units - semester 2

60 hours lectures, tutorials and practicals

Restriction: B Science (Animal Science: Pre-Vet)

Assumed Knowledge: SACE stage 2 Mathematical Methods or equiv

Incompatible: Cannot be counted with STATS 1000, ECON 1008,

STATS 2004, APP MTH 2009, APP MTH 2010 or STATS 1004

Assessment: ongoing assessment 30%, exam 70%

Statistical ideas and methods are essential tools in virtually all areas that rely on data to make decisions and reach conclusions. This includes diverse fields such as science, technology, government, commerce, manufacturing and the life sciences. In broad terms, statistics is about getting information from data. This includes both the important question of how to obtain suitable data for a given purpose and also how best to extract the information, often in the presence of random variability. This course provides an introduction to the contemporary application of statistics to a range of real world situations. It has a strong practical focus using the statistical package SPSS to analyse real data relevant to the life sciences.

Topics covered: organisation, description and presentation of data in the life sciences; design of experiments and surveys; random variables, probability distributions, the binomial distribution and the normal distribution; statistical inference, tests of significance, confidence intervals; inference for means and proportions, one-sample tests, two independent samples, paired data, t-tests, contingency tables; analysis of variance; linear regression, least squares estimation, residuals and transformations, inference for regression coefficients, prediction.

LEVEL II

APP MTH 2105 Optimisation and Operations Research

3 units - semester 2

42 hours of lectures and tutorials

Available for Non-Award Study

Prerequisite(s): MATHS 1012 or MATHS 2004

Incompatible: Cannot be presented with APP MTH 2008

Assessment: Ongoing assessment 30%, exam 70%

Operations Research (OR) is the application of mathematical techniques and analysis to problem solving in business and industry, in particular to carrying out more efficiently tasks such as scheduling, or optimising the provision of services *or* is an interdisciplinary topic drawing from mathematical modelling, optimisation theory, game theory, decision analysis, statistics, and simulation to help make decisions in complex situations. This first course in *or* concentrates on mathematical modelling and optimisation: for example maximising production capacity, or minimising risk. It focuses on linear optimisation problems involving both continuous, and integer variables. The course covers a variety of mathematical techniques for linear optimisation, and the theory behind them. It will also explore the role of heuristics in such problems. Examples will be presented from important application areas, such as the emergency services, telecommunications, transportation, and manufacturing. Students will undertake a team project based on an actual Adelaide problem.

Topics covered are: formulating a linear program; the Simplex Method; duality and Complementary slackness; sensitivity analysis; an interior point method; alternative means to solve some linear and integer programs, such as primal-dual approaches methods from a complete solution (such as Greedy Methods, and Simulated Annealing), methods from a partial solution (such as Dijkstra's shortest path algorithm, and branch-and-bound).

MATHS 2100 **Real Analysis**

3 units - semester 2

42 hours lectures and tutorials

Available for Non-Award Study

Prerequisite(s): MATHS 1012 or MATHS 2004

Incompatible: PURE MTH 2003, PURE MTH 3017 or Real Analysis (Pre 2001)

Assessment: ongoing assessment 30%, exam 70%

Modern mathematics and physics rely on our ability to be able to solve equations, if not in explicit exact forms, then at least in being able to establish the existence of solutions. To do this requires a knowledge of so-called 'analysis', which in many respects is just Calculus in very general settings. The foundations for this work are commenced in Real Analysis, a course that develops this basic material in a systematic and rigorous manner in the context of real-valued functions of a real variable.

Topics covered: Basic set theory. The real numbers, least upper bounds, completeness and its consequences. Sequences: convergence, subsequences, Cauchy sequences. Open, closed, and compact sets of real numbers. Continuous functions, uniform continuity. Differentiation, the Mean Value Theorem. Sequences and series of functions, pointwise and uniform convergence. Power series and Taylor series. Metric spaces: basic notions generalised from the setting of the real numbers. The space of continuous functions on a compact interval. The Contraction Principle. Picard's Theorem on the existence and uniqueness of solutions of ordinary differential equations.

MATHS 2101 **Multivariable & Complex Calculus**

3 units - semester 1

42 hours lectures and tutorials

Available for Non-Award Study

Prerequisite(s): MATHS 1012 or MATHS 2004

Incompatible: PURE MTH 2005, PURE MTH 3016, MATHS 2202 or Real Analysis prior to 2002

Assessment: ongoing assessment 30%, exams 70%

The mathematics required to describe most 'real life' systems involves functions of more than one variable, so the differential and integral calculus developed in a first course in Calculus must be extended to functions of more variables. In this course, the key results of one-variable calculus are extended to higher dimensions: differentiation, integration, and the link between them provided by the Fundamental Theorem of Calculus are all generalised. The machinery developed can be applied to

another generalisation of one-variable Calculus, namely to complex calculus, and the course also provides an introduction to this subject. The material covered in this course forms the basis for mathematical analysis and application across an extremely broad range of areas, essential for anyone studying the hard sciences, engineering, or mathematical economics/finance.

Topics covered: introduction to multivariable calculus; differentiation of scalar- and vector-valued functions; higher-order derivatives, extrema, Lagrange multipliers and the implicit function theorem; integration over regions, volumes, paths and surfaces; Green's, Stokes' and Gauss's theorems; differential forms; curvilinear coordinates; an introduction to complex numbers and functions; complex differentiation; complex integration and Cauchy's theorems; and conformal mappings.

MATHS 2102 **Differential Equations**

3 units - semester 1

42 hours lectures and tutorials

Available for Non-Award Study

Prerequisite(s): MATHS 1012 or MATHS 2004

Incompatible: APP MTH 2007, APP MTH 2000, APP MTH 2010, APP MTH 2010, MATHS 2201

Assessment: ongoing assessments 30%, exams 70%

Most 'real life' systems that are described mathematically, be they physical, financial, economic or some other kind, are described by means of differential equations. Our ability to predict the way in which these systems evolve or behave is determined by our ability to find solutions of these equations explicitly or to be able to approximate solutions as accurately as we need. Every differential equation presents its own challenges, but there are various classes of differential equations, and for some of these there are established approaches and methods for solving them. This course presents some of the most important such methods.

Topics covered: first order ordinary differential equations (ODEs), higher order ODEs, numerical techniques for solving ODEs, systems of ODEs, series solutions of ODEs, Laplace transforms, Fourier analysis, solution of linear partial differential equations using the method of separation of variables, and D'Alembert's solution of the wave equation.

MATHS 2103 **Probability & Statistics**

3 units - semester 1

42 hours lectures and tutorials

Available for Non-Award Study

Prerequisite(s): MATHS 1012 or MATHS 2004

Incompatible: STATS 2002, STATS 2003, STATS 2011

Assessment: ongoing assessment 30%, exam 70%

Probability theory is the branch of mathematics that deals with modelling uncertainty. It is important because of its direct application in areas such as genetics, finance and telecommunications. It also forms the fundamental basis for many other areas in the mathematical sciences

including statistics, modern optimisation methods and risk modelling. This course provides an introduction to probability theory, random variables and Markov processes.

Topics covered: probability axioms, conditional probability; Bayes' theorem; discrete random variables, moments, bounding probabilities, probability generating functions, standard discrete distributions; continuous random variables, uniform, normal, Cauchy, exponential, gamma and chi-square distributions, transformations, the Poisson process; bivariate distributions, marginal and conditional distributions, independence, covariance and correlation, linear combinations of two random variables, bivariate normal distribution; sequences of independent random variables, the weak law of large numbers, the central limit theorem; definition and properties of a Markov chain and probability transition matrices; methods for solving equilibrium equations, absorbing Markov chains.

MATHS 2104 Numerical Methods

3 units - semester 2

42 hours of lectures and tutorials

Available for Non-Award Study

Prerequisite(s): MATHS 1012 or MATHS 2004

Assumed Knowledge: MATHS 2102

Incompatible: cannot be counted with APP MTH 2004 OR APP MTH 2009

Assessment: ongoing assessment 30%. exam 70%

To explore complex systems, physicists, engineers, financiers and mathematicians require computational methods since mathematical models are only rarely solvable algebraically. Numerical methods, based upon sound computational mathematics, are the basic algorithms underpinning computer predictions in modern systems science. Such methods include techniques for simple optimisation, interpolation from the known to the unknown, linear algebra underlying systems of equations, ordinary differential equations to simulate systems, and stochastic simulation under unknown influences.

Topics covered: the mathematical and computational foundations of the numerical approximation and solution of scientific problems; simple optimisation; vectorisation; clustering; polynomial and spline interpolation; pattern recognition; integration and differentiation; solution of large scale systems of linear and nonlinear equations; modelling and solution with sparse equations; explicit schemes to solve ordinary differential equations; random numbers; stochastic system simulation.

MATHS 2105 Mathematics IIM

3 units - summer semester or semester 1 or semester 2

65 hours lectures, tutorials and computer practicals

Available for Non-Award Study

Prerequisite(s): MATHS 1011, MATHS 1013

Incompatible: MATHS 1012

Assessment: 3 hour exam, small percentage for assignments, tests

This course extends the concepts and techniques of calculus and linear algebra which were introduced in Mathematics IA and Mathematics IMA, emphasising their inter-relationships and applications to the sciences and financial areas and continues to develop problem solving skills in mathematics.

Topics covered: Calculus - Applications of the derivative; functions of two variables; Taylor series; differential equations, techniques of integration. Algebra - The real vector space, eigenvalues and eigenvectors, linear transformations and applications of linear algebra.

MATHS 2201 Engineering Mathematics 1

3 units - semester 1

42 hours lectures and tutorials

Restriction: available only to students enrolled in Bachelor of Engineering Programs

Available for Non-Award Study

Prerequisite(s): MATHS 1012 or MATHS 2004

Incompatible: APP MTH 2000, APP MTH 2007, APP MTH 2010, MATHS 2102, STATS 2004, STATS 1000

Assessment: ongoing assessment 30%, exam 70%

Mathematical models are used to understand, predict and optimise engineering systems. Many of these systems are deterministic and are modelled using differential equations. Others are random in nature and are analysed using probability theory and statistics. This course provides an introduction to differential equations and their solutions and to probability and statistics, and relates the theory to physical systems and simple real world applications.

Topics covered: Ordinary differential equations, including first and second order equations and series solutions; Fourier series; partial differential equations, including the heat equation, the wave equation, Laplace's equation and separation of variables; probability and statistical methods, including sampling and probability, descriptive statistics, random variables and probability distributions, mean and variance, linear combinations of random variables, statistical inference for means and proportions and linear regression.

MATHS 2202 Engineering Mathematics II

3 units - semester 2

36 hours lectures, 6 hours tutorials

Available for Non-Award Study

Prerequisite: MATHS 1012 or MATHS 2004

Assumed Knowledge: MATHS 2102 or APP MTH 2000 or APP MTH 2007

Incompatible: APP MTH 2002, APP MTH 2006 or MATHS 2101

Assessment: Final exam, assignments and/or practicals

This course provides an introduction to vector analysis and complex calculus, which is relevant to physics and engineering problems in two or more dimensions, such as solid and fluid mechanics, electromagnetism and thermodynamics. The course also introduces Laplace

transform methods for solving differential equations, which have application to engineering problems such as circuit analysis and control.

Topics covered: Vector calculus - vector fields; gradient, divergence and curl; line, surface and volume integrals; integral theorems of Green, Gauss and Stokes with applications; orthogonal curvilinear coordinates. Complex analysis - elementary functions of a complex variable; complex differentiation; complex contour integrals; Laurent series; residue theorem. Laplace transforms - transforms of derivatives and integrals; shifting theorems; convolution; applications to differential equations.

PURE MTH 2106

Algebra

3 units - semester 1

42 hours lectures and tutorials

Available for Non-Award Study

Prerequisite(s): MATHS 1012 or MATHS 2004

Incompatible: PURE MTH 2002

Assessment: ongoing assessment 30%, exam 70%

Knowledge of group theory and of linear algebra is important for an understanding of many areas of pure and applied mathematics, including advanced algebra and analysis, number theory, coding theory, cryptography and differential equations. There are also important applications in the physical sciences.

Topics covered: (1) Equivalence relations (2) Groups - subgroups, cyclic groups, cosets, Lagrange's theorem, normal subgroups and factor groups. Examples of finite and infinite groups, including groups of symmetries and permutations, groups of numbers and matrices. Homomorphism and isomorphism of groups. (3) Linear algebra - vector spaces, bases, linear transformations and matrices, subspaces, sums and quotients of spaces, dual spaces, bilinear forms and inner product spaces, and canonical forms.

STATS 2107

Statistical Modelling and Inference

3 units - semester 2

42 hours lectures, tutorials and practicals

Available for Non-Award Study

Prerequisite(s): MATHS 1012 or MATHS 2004

Assumed Knowledge: STATS 1000 or STATS 1004, MATHS 2103

Incompatible: STATS 2011

Assessment: ongoing assessment 30%, exam 70%

Statistical methods are important to all areas that rely on data including science, technology, government and commerce. To deal with the complex problems that arise in practice requires a sound understanding of fundamental statistical principles together with a range of suitable modelling techniques. Computing using a high level statistical package is also an essential element of modern statistical practice. This course provides an introduction to the principles of statistical inference and the development of linear statistical models with the statistical package R.

Topics covered: Point estimates, unbiasedness, mean-squared error, confidence intervals, tests of hypotheses, power calculations, derivation of one and two-sample procedures; simple linear regression, regression diagnostics, prediction; linear models, ANOVA, multiple regression, factorial experiments, analysis of covariance models, model building; likelihood based methods for estimation and testing, goodness of fit tests; sample surveys, population means, totals and proportions, simple random samples, stratified random samples.

LEVEL III

APP MTH 3000

Computational Mathematics III

3 units - semester 1

36 hours lectures, tutorials

Available for Non-Award Study

Prerequisite(s): Pass in MATHS 1012 or MATHS 2004

Assumed Knowledge: APP MTH 2007 or 2000 or 2010 or MATHS 2201 & computer programming language such as Matlab, Fortran or C

Assessment: Ongoing assessment 30%, final exam 70%

In exploring large scale, complex systems, physicists, engineers, financiers and mathematicians often formulate problems as partial differential equations or many coupled ordinary differential equations. Only rarely can these mathematical models be solved algebraically. Instead computational mathematics derives approximate models that form the basis of computer predictions. Such models predict the climate, the weather, option prices, industrial processes, engineering devices, blood flow, epidemiology and more. This course develops sound stable computational methods for exploring large-scale systems.

Topics covered: the numerical solution and stability of ordinary differential equations, using explicit and implicit methods; finite-difference and spectral methods applied to boundary value problems and certain partial differential equations, including Laplace's equation, the heat equation and the wave equation; stability analysis of these schemes; modern Krylov and multigrid methods are used to solve large systems of linear equations such as those that arise from finite-difference schemes; continuation methods.

APP MTH 3001

Applied Probability III

3 units - semester 1

36 hours lectures, tutorials

Available for Non-Award Study

Prerequisite(s): Pass in MATHS 1012 or MATHS 2004

Assumed Knowledge: Markov Chains such as in APP MTH 2008 or MATHS 2103

Assessment: Ongoing assessment 30%, final exam 70%

Many processes in the real world involve some random variation superimposed on a deterministic structure. Often

– as in games – the random component is the dominant part. This course aims to provide a basic toolkit for modelling and analyzing discrete-time problems in which there is a significant probabilistic component.

Markov chain examples in the course include population branching processes (with application to genetics), random walks (with application to tennis and other games), and processes with an over-riding cost structure.

Topics covered are: hitting probabilities and hitting time theorems, (including extremal versions), population branching processes, inhomogeneous random walks on the line, transient, recurrent and ephemeral states, communicating classes, solidarity properties, necessary and sufficient conditions for transience and positive recurrence, global balance, partial balance, reversibility, rewards on Markov chains, and the policy improvement algorithm.

APP MTH 3002 Fluid Mechanics III

3 units - semester 2

36 hours lectures, tutorials

Available for Non-Award Study

Prerequisite(s): Pass in MATHS 1012 or MATHS 2004

Assumed Knowledge: APP MTH 2000 or 2007 or 2010 or MATHS 2201 or 2102, APP MTH 2002 or 2006 or MATHS 2202 or 2101

Assessment: ongoing assessment 30%, final exam 70%

Fluid flows are important in many scientific and technological problems including atmospheric and oceanic circulation, energy production by chemical or nuclear combustion in engines and stars, energy utilisation in vehicles, buildings and industrial processes, and biological processes such as the flow of blood.

Considerable progress has been made in the mathematical modelling of fluid flows and this has greatly improved our understanding of these problems, but there is still much to discover. This course introduces students to the mathematical description of fluid flows and the solution of some important flow problems.

Topics covered: the mathematical description of fluid flow in terms of Lagrangian and Eulerian coordinates; the derivation of the Euler, Navier-Stokes and Bernoulli equations from the fundamental physical principles of mass and momentum conservation; use of the stream function, velocity potential and complex potential are introduced to find solutions of the governing equations for inviscid, irrotational flow past bodies and the forces acting on those bodies; solutions of the Navier-Stokes equations for simple viscous flows.

APP MTH 3004 Mathematical Biology III

3 units - semester 2

36 hours lecture and tutorials

Available for Non-Award Study

Prerequisite(s): Pass in MATHS 1012 or MATHS 2004

Assumed Knowledge: APP MTH 2000 or 2007 or 2010 or MATHS 2201 or 2102

Assessment: Ongoing assessment 30%, final exam 70%

The application of mathematics to problems arising in the life sciences is a rapidly growing area yielding quantitative understanding of questions about such things as the spread of infectious diseases, population growth and interaction, organ (e.g. heart) function, cell signalling, nutrient supply, and more. This course will introduce students to the fascinating world of modelling biological systems. A variety of biological problems will be considered, in the context of which students will be exposed to a variety of mathematical techniques. No previous exposure to biology is necessary.

Topics covered: Scalar, discrete-time models, analysed using the mathematical tools of cobwebbing and linear stability analysis of fixed points; Linear stability analysis of systems of discrete-time equations; The theory of dynamical systems for models comprised of linear and nonlinear scalar and coupled ordinary differential equations, including vector fields, phase-plane analysis and elementary bifurcation theory; Reaction-advection-diffusion models, including equation derivation from the law of mass conservation and Fick's law. The 1D Fisher equation is examined in particular, a Hamiltonian function is introduced for analysis of the steady equation, while travelling wave solutions of the unsteady equation are obtained.

APP MTH 3005 Mathematical Programming III

3 units - Not offered in 2010

36 hours lectures, tutorials

Available for Non-Award Study

Prerequisite(s): Pass in MATHS 1012 or MATHS 2004

Assumed Knowledge: duality theory as in APP MTH 2008 or 2105

Assessment: Ongoing assessment 30%, final exam 70%

A rich set of important optimisation problems are distinguished by the fact that the variables are discrete, and are often integers, for instance, problems related to network flows, scheduling, allocation problems, etc. Distribution networks such as those involving the routing of delivery vehicles to supermarkets ensure we have adequate food supplies, but ensuring a supermarket gets appropriate deliveries when they need them is a complex vehicle routing problem. This is a problem on a network, and any mathematical formulation of such problems involves discrete variables: one cannot send half a truck from a depot to a supermarket! Many such optimisation problems can be formulated using linear models. However, because the variables are often integer, methods of linear programming such as the Simplex Method or Interior Point Methods are not necessarily suitable, since these assume the solution space is a continuum. The focus in this course will be in formulating models and developing solution methods for such optimisation problems, and in understanding the mathematical underpinnings of these methods.

Topics covered: Network theory - formulation of maximum flow and minimum cost problems, and appropriate algorithms to solve these; Extension to more general

integer programs: branch-and-bound, cutting plane techniques, Dual Simplex Method and the role of totally unimodular matrices; Dynamic programming and applications.

APP MTH 3006 Industrial Mathematics III

3 units - Not offered in 2010

36 hours lectures, tutorials

Available for Non-Award Study

Prerequisite(s): Pass in MATHS 1012 or MATHS 2004

Assumed Knowledge: APP MTH 2007, APP MTH 2000 or APP MTH 2010 or MATHS 2102 or 2201

Assessment: Ongoing assessment 30%, final exam 70%

Mathematical modelling is the art of representing a real-world process (existing or proposed) by mathematical equations, and then investigating this "mathematical model" to obtain better insight into and understanding of the important features of the process. Mathematical modelling with differential equations has been recognised for some decades as a valuable tool in the development of modern industrial technologies and processes. Examples of industrial problems which might be modelled with differential equations include laser drilling, spontaneous ignition, contaminant dispersion, desalination, casting of sheet steel, solar heating, pasteurisation, heat exchanger design and geothermal heating.

In the context of such energy and mass transport problems from industry, this course will give students an understanding of general modelling methodology. In addition to model development, a variety of mathematical methods for solving these models will be considered. The emphasis throughout is on using mathematics to obtain practical answers to realistic problems. Case studies from the above, or similar, examples will be used to demonstrate how to develop and use models. Students will also develop their own modelling skills through a project investigation of a real-world problem. The skills acquired will be applicable across a wide range of disciplines.

APP MTH 3012 Financial Modelling III

3 units - semester 2

36 hours lectures, tutorials

Available for Non-Award Study

Prerequisite(s): Pass in MATHS 1011

Assumed Knowledge: familiarity with Excel spreadsheets

Incompatible: cannot be counted with APP MTH 3011

Assessment: Ongoing assessment 30%, final exam 70%

The growth of the range of financial products that are traded on financial markets or are available at other financial institutions, is a notable feature of the finance industry. A major factor contributing to this growth has been the development of sophisticated methods to price these products. The significance to the finance industry of developing a method for pricing options (financial derivatives) was recognised by the awarding of the Nobel Prize in Economics to Myron Scholes and Robert Merton

in 1997. The mathematics upon which their method is built is stochastic calculus in continuous time. Binomial lattice type models provide another approach for pricing options. These models are formulated in discrete time and the examination of their structure and application in various financial settings takes place in a mathematical context that is less technically demanding than when time is continuous. This course discusses the binomial framework, shows how discrete-time models currently used in the financial industry are formulated within this framework and uses the models to compute prices and construct hedges to manage financial risk. Spreadsheets are used to facilitate computations where appropriate.

Topics covered: The no-arbitrage assumption for financial markets; no-arbitrage inequalities; formulation of the one-step binomial model; basic pricing formula; the Cox-Ross-Rubinstein (CRR) model; application to European style options, exchange rates and interest rates; formulation of the n-step binomial model; backward induction formula; forward induction formula; n-step CRR model; relationship to Black-Scholes; forward and future contracts; exotic options; path dependent options; implied volatility trees; implied binomial trees; interest rate models; hedging; real options; implementing the models using EXCEL spreadsheets.

APP MTH 3013 Differential Equations III

3 units - semester 1

36 hours lectures, tutorials

Available for Non-Award Study

Prerequisite(s): Pass in MATHS 1012 or MATHS 2004

Assumed Knowledge: APP MTH 2000 or 2007 or 2010 or MATHS 2201 or 2102

Assessment: Ongoing assessment 30%, final exam 70%

Differential equations describe a wide range of practical problems in areas such as biology, engineering, physical sciences, economics and finance. This course aims to provide students with techniques required to solve classes of ordinary and partial differential equations that commonly occur in applications.

Topics covered: methods for the solution of systems of linear and non-linear ordinary differential equations; techniques for the solution of two point boundary value problems for second order linear ordinary differential equations with variable coefficients; classification of partial differential equations and the solution of boundary value problems for these equations using the methods of reduction to ordinary differential equations by use of separation of variables, integral transforms, and characteristics.

APP MTH 3014 Optimisation III

3 units - semester 1

36 hours lectures, tutorials

Available for Non-Award Study

Prerequisite(s): Pass in MATHS 1012 or MATHS 2004

Assumed Knowledge: linear programming as in APP MATH 2008 or 2105

Assessment: Ongoing assessment 30%, final exam 70%

Most problems in life are optimisation problems: what is the best design for a racing kayak, how do you get the best return on your investments, what is the best use of your time in swot vac, what is the shortest route across town for an emergency vehicle, what are the optimal release rates from a dam for environmental flows in a river? Mathematical formulations of such optimisation problems might contain one or many independent variables. There may or may not be constraints on those variables. There is always, though, an objective: minimise or maximise some function of the variable(s), subject to the constraints. This course will examine nonlinear mathematical formulations, and will concentrate on convex optimisation problems. Many modern optimisation methods in areas such as design of communication networks, finance, etc, rely on the classical underpinnings covered in this course.

Topics covered: One-dimensional (line) searches - direct methods, polynomial approximation, methods for differentiable functions; Theory of convex and nonconvex functions relevant to optimisation; Multivariable unconstrained optimisation, in particular, higher-order Newton's Method, steepest descent methods, conjugate direction and conjugate gradient methods; Constrained optimisation, including Kuhn-Tucker conditions and the Gradient Projection Method; Penalty methods.

APP MTH 3016 Telecommunications Systems Modelling III

3 units - semester 2

36 hours lectures, tutorials

Available for Non-Award Study

Prerequisite(s): Pass in MATHS 1012 or MATHS 2004

Assumed Knowledge: Basic probability as in APP MTH 2008 or MATHS 2103

Incompatible: APP MTH 3015

Assessment: Ongoing assessment 30%, final exam 70%

This course introduces students to the fundamental concepts of stochastic modelling with an emphasis on applications relating to telecommunication systems. Considerable emphasis is also placed on the development of skills, which are important in the workplace. Amongst these are presentation and communication skills, ability to present a solution in terms that the 'owner of a problem' can understand, and ability to make decisions about which techniques might be useful to solve a problem. Application of the above skills to sophisticated models of telecommunications systems are developed by students through completing a series of mini-projects.

Topics covered: Definition of continuous-time Markov-chains, classical queueing examples, transient behaviour, the stationary distribution, hitting probabilities and expected hitting times; stochastic modelling of traffic streams; effective bandwidth and quality of service; evaluation of exact and approximate performance measures for both queueing networks and loss networks; TCP/IP protocols and performance measures.

APP MTH 3017 Waves III

3 units - semester 1

36 hours lectures, tutorials

Available for Non-Award Study

Prerequisite(s): Pass in MATHS 1012 or MATHS 2004

Assumed Knowledge: APP MTH 2000, 2007 or 2010 or MATHS 2201 or 2102

Assessment: Ongoing assessment 30%, final exam 70%

Waves impact on every facet of our experience. The simple acts of seeing and hearing rely on electromagnetic and sound waves. Traffic flows in waves. Earthquakes and tsunamis are waves capable of causing enormous devastation. Waves carry the information required for our technological society to function. This course will introduce you to the study of waves through a wide variety of examples of wave motions.

Topics covered: waves on stretched strings and membranes, sound waves, water waves, electromagnetic waves, waves in elastic media, traffic waves and solitary waves. The course will emphasise the mathematical features common to many of these phenomena, such as the transmission and reflection of waves at interfaces, cut-off frequencies, dispersion and group velocity, internal reflection and evanescent waves, shock waves and solitons.

MATHS 3015 Communication Skills III

3 units - semester 2

36 lectures and tutorials

Available for Non-Award Study

Prerequisite(s): MATHS 1012 or Passes in MATHS 2004 or COMP SCI 1009

Incompatible: CHEM ENG 3004, C&ENVENG 3000, ELEC ENG 3012, MECH ENG 3006, 9007

Assessment: ongoing assessment 30%, exam 70%

In the modern world skill at communicating mathematics is sometimes just as important as skill at doing mathematics. This course develops students' skills in both the written and verbal communication of mathematics. In addition the general communication skills which are fundamental to getting and keeping a job are taught. The course encourages student learning with a range of interesting teaching techniques including guest lecturers and workshops.

Topics covered: the writing process, abstracts and summaries, communicating with non-technical audiences, writing professional documents, preparation and delivery of presentations, ethics and professional practice, preparation of job applications, and interviews.

PURE MTH 3002 Topology and Analysis III

3 units - semester 1

36 hours lectures and tutorials

Available for Non-Award Study

Prerequisite(s): Pass in MATHS 1012 or MATHS 2004

Incompatible: Analysis & Topology III

Assessment: ongoing assessment 30%, exams 70%

Solving equations is a crucial aspect of working in mathematics, physics, engineering, and many other fields. These equations might be straightforward algebraic statements, or complicated systems of differential equations, but there are some fundamental questions common to all of these settings: does a solution exist? If so, is it unique? And if we know of the existence of some specific solution, how do we determine it explicitly or as accurately as possible? This course develops the foundations required to rigorously establish the existence of solutions to various equations, thereby laying the basis for the study of solutions. Through an understanding of the foundations of analysis, we obtain insight critical in numerous areas of application, such as areas ranging across physics, engineering, economics and finance.

Topics covered: sets, functions, metric spaces and normed linear spaces, compactness, connectedness, and completeness. Banach fixed point theorem and applications, uniform continuity and convergence. General topological spaces, generating topologies, topological invariants, quotient spaces. Introduction to Hilbert spaces and bounded operators on Hilbert spaces.

PURE MTH 3003 Number Theory III

3 units - semester 2

36 hours lectures and tutorials

Available for Non-Award Study

Prerequisite(s): MATHS 1012 or MATHS 2004

Assessment: ongoing assessment 30%, exam 70%

Number theory is one of the oldest branches of mathematics. It is concerned with the properties of numbers, especially the properties of the integers. Historically, it was valued as the purest form of mathematics, but in fact there are many modern applications to information technology and cryptography. Number theory is a fundamentally useful course for any mathematician, but it also attracts a general audience because of its intrinsic beauty and its emphasis on problem-solving.

Topics covered: Divisibility and primes, congruences, arithmetic functions, continued fractions and rational approximation, quadratic residues, and primitive roots. Examples of diophantine equations. Modern applications to computer science, cryptography etc. Introduction to number-theoretic computer packages.

PURE MTH 3007 Groups and Rings III

3 units - semester 1

36 hours lectures and tutorials

Available for Non-Award Study

Prerequisite(s): Pass in MATHS 1012 or MATHS 2004

Assumed Knowledge: PURE MTH 2002 or PURE MTH 2106

Incompatible: Groups III or Rings, Fields and Matrices III

Assessment: ongoing assessments 30%, exam 70%

The algebraic notions of groups and rings are of great interest in their own right, but knowledge and understanding of them is of benefit well beyond the realms of pure algebra. Areas of application include, for example, advanced number theory; cryptography; coding theory; differential, finite and algebraic geometry; algebraic topology; representation theory and harmonic analysis including Fourier series. The theory also has many practical applications including, for example, to the structure of molecules, crystallography and elementary particle physics.

Topics covered: (1) Groups, subgroups, cosets and normal subgroups, homomorphisms and factor groups, products of groups, finitely generated abelian groups, groups acting on sets and the Sylow theorems. (2) Rings, integral domains and fields, polynomials, ideals, factorisation in integral domains and unique factorisation domains.

PURE MTH 3009 Integration and Analysis III

3 units - semester 2

36 hours lectures and tutorials

Available for Non-Award Study

Prerequisite(s): Pass in MATHS 1012 or MATHS 2004

Assumed Knowledge: PURE MTH 2003, MATHS 2100, PURE MTH 3002 or PURE MTH 3017

Assessment: ongoing assessment 30%, exam 70%

The Riemann integral works well for continuous functions on closed bounded intervals, but it has certain deficiencies that cause problems, for example, in Fourier analysis and in the theory of differential equations. To overcome such deficiencies, a 'new and improved' version of the integral was developed around the beginning of the twentieth century, and it is this theory with which this course is concerned. The underlying basis of the theory, measure theory, has important applications not just in analysis but also in the modern theory of probability.

Topics covered: Set theory; Lebesgue outer measure; measurable sets; measurable functions. Integration of measurable functions over measurable sets. Convergence of sequences of functions and their integrals. General measure spaces and product measures. Fubini and Tonelli's theorems. L_p spaces. The Radon-Nikodym theorem. The Riesz representation theorem. Integration and Differentiation.

PURE MTH 3012 Fields and Geometry III

3 units - semester 2

36 hours lectures and tutorials

Available for Non-Award Study

Prerequisite(s): Pass in MATHS 1012 or MATHS 2004

Assumed Knowledge: PURE MTH 2106

Assessment: ongoing assessment 30%, exam 70%

This first part of this course generalises the real numbers to a mathematical structure called a field. Finite fields have many applications, particularly in Information Security where the understanding of finite fields is fundamental to many codes and cryptosystems.

Properties and constructions of fields will be investigated in detail. The second part of the course considers projective geometries. Projective geometry is one of the important modern geometries introduced in the 19th century. Projective geometry is more general than our usual Euclidean geometry, and it has useful applications in Information Security, Statistics, Computer Graphics and Computer Vision. The focus of this course will be primarily on projective planes.

Topics covered: (I) Fields: fields, polynomials rings, extensions of fields; automorphisms of fields, the structure of a finite field. (II) Projective Geometry: projective planes, homogeneous coordinates, field planes, collineations of projective planes, conics in field planes, projective geometry of general dimension.

PURE MTH 3018 Coding and Cryptology III

3 units - semester 2

36 hours lectures and tutorials

Available for Non-Award Study

Prerequisite(s): Pass in MATHS 1012 or MATHS 2004

Assumed Knowledge: Students who have not completed either PURE MTH 2000, PURE MTH 2002 or PURE MTH 2106 should see the Pure Mathematics Head of Discipline

Incompatible: PURE MTH 3006

Assessment: ongoing assessment 30%, exam 70%

The fundamental objective of cryptology is to enable communication over an insecure channel in such a way that an eavesdropper cannot understand what is being said. Classical cryptosystems required participants to share a common key. The new public key systems removed the need to share a private key. Coding theory is concerned with finding efficient schemes by which digital information can be coded for reliable transmission through a noisy channel. Error correcting codes are widely used in applications such as transmission of pictures from deep space, storage of data on CDs and design of identification numbers.

Topics covered in Cryptography: classical cryptosystems; cryptanalysis: the different types of attack on these systems; Shannon's theory of perfect secrecy; unconditional and computational security; perfect secrecy. Public key cryptography: the RSA method and the El-Gamal cryptosystem and the mathematical problems on which they are based; digital signature schemes; the DES and AES cryptosystems.

Topics covered in Codes: maximum likelihood decoding, symmetric channels, minimum distance of a code, error correcting capabilities of a code; Linear Codes: the generator and parity check matrix, the dual of a code; bounds on codes; syndrome decoding. Perfect codes: sphere packing bound, Hamming codes. Cyclic codes.

PURE MTH 3019 Complex Analysis III

3 units - semester 1

36 hours lectures and tutorials

Available for Non-Award Study

Prerequisite(s): Pass in MATHS 1012 or MATHS 2004

Incompatible: PURE MTH 2001

Assessment: ongoing assessment 30%, exam 70%

When the real numbers are replaced by the complex numbers in the definition of the derivative of a function, the resulting (complex-)differentiable functions turn out to have many remarkable properties not enjoyed by their real analogues. These functions, usually known as holomorphic functions, have numerous applications in areas such as engineering, physics, differential equations and number theory, to name just a few. The focus of this course is on the study of holomorphic functions and their most important basic properties.

Topics covered: Complex numbers and functions; complex limits and differentiability; elementary examples; analytic functions; complex line integrals; Cauchy's theorem and the Cauchy integral formula; Taylor's theorem; zeros of holomorphic functions; Rouché's Theorem; the Open Mapping theorem and Inverse Function theorem; Schwarz' Lemma; automorphisms of the ball, the plane and the Riemann sphere; isolated singularities and their classification; Laurent series; the Residue Theorem; calculation of definite integrals and evaluation of infinite series using residues; outlines of the Jordan Curve Theorem, Montel's Theorem and the Riemann Mapping Theorem.

STATS 3000 Industrial Statistics III

2 units - semester 1

2 lectures per week, 1 tutorial, 1 hour practical every 3 weeks

Available for Non-Award Study

Prerequisite: Pass in MATHS 1012 or MATHS 2004; Pass in one of STATS 1000, STATS 1004, STATS 2004, APP MTH 2009, APP MTH 2010, MATHS 1504 or MATHS 2201

Assessment: 2 hour exam, class exercises, practicals, project work

Reliability definitions, types of failure, confidence levels, mtbf concepts, predication of reliability from life test data. Quality control and assurance: definition of quality, data presentation, quality control methods. Total quality management: measurement and audit methods. Quality improvement.

STATS 3000 Industrial Statistics III

2 units - Not offered in 2010

2 lectures per week, 1 tutorial, 1 hour practical every 3 weeks

Available for Non-Award Study

Prerequisite(s): Pass in MATHS 1012 or MATHS 2004; Pass in one of STATS 1000, STATS 1004, STATS 2004, APP MTH 2009, APP MTH 2010, MATHS 1504 or MATHS 2201

Assessment: 2 hour exam, class exercises, practicals, project work

Reliability definitions, types of failure, confidence levels, mtbf concepts, predication of reliability from life test data. Quality control and assurance - definition of quality, data presentation, quality control methods. Total quality management - measurement and audit methods. Quality improvement.

STATS 3001 Statistical Modelling III

3 units - semester 1

36 hours lectures, tutorials and practicals

Available for Non-Award Study

Prerequisite(s): Pass in MATHS 1012 or MATHS 2004; Pass in one of STATS 1000, STATS 1004, STATS 2004, APP MTH 2009, APP MTH 2010, MATHS 1504 or MATHS 2201

Assumed Knowledge: STATS 2011 or STATS 2107

Assessment: ongoing assessment 30%, exam 70%

One of the key requirements of an applied statistician is the ability to formulate appropriate statistical models and then apply them to data in order to answer the questions of interest. Most often, such models can be seen as relating a response variable to one or more explanatory variables. For example, in a medical experiment we may seek to evaluate a new treatment by relating patient outcome to treatment received while allowing for background variables such as age, sex and disease severity. In this course, a rigorous discussion of the linear model is given and various extensions are developed. There is a strong practical emphasis and the statistical package R is used extensively.

Topics covered: the linear model, least squares estimation, generalised least squares estimation, properties of estimators, the Gauss-Markov theorem; geometry of least squares, subspace formulation of linear models, orthogonal projections; regression models, factorial experiments, analysis of covariance and model formulae; regression diagnostics, residuals, influence diagnostics, transformations, Box-Cox models, model selection and model building strategies; models with complex error structure, split-plot experiments; logistic regression models.

STATS 3003 Sampling Theory and Practice III

3 units - semester 2

36 hours lectures, tutorials and practicals

Available for Non-Award Study

Prerequisite(s): Pass in MATHS 1012 or MATHS 2004; Pass in one of STATS 1000, STATS 1004, STATS 2004, APP MTH 2009, APP MTH 2010, MATHS 1504 or MATHS 2201

Assumed Knowledge: STATS 2011 or STATS 2107

Assessment: ongoing assessment 30%, exam 70%

Sample surveys are an important source of statistical data. A great many published statistics on demographic, economic, political and health related characteristics are based on survey data. Simple random sampling is a well known method of sampling but, for reasons of efficiency and practical constraints, methods such as stratified sampling and cluster sampling are typically used by statistical authorities such as the Australian Bureau of Statistics and by market research organisations. This course is concerned with the design of sample surveys and the statistical analysis of data collected from such surveys.

Topics covered: experiments and surveys, steps in planning a survey; randomisation approach to sampling

and estimation, sampling distribution of estimator, expected values, variances, generalisation of probability sampling; prediction approach, inadequacies of approach, decomposition of population total, concomitant variables; regression through the origin, estimation by least squares, ratio estimation, variance formulae; balance and robustness; best fit sample; stratified sampling, estimation, allocation, construction of strata, stratification on size variables, post-stratification; two-stage sampling, estimation, allocation, cluster sampling.

STATS 3005 Time Series III

3 units - semester 2

36 hours lectures, tutorials and practicals

Available for Non-Award Study

Prerequisite(s): Pass in MATHS 1012 or MATHS 2004; Pass in one of STATS 1000, STATS 1004, STATS 2004, APP MTH 2009, APP MTH 2010, MATHS 1504 or MATHS 2201

Assumed Knowledge: STATS 2011 or STATS 2107

Assessment: ongoing assessment 30%, exam 70%

Time series consist of values of a variable recorded over a long period of time. Such data arise in just about every area of science and the humanities, including econometrics and finance, engineering, medicine, genetics, sociology, environmental science. What makes time series data special is the presence of dependence between observations in a series, and the fact that usually only one observation is made at any given point in time. This means that standard statistical methods are not appropriate, and special methods for statistical analysis are needed. This course provides an introduction to time series analysis using current methodology and software.

Topics covered: descriptive methods, plots, smoothing, differencing, the autocorrelation function, the correlogram and the variogram; the periodogram, estimation and elimination of trend and seasonal components; stationary processes, modelling and forecasting with autoregressive moving average (ARMA) models; spectral analysis, the fast Fourier transform, periodogram averages and other smooth estimates of the spectrum, time-invariant linear filters; non-stationary and seasonal time series models. ARIMA processes, identification, estimation and diagnostic checking, forecasting, including extrapolation of polynomial trends, exponential smoothing, and the Box-Jenkins approach.

STATS 3006 Mathematical Statistics III

3 units - semester 1

36 hours lectures and tutorials

Available for Non-Award Study

Prerequisite(s): Pass in MATHS 1012 or MATHS 2004; Pass in one of STATS 1000, STATS 1004, STATS 2004, APP MTH 2009, APP MTH 2010, MATHS 1504 or MATHS 2201

Assumed Knowledge: STATS 2011 or STATS 2107

Assessment: ongoing assessment 30%, exam 70%

Statistical methods used in practice are based on a foundation of statistical theory. One branch of this theory uses the tools of probability to establish important

distributional results that are used throughout statistics. Another major branch of statistical theory is statistical inference. It deals with issues such as how do we define a 'good' estimator or hypothesis test, how do we recognise one and how do we construct one? This course is concerned with the fundamental theory of random variables and statistical inference.

Topics covered: calculus of distributions, moments, moment generating functions; multivariate distributions, marginal and conditional distributions, conditional expectation and variance operators, change of variable, multivariate normal distribution, exact distributions arising in statistics; weak convergence, convergence in distribution, weak law of large numbers, central limit theorem; statistical inference, likelihood, score and information; estimation, minimum variance unbiased estimation, the Cramer-Rao lower bound, exponential families, sufficient statistics, the Rao-Blackwell theorem, efficiency, consistency, maximum likelihood estimators, large sample properties; tests of hypotheses, most powerful tests, the Neyman-Pearson lemma, likelihood ratio, score and Wald tests, large sample properties.

STATS 3008 Biostatistics III

3 units - semester 2

36 hours lectures, tutorials and practicals

Available for Non-Award Study

Prerequisite(s): Pass in MATHS 1012 or MATHS 2004; Pass in one of STATS 1000, STATS 1004, STATS 2004, APP MTH 2009, APP MTH 2010, MATHS 1504 or MATHS 2201

Assumed Knowledge: STATS 2011 or STATS 2107

Assessment: ongoing assessment 30%, exam 70%

Biostatistics is the branch of statistics developed for applications within the biomedical, pharmaceutical and health sciences. These methods are fundamental to contemporary medical research. They play a key role in evaluating treatments for diseases such as cancer and heart disease, in predicting the spread and incidence of epidemics and in evaluating the risk associated with factors such as obesity or exposure to electromagnetic radiation. This course provides an introduction to the design and analysis of clinical trials and epidemiological studies, and methods for the analysis of biostatistical data.

Topics covered: the role of randomisation and ethical considerations, Phase I to Phase IV trials, the Data and Safety Monitoring Board; methods of randomisation, unrestricted and restricted randomisation, random permuted blocks, biased coin designs, stratification, minimisation; trial size, fixed, sequential and group sequential trials, factorial trials, crossover trials and equivalence trials; epidemiology, cohort, case-control and related epidemiological studies, models for disease association, relative risk, odds ratio, attributable risk; diagnostic tests and screening, meta-analysis, survival analysis.

LEVEL IV

APP MTH 4050 System Modelling and Simulation

3 units - semester 1

30 hours of lectures and tutorials

Prerequisite(s): MATHS 1012 or MATHS 2004

Assumed Knowledge: Level II Applied Mathematics courses with aggregate value of 6 units

Assessment: ongoing assessment 30%, exam 70%

The course provides students with the skills to analyse and design systems using modelling and simulation techniques. Case studies will be undertaken involving hands-on use of simulation packages. The application of simulation in areas such as manufacturing, telecommunications and transport will be investigated. At the end of this course, students will be capable of identifying practical situations where simulation modelling can be helpful, reporting to management on how they would undertake such a project, collecting relevant data, building and validating a model, analysing the output and reporting their findings to management. Students complete a project in groups of two or three, write a concise summary of what they have done and report their findings to the class. The project report at the end of this course should be a substantial document that is a record of a student's practical ability in simulation modelling, which can also become part of a portfolio or CV.

Topics covered are: Introduction to simulation, hand simulation, introduction to a simulation package, review of basic probability theory, introduction to random number generation, generation of random variates, analysis of simulation output, variance reduction techniques and basic analytic queueing models.

APP MTH 4051 Applied Mathematics Topic E

3 units - semester 2

30 hours lectures

Available for Non-Award Study

Assessment: 30% ongoing assessment, 70% exam

Please contact the School of Mathematical Sciences for further details or view course information tab on the School of Mathematical Sciences website at www.maths.adelaide.edu.au/courses/

APP MTH 4052 Applied Mathematics Topic F

3 units - semester 2

30 hours lectures

Available for Non-Award Study

Assessment: 30% ongoing assessment, 70% exam

Please contact the School of Mathematical Sciences for further details or view course information tab on the School of Mathematical Sciences website at www.maths.adelaide.edu.au/courses/

STATS 4001 **Reliability and Quality Control**

2 units - semester 1

28 hours lectures, tutorials or equivalent

Restriction: not available to B.Comp.Sci or B.Ma.&Comp.Sc. students

Assumed Knowledge: STATS 2004, APP MTH 2010, APP MTH 2009, MATHS 2201

Assessment: ongoing assessment 30%, exam 70%

Statistical methods are important in many areas of industry and commerce. This includes the modelling and control of processes needed for the levels of quality and reliability essential in a competitive manufacturing environment. They also form the basis for designing experiments that are an essential part of research and development. Many of the methods developed originally for manufacturing are applied increasingly in service industries and in areas such as the monitoring of surgical outcomes. This course is concerned with the statistical process control, the design of industrial experiments and statistical basis of system reliability.

Topics covered: reliability definitions, types of failure, confidence levels, MTBF concepts, prediction of reliability from life test data; quality control and assurance: definition of quality, data presentation, quality control methods; total quality management: measurement and audit methods, quality improvement.

HONOURS

APP MTH 4011A/B **Honours Applied Mathematics & Comp Science Part I**

12 units - semester 1 or semester 2

Available for Non-Award Study

Prerequisite(s): At least 9 units of Maths Science courses at credit standard or above and a strong background in Computer Science - different backgrounds may be accepted at the discretion of the Heads of School

Assessment: each course at end of semester in which it is offered, project, seminar

Candidates are required to undertake at least 3 Honours level Computer Science options and at least 3 Honours level Applied Mathematics options. Other lecture topics may be included at the discretion of the Heads of both Schools. They must also complete a project supervised within the Applied Mathematics discipline in a topic with a significant computing component.

APP MTH 4015A/B **Honours Applied Mathematics**

12 units - semester 1 or semester 2

Available for Non-Award Study

Prerequisite(s): At least 12 units of Mathematical Sciences courses at credit standard or above, of which at least 9 units must be from the Discipline - different backgrounds may be accepted at the discretion of the Head of School

Assessment: exams for each course at end of semester in which it is offered, project, seminar

Students should consult the Head of Mathematical Sciences preferably before enrolling for Level III; Students are required to obtain the approval of Head of Mathematical Sciences before enrolling in the Program. Candidates may apply to the Head for permission, under certain circumstances, to take Honours over two years.

Students select from lecture courses offered by the School of Mathematical Sciences and other Schools as may be agreed to by Head of Mathematical Sciences. Students may be allowed to take appropriate Level III Mathematical Sciences courses not already taken.

Students are assigned a supervisor to advise on and approve their lecture program and give guidance in writing a project on an Applied Mathematics topic. Possible topics should be discussed with staff during the preceding year.

APP MTH 4017A/B **Honours Applied Maths & Statistics**

12 units - semester 1 or semester 2

Available for Non-Award Study

Prerequisite(s): At least 6 units in each of the two Disciplines at credit standard or above - different backgrounds may be accepted at the discretion of the Head of School

Assessment: exams for each course at end of semester in which it is offered, project, seminar

Prospective students should consult Heads of the Disciplines of Applied Mathematics and Statistics early in the year to obtain advice as to specific course content. Candidates should consult potential supervisors and the Heads of the Disciplines of Applied Mathematics and Statistics during the final year of the degree program. The honours program commences at the beginning of February. Candidates are required to present a project that will constitute about 30% of the final result. The project will involve interdisciplinary work at the interface of Statistics and Applied Mathematics.

The student's project will be jointly supervised by staff of both the Statistics and the Applied Mathematics disciplines. The remainder of the program will consist of (at least) seven or eight Honours mathematics and statistics courses.

MATHS 4000A/B **Honours Mathematical Science**

24 units - semester 1 or semester 2

Prerequisite(s): At least 12 units of Mathematical Sciences courses, at credit standard - different backgrounds may be accepted at discretion of the Head of School

Assessment: end of semester 3 hour exam for each topic (unless other arrangements notified, seminar on mathematical topic & project also contribute to final result)

Students considering this course are advised to see Heads of Applied Mathematics, Pure Mathematics or Statistics as soon as possible, preferably no later than the end of the year preceding their enrolment; students required approval of the Head of School of Mathematics before enrolling

Students should consult the Head of Mathematical Sciences preferably before enrolling for Level III;

Students are required to obtain the approval of Head of Mathematical Sciences before enrolling in the Program. Candidates may apply to the Head for permission, under certain circumstances, to take Honours over two years.

Students select from lecture courses offered by the School of Mathematical Sciences and other Schools as may be agreed to by Head of Mathematical Sciences. Students may be allowed to take appropriate Level III Mathematical Sciences courses not already taken.

Students are assigned a supervisor to advise on and approve their lecture program and give guidance in writing a project on an Mathematics topic. Possible topics should be discussed with staff during the preceding year.

PURE MTH 4005A/B **Honours Pure Mathematics**

24 units - semester 1 or semester 2

Prerequisite(s): At least 12 units of Mathematical Sciences courses at credit standard or above, of which at least 9 units must be from the Discipline - different backgrounds may be accepted at the discretion of the Head of School.

Assessment: 3 hour semester exams (unless other arrangements notified), project also contributes to the final result.

Students should consult the Head of Mathematical Sciences preferably before enrolling for Level III; Students are required to obtain the approval of Head of Mathematical Sciences before enrolling in the Program. Candidates may apply to the Head for permission, under certain circumstances, to take Honours over two years.

Students select from lecture courses offered by the School of Mathematical Sciences and other Schools as may be agreed to by Head of Mathematical Sciences. Students may be allowed to take appropriate Level III Mathematical Sciences courses not already taken.

Students are assigned a supervisor to advise on and approve their lecture program and give guidance in writing a project on an Pure Mathematics topic. Possible topics should be discussed with staff during the preceding year.

STATS 4000A/B **Honours Statistics**

24 units - semester 1 or semester 2

Prerequisite(s): At least 12 units of Mathematical Sciences courses at credit standard or above, of which at least 9 units must be from the Discipline - different backgrounds may be accepted at the discretion of the Head of School.

Assessment: 3 hour exam for each course at end of semester in which it is offered, Honours project, seminar

Students should consult the Head of Mathematical Sciences preferably before enrolling for Level III; Students are required to obtain the approval of Head of Mathematical Sciences before enrolling in the Program. Candidates may apply to the Head for permission, under certain circumstances, to take Honours over two years.

Students select from lecture courses offered by the School of Mathematical Sciences and other Schools as may be agreed to by Head of Mathematical Sciences. Students may be allowed to take appropriate Level III Mathematical Sciences courses not already taken.

Students are assigned a supervisor to advise on and approve their lecture program and give guidance in writing a project on an Statistics topic. Possible topics should be discussed with staff during the preceding year.

Media

LEVEL I

MDIA 1002 **Introduction to Media: Digital Revolutions**

3 units - semester 1

3 contact hours per week

Restriction: B Media students only

Assessment: diagnostic exercise (10%), essay (25%), online projects (30%), e-portfolio (25%), participation (10%)

Why is digital media being seen as creatively, socially and politically transformative? What is 'collective intelligence' and how is it empowered by digital tools? How are 'amateur' media makers impacting on mainstream media practices? This course provides answers to the important questions being asked about new digital technologies and encourages creative experimentation with freeware, and critical, reflexive participation in social media sites. It explores the links between earlier communication forms and media institutions, and contemporary digital and mobile technologies. Forms of media interactivity and methods of media analysis are introduced, as are selected theories and debates about media's historical role in shaping social, cultural, economic, and political relations.

MDIA 1004 **Broadcast: Television & Radio**

3 units - semester 2

3 contact hours per week

Restriction: B Media students only

Assessment: First assignment 10%, research assignment 30%, essay assignment including creative assessment or policy assessment option 50%, class participation and attendance 10%

This course examines the history and contemporary forms of broadcast television and radio, and develops an understanding of the impact of digitisation, which students gained in the introductory media course, Digital Revolutions. It compares public, commercial, and community models of broadcast media organisations by examining ownership and the range of audiences, styles, formats and the content typical of each institution. National broadcast regulation and policy-making is considered in relation to the forming or sustaining of communities. The course considers the production, reception and distribution of broadcast content, nationally, and globally with reference to format trade. Cable, TiVo, MTV and JTV are discussed. Celebrity-based programming and genre traditions, such as reality television, live radio talkback, news, documentary, sitcom, sports, drama and games are studied as ways of understanding the mobilisation of audience share, content flows, and

revenue. Students may take a practical option—writing for a television or radio genre—as part of their assessment.

MDIA 1005 Critical Histories of the Image

3 units - semester 1

3 contact hours per week

Restriction: B Media students only

Assessment: Class participation 10%, 750 word image analysis exercise 20%, 1250 word research assignment 30%, 2000 word essay assignment 40%

This course examines the history of media forms responsible for producing and transforming predominant images of reality. Graphical traditions, print media, photography and cinema will be the media practices upon which the course will focus. Historical and conceptual perspectives are used to examine the innovations in technologies of representation from the 19th century into the 20th century, the period of modernisation in Western culture and society. The adoption of these representational practices transformed understandings of reality and the everyday. We will look at the impact of modernist culture and artistic responses to the new technologies of photographic, cinematic and related image production in documentary, photojournalism and other representational media. Connections to contemporary understandings and questionings of mainstream media's power to represent the real will be made.

MDIA 1006 Story/Technology: Writing Techniques

3 units - semester 2

3 contact hours per week

Restriction: B Media students only

Assessment: Tutorial presentation 25%, script development exercise 25%, digital story draft 20%, final submission of digital story 30%

This course looks at the development and uses of digital stories. Digital story has become an avenue of expression leading to new forms of social networking and a means through which story is re-made for different media. The course examines techniques of writing for a range of media which will lead to the development and production of materials by students. The capacity for digital storytelling has developed through the availability of convergent communication technologies. The availabilities of these technologies has meant that new skills and techniques of writing are necessary which fit with computer screen technologies and other parameters of these new media forms. The subject will cover the relatively short history of this new field of media production linking it to older forms of story-telling in terms of connection to comparative and indigenous precursors and uses. The course will cover an analysis of the 'new prosumer' as an autonomous media producer and the development of a computer mediated aesthetics. Theories of narrative form, subjectivity and identity will form part of the course with an examination of forms of collective and political engagement that develop out of digital story. New mainstream genres which grow out of older forms such as the diary or the journal will be discussed. The course

has a practical component which will encourage the production of new forms of narrative through exercises and the use of these techniques.

LEVEL II

MDIA 2301 Media Policy and Media Law

3 units - summer semester or semester 1

3 contact hours per week

Available for Non-Award Study

Prerequisite: 12 units Level I Humanities/Social Sciences including MDIA 1002 and at least one other compulsory Level I Media course, or with permission of Head of Discipline

Incompatible: MDIA 2202

Assessment: Tutorial presentation 25%, short essay 20%, attendance, participation 15%, project 40%

This course examines the various media law, policy and regulatory frameworks in Australia that affect media establishments and how they enhance or constrain media institutions and the public in their communication activities. It will also examine the media regulatory frameworks of other countries. The course will examine the success or failure of existing media policy and regulations in a technologically dynamic media environment.

MDIA 2302 Media Research Methods

3 units - winter semester or semester 2

3 contact hours per week

Restriction: B Media students only

Available for Non-Award Study

Prerequisite: 12 units Level I Humanities/Social Sciences including MDIA 1002 and at least one other compulsory Level I Media course

Incompatible: MDIA 2204

Assessment: Attendance & research exercises 30%, individual research proposal 30%, seminar & paper submission 40%

Research is central to all media analysis and projects. This course aims to bring together the theoretical and practical elements of research in the media. Students will be exposed to various research methodologies as they affect the changing media landscape and its evaluation. Students will be exposed to different theoretical paradigms of media research, analysis of competing frameworks for defining the media as object of study, and to debate on issues such as research ethics, intellectual property and cultural sensitivity, among others. The course will also explore research design techniques and look at various styles of referencing, interview techniques, project proposals, execution and presentation.

MDIA 2303 Global Media: Policies and Practices

3 units - semester 1 or winter semester

3 contact hours per week

Available for Non-Award Study

Prerequisite: 12 Units Level I Humanities/Social Sciences including MDIA 1002 and one other compulsory Level I Media course, or with permission of Head of Discipline

Incompatible: MDIA 2207

Assessment: Active participation in workshops 10%, essay assignment 45%, case study report 45%

This course examines the social and cultural institutions through which production, distribution and consumption of media are organised around the world. It pays particular attention to the working of commercial markets, public institutions (both governmental and non-governmental), and civil society organisations that influence these different aspects of our uses of media. The course focuses on political, economic and sociological characteristics of media institutions and explores how these important aspects of media influence content and innovation in information and communication technologies. The examination of debates about the normative characteristics of media is an important part of the course with particular attention paid to how these debates are reflected in the development of governments' policies on media regulation, censorship and trade. The course explores how researchers integrate an understanding of macro and micro-levels of social action into their work through the use of theories that incorporate analyses of institutional structures and individuals' agency. The more abstract, analytical concerns of the course are consistently examined through the use of concrete examples of the people, policies, practices and places that together make up the global media of the 21st century.

MDIA 2306 Media Theory

3 units - semester 2

3 contact hours per week

Restriction: B Media students only

Prerequisite: 12 units Level Humanities/Social Sciences including two Media core courses

Incompatible: MDIA 3303

Assessment: Participation and planning 10%, seminar exercises 20%, minor essay 20%, final essay 50%

This course examines the different traditions within media theory. It maps the major theoretical traditions of the field including postmodernism, post-colonialism, political economy and communication theories. It also investigates the social and cultural processes implicated in the production and consumption of media forms. Issues range from media as creative and cultural industry, the political economy of the media, techno-transformation/post-modernity, consumers, audiences and the public, to media products as agents of globalisation. Students will consider a number of key concepts, and examine the writings of several key thinkers working in and around this field. They will also be encouraged to compare and contrast different approaches, so that they are able to recognise the different theoretical concerns and emphases in play. Discussion will range across a selection of themes and issues, from the more traditional (e.g. debates about ideology and signification) to the more contemporary (e.g. debates about globalisation and the arrival of so-called new media).

MDIA 2322 Radio Production A

3 units - semester 2

3 contact hours per week

Restriction: B Media students only

Prerequisite: 12 units Level I Humanities/Social Sciences including MDIA 1002 and at least one other compulsory Level I Media course

Incompatible: MDIA 2203

Assessment: Program planning exercise 5%, broadcast writing & production exercise 5%, production exercise 10%, program design exercise 10%, in-class exercise & participation 20%, production & presentation exercise 50%

Radio Production A is a hands-on course designed to introduce students to the theoretical and practical fundamentals of radio broadcasting across public, community and commercial sectors. Students will learn the basic elements of producing and presenting a radio program, including writing in broadcast style, live to air technical production, presentation, interviewing, program planning and research, audience awareness and digital audio production and editing. This course will be taught at Radio Adelaide and is a prerequisite for Radio Production B. Students are expected to enrol in the two-course sequence.

MDIA 2328 Australian Stories: Fast Track Video Production

3 units - summer semester or winter semester

6 studio hours per week

Available for Non-Award Study

Quota applies

Prerequisite(s): 12 units of Level I Humanities and Social Sciences, or equivalent.

Incompatible: MDIA 2107

Assessment: 4 class tests worth 10% each, major project 30%, production assistance 10%, journal 20%

This course in video production will enable you to tell their own Australian stories on video. Taught by an Adelaide film-maker and television producer, this course covers all aspects of practical video production processes and the technical operation of equipment. Working in the production studio and through fieldwork, students will develop the basic production skills to create short narrative projects based on their own experience of Australian culture. You will work on their own major video project as well as acting as a member of the production crew on others' projects.

MDIA 2331 Digital Games, Culture and Co-creation

3 units - winter semester

12 x 3hr workshops over 6 days

Available for Non-Award Study

Quota applies

Prerequisite(s): 12 units of level 1 courses, or Study Abroad entry

Assessment: Attendance and participation (10%), 2000 words online wiki entries - group work (40%), 3000 word essay (50%)

Digital games are a successful, commercially important and highly engaging form of media. Their interactive

form represents a major shift from more conventional, narrative-based media. Although they currently occupy a demonised position within mainstream discourses, they are played by a majority of people in Australia and their ubiquity demands that we examine the new practices of production and engagement that they represent. Gaining a critical perspective on digital games that is based on research and evidence is an essential part of any degree seeking to comprehensively cover media.

LEVEL III

MDIA 3204 Creative Industries, Peoples and Practices

3 units - semester 2

3 contact hours per week

Prerequisite(s): 12 units advanced level

Assumed Knowledge: basic understanding and interest in the changing dynamics of digital and interactive media, creative arts, technology and business

Assessment: 2000 word creative exploration/investigation (30%); attendance (10%); tutorial presentation (20%); 2500-3000 word final essay/project (40%)

Creative Industries Peoples and Practices (CIPP) will introduce students to basic concepts, debates, definitions and theories of creative industries. It will investigate global trends in creative activities; identify the core values in creative institutions and why many nations and institutions are fast adopting creative policy frameworks. The course will analyse Australia's creative industries position in relation to other OECD nations. Contextually, it will explore the operational mechanisms and structures of some local creative sectors such as advertising and marketing, film and television, games and software companies, visual arts, design and architecture; publishing and performing arts in order to identify why and how these institutions are perceived as important economic drivers. Through such exploration, students will have opportunities to study and understand some of the practitioners in these creative institutions and use such knowledge to form better understanding of the uniqueness of creative practices as opposed to everyday business enterprises.

MDIA 3310 Professional Practice

3 units - semester 2

3 contact hours per week

Restriction: B Media students only

Prerequisite(s): 12 units Level I Humanities/Social Sciences including two Media core courses

Incompatible: MDIA 3301

Assessment: Attendance & participation 10%, Research essay 30%, Media skills project 30%, Professional writing exercise 30%

This course prepares students for diverse fields of media work. It introduces students to the expectations of a range of professional media and communications roles within a range of organisations, including fast-developing media industries, government service and community organisations. The course is in three parts.

The first part explores the changing nature of professional media careers and the role of communications professionals in broader industry, government and community environments. Career search and professional presentation will be included. During the second part, students will learn about current media and communications project management, communication strategies, report writing, and other essential activities in contemporary organisational environments. The third part provides an opportunity for students to develop and polish their skills in a broad range of media and professional writing forms.

MDIA 3311 Media Industry Placement

6 units - summer semester or semester 1 or semester 2

Students enrolling for semester 1 or 2 will be required to attend some on-campus classes - details confirmed during information session in Week 1

Restriction: B Media students only

Prerequisite(s): 12 units Level I Humanities/Social Sciences including two Media core courses

Incompatible: MDIA 3302

Assessment: Organisation's performance evaluation of student 30%, departmental evaluation (based on expected levels of organisational and professional skills and mid-placement progress reports) 30%, student report 40%

This course is open to every Bachelor of Media student as an elective. It is highly recommended for those who wish to enter the industry directly after completion of their undergraduate degree. The placement allows students to gain work experience, and it requires them to contribute to the host organisation project. Students should negotiate their own placements with organisations of their choice, after discussion with the Head of Discipline. Proposed projects require sign-off by the Media Industry Placement convenor and Head of School. It is the responsibility of the student to ensure that the Media Industry Placement does not clash with their other courses.

*Students may elect to do the program during vacation time if staff are available to supervise them, and the host organisation and the University agree on a mutually acceptable time frame.

MDIA 3312 Media Democracies and E-Participation

3 units - semester 1

3 contact hours per week

Restriction: B Media students only

Prerequisite(s): 12 units Level I Humanities/Social Sciences

Assessment: e-activities 25%; major project 40% (including 10% for the pitch); print journal tasks 25%; participation 10%

This course develops understandings of mainstream media's crucial constitutive and dynamic role in information society democracies. The specific characteristics of reported public life and events - the 'daily miracle' of news - provide the material for grounded analyses of the global social and political trends of increased information flows, and higher public expectations of the transparency and accountability of media and governmental power. The course moves from theoretical concepts of mass 'public spheres' in

which news has a nation-building place, to the changing realities of fragmented 'publics' and the contradictions and complexities of trends (operating globally, locally and virtually) towards outsourcing, remediating and redistributing media content. It teaches the skills of e-participation, political communication, and citizen journalism in print, broadcast, and electronic forms. Media forms analysed and practised include the press release, interview, opinion, the political speech, editorial, feature, blog, and photojournalism.

MDIA 3313

Screens: Special Topic: Asian Screen Media

3 units - semester 1

3 contact hours per week

Restriction: B Media students only

Prerequisite: 12 units Level I Humanities/Social Sciences

Assessment: Tutorial participation and planning 10%, 3,500 word major written work 60%, 1,500 word small project experimenting with the technology 30%

Screen-based technologies increasingly dictate what we 'know' about the world around us. From the humble ATM, mobile phone, CCTV, video games, MTV, to in-flight navigation devices, convergent televisual forms, the screen both informs and reflects our everyday interaction with those around us, how we work, and the environments we live in.

This theoretically informed course drawn from the research expertise of a particular member of staff addresses specific areas of interest in the genre of screen-based technologies. Typically this will include the genres and uses of information visualisation, games, anime, mobile technologies, web media, and film. Theoretical, practical, and ethical issues will be covered in this comprehensive but specific special topic course. In 2009, Asian Screen Media is the focus of the course.

MDIA 3322

Radio Production B

3 units - semester 1

4 contact hours per week

Restriction: B Media students only

Prerequisite: 12 units Level I Humanities/Social Sciences and MDIA 2203/2322 Radio Production A

Incompatible: MDIA 3304

Assessment: Continuous assessment work performance 40%, workshop participation 10%, self-assessment exercise 10%, portfolio of work 40%

Radio Production B is a hands-on course, offering students supervised production and on-air experience at Radio Adelaide. The course builds upon the skills and knowledge acquired in Radio Production A. Students will have the opportunity to develop and broadcast their own on-air projects or contribute to existing radio programs. In addition, a series of advanced workshops will be offered on interviewing skills, production and editing of current affairs and feature packages, and writing for different formats.

MDIA 3325

Video Production B

3 units - semester 1

3 contact hours per week

Restriction: B Media students only

Prerequisite: 12 units Level I Humanities/Social Sciences and MDIA 2206/2325 Video Production A

Incompatible: MDIA 3206

Assessment: 4 projects with equal weighting 40%, client brief 5%, script 30%, report 10%, journal 5%, DVD portfolio 10%

Building on Video Production A, this course extends the foundation skills gained in that course in a studio-based learning environment where major real-world project scenarios are undertaken. As in film production, video production involves satisfying client needs, script writing commercial reporting, and budgetary requirements. In this course each aspect of the production process is covered in a real-world project scenario. Genres covered include documentary, drama, animation, and music videos.

MDIA 3327

Multimedia Production B

3 units - semester 1

3 contact hours per week

Restriction: B Media students only

Prerequisite: 12 units Level I Humanities/Social Sciences and MDIA 2205/2327 Multimedia Production A

Incompatible: MDIA 3205

Assessment: 4 projects with equal weighting 80%, client brief 5%, design document 30%, report 10%, journal 5%, DVD portfolio 5%

Building on Multimedia Production A, this course extends the foundation skills gained in that course in a studio-based learning environment where major real-world project scenarios are undertaken. Commercial multimedia production in the genres: interactive media, image, games, and DVD production, involves satisfying client needs, commercial reporting, and budgetary requirements. In this course each aspect of the production process is covered for these genres in a real-world project scenario.

HONOURS

MDIA 4401A/B

Honours Media

24 units - full year

Prerequisite: completion of B Media at appropriate standard

Assessment: coursework 50% (academic & creative streams), dissertation 50% (academic stream only), project & exegesis 50% (creative stream only)

The aim of Honours Media is to provide students with a stronger and more focused intellectual context in which to carry out research in their areas of specialisation in the media. It is designed to extend the academic and creative synergies of the B.Media into higher degree and professional industry application. It is expected that by the end of the program students will be able to carry

out independent research in either a higher degree or an industry-related specialisation. It is also expected that students will have developed the awareness and critical skills necessary for a proper understanding of the ethical implications of professional and scholarly conduct. Honours Media enables students to develop skills in their chosen areas of specialisation within the B.Media through one of two streams - academic and creative. The academic stream is for students who wish to pursue the traditional critical and analytic research higher degree structure. The creative stream is for those wishing to combine practical with analytical inquiry in any of the production specialisations studied in the B.Media. Both streams take the compulsory core course, and an elective course.

Medical Studies

LEVEL I

MEDIC ST 1000A/B **First Year MBBS Examination**

MEDIC ST 1101A/B **Scientific Basis of Medicine I**

6 units - full year

Weekly lectures, PBL sessions & resource sessions

Restriction: MBBS students only

Assessment: Details provided at start of year

Through the study of clinical cases students will develop a knowledge and understanding of the basic scientific principles that underpin the practice of medicine. The Problem Based Learning Program emphasises the need for students to be able to explain the mechanisms responsible for the production of symptoms and signs of diseases and to be able to relate these to pathophysiology and related underlying scientific disciplines. Student learning in this program is supported by relevant resource sessions and lectures.

MEDIC ST 1102A/B **Clinical Skills I**

6 units - full year

Weekly lectures, PBL sessions & resource sessions

Restriction: MBBS students only

Assessment: Details provided at start of year

Students are introduced to the skills of medical practice. Emphasis is placed on developing the clinical interviewing skills required to elicit and record a clinical history and to perform a physical examination. Clinical skills will be gained within the Medicine Course's Clinical Skills Laboratory located within the Medical School building.

MEDIC ST 1103A/B **Medical Professional & Personal Development I**

6 units - full year

Weekly lectures, PBL sessions & resource sessions

Restriction: MBBS students only

Assessment: Details provided at start of year

Through this stream students will develop competency in communication with patients, relatives, allied health professionals, media and people in general. Alongside this, students are assisted to develop strategies and skills for self care and for addressing attitudinal, ethical and professional aspects of life as a medical practitioner. Supporting skills in information technology, decision making, information management, organisational factors, workflow, patient safety, evidence based medicine and epidemiology are developed.

LEVEL II

MEDIC ST 2000A/B **Second Year MBBS Examination**

MEDIC ST 2101A/B **Scientific Basis of Medicine II**

6 units - full year

Weekly lectures, PBL sessions & resource sessions

Restriction: MBBS students only

Prerequisite: Year 1 MBBS Exam

Assessment: Details provided at start of year

Through the study of clinical cases students will develop a knowledge and understanding of the basic scientific principles that underpin the practice of medicine. The Problem Based Learning Program emphasises the need for students to be able to explain the mechanisms responsible for the production of symptoms and signs of diseases and to be able to relate these to pathophysiology and related underlying scientific disciplines. Student learning in this program is supported by relevant resource sessions and lectures.

MEDIC ST 2102A/B **Clinical Skills II**

6 units - full year

Weekly lectures, PBL sessions & resource sessions

Restriction: MBBS students only

Prerequisite: Year 1 MBBS Exam

Assessment: Details provided at start of year

Students are introduced to the skills of medical practice. Emphasis is placed on developing the clinical interviewing skills required to elicit and record a clinical history and to perform a physical examination. Clinical skills will be gained within the Medicine Course's Clinical Skills Laboratory located in the Medical School building.

MEDIC ST 2103A/B **Medical Professional & Personal Development II**

6 units - full year

Weekly lectures, PBL sessions & resource sessions

Restriction: MBBS students only

Prerequisite: Year 1 MBBS Exam

Assessment: Details provided at start of year

Through this stream students will develop competency in communication with patients, relatives, allied health professionals, media and people in general. Alongside this students are assisted to develop strategies and skills for self care and for addressing attitudinal, ethical and professional aspects of life as a medical practitioner. Supporting skills in information technology, decision making, information management, organisational factors, workflow, patient safety, evidence based medicine and epidemiology are developed.

LEVEL III

MEDIC ST 3000A/B **Third Year MBBS Examination**

MEDIC ST 3101A/B **Scientific Basis of Medicine III**

6 units - full year

Weekly lectures, PBL sessions & resource sessions

Restriction: MBBS students only

Prerequisite: Year 2 MBBS Exam

Assessment: Details provided at start of year

Through the study of clinical cases students will develop a knowledge and understanding of the basic scientific principles that underpin the practice of medicine. The Problem Based Learning Program emphasises the need for students to be able to explain the mechanisms responsible for the production of symptoms and signs of diseases and to be able to relate these to pathophysiology and related underlying scientific disciplines. Student learning in this program is supported by relevant resource sessions and lectures.

MEDIC ST 3102AHO/BHO **Clinical Skills III**

6 units - full year

Weekly lectures, PBL sessions & resource sessions

Restriction: MBBS students only

Prerequisite: Year 2 MBBS Exam

Assessment: Details provided at start of year

Students are introduced to the skills of medical practice. Emphasis is placed on developing the clinical interviewing skills required to elicit and record a clinical history and to perform a physical examination. Clinical skills will be gained through placement in a hospital for one day per week.

MEDIC ST 3103A/B **Medical Professional & Personal Development III**

6 units - full year

Weekly tutorials and regular lectures

Restriction: MBBS students only

Prerequisite: Year 2 MBBS Exam

Assessment: Details provided at start of semester

Through this stream students will develop competency in issues relating to public health, particularly population

health, medical systems, ethics and epidemiology. Supporting skills in information technology, decision making, information management, organisational factors, workflow, patient safety, evidence based medicine and epidemiology are developed.

LEVEL IV

MEDIC ST 4000AHO/BHO **Fourth Year MBBS Exam**

MEDIC ST 4005AHO/BHO **Medical Home Unit**

5 units - full year

Attachments, common program & research

Restriction: MBBS students only

Prerequisite: Year 3 MBBS Exam

Assessment: Details provided at start of year

The clinical attachments are a program of clinical education through a selection of placements so that students will be competent in history-taking, patient examination and management. This includes problem formulation, investigations, treatment (pharmacological and non-pharmacological), counselling, good communication skills, the practice of empathetic medicine, and a sound knowledge base that allows diagnosis and management of common disorders to be carried out under appropriate supervision. Some students will have the opportunity to undertake their training for an extended period of time in a rural or remote setting.

MEDIC ST 4006AHO/BHO **Surgical Home Unit**

5 units - full year

Attachments, common program & research

Restriction: MBBS students only

Prerequisite: Year 3 MBBS Exam

Assessment: Details provided at start of year

The clinical attachments are a program of clinical education through a selection of placements so that students will be competent in history-taking, patient examination and management. This includes problem formulation, investigations, treatment (pharmacological and non-pharmacological), counselling, good communication skills, the practice of empathetic medicine, and a sound knowledge base that allows diagnosis and management of common disorders to be carried out under appropriate supervision. Some students will have the opportunity to undertake their training for an extended period of time in a rural or remote setting.

MEDIC ST 4007AHO/BHO **Psychological Health**

3 units - full year

Attachments, common program & research

Restriction: MBBS students only

Prerequisite: Year 3 MBBS Exam

Assessment: Details provided at start of year

The clinical attachments are a program of clinical education through a selection of placements so that students will be competent in history-taking, patient examination and management. This includes problem formulation, investigations, treatment (pharmacological and non-pharmacological), counselling, good communication skills, the practice of empathetic medicine, and a sound knowledge base that allows diagnosis and management of common disorders to be carried out under appropriate supervision. Some students will have the opportunity to undertake their training for an extended period of time in a rural or remote setting.

MEDIC ST 4008AHO/BHO
Acute and Chronic Care 1

3 units - full year

Attachments, common program & research

Restriction: MBBS students only

Prerequisite: Year 3 MBBS Exam

Assessment: Details provided at start of year

The clinical attachments are a program of clinical education through a selection of placements so that students will be competent in history-taking, patient examination and management. This includes problem formulation, investigations, treatment (pharmacological and non-pharmacological), counselling, good communication skills, the practice of empathetic medicine, and a sound knowledge base that allows diagnosis and management of common disorders to be carried out under appropriate supervision. Some students will have the opportunity to undertake their training for an extended period of time in a rural or remote setting.

MEDIC ST 4012AHO/BHO
Common Program

2 units - full year

Weekly 1/2 day program

Restriction: MBBS students only

Prerequisite: Year 3 MBBS Exam

Assessment: Details provided at start of year

The common program is a weekly 1/2 day program that integrates basic science with the clinical program.

MEDIC ST 40013AHO/BHO
Medical and Scientific Attachment 1

3 units - full year

Attachments, common program & research

Restriction: MBBS students only

Prerequisite: Year 3 MBBS Exam

Assessment: Details provided at start of year

Students will be offered options for three-week medical and scientific attachments. These attachments will have a structured program of learning activities and may be used to offer a student the opportunity for: immersion in a broad spectrum of clinical or non-clinical specialty areas and their scientific underpinning; additional research; or directed remediation.

MEDIC ST 4014AHO/BHO
Medical and Scientific Attachment 2

3 units - full year

Attachments, common program & research

Restriction: MBBS students only

Prerequisite: Year 3 MBBS Exam

Assessment: Details provided at start of year

Students will be offered options for three-week medical and scientific attachments. These attachments will have a structured program of learning activities and may be used to offer a student the opportunity for: immersion in a broad spectrum of clinical or non-clinical specialty areas and their scientific underpinning; additional research; or directed remediation.

LEVEL V

MEDIC ST 5000AHO/BHO
Fifth Year MBBS Examination

MEDIC ST 5005AHO/BHO
Medical and Scientific Attachment

2 units - full year

Attachments, common program & research

Restriction: MBBS students only

Prerequisite: Year 4 MBBS Exam

Assessment: Details provided at start of year

Students will be offered options for three-week medical and scientific attachments. These attachments will have a structured program of learning activities and may be used to offer a student the opportunity for: immersion in a broad spectrum of clinical or non-clinical specialty areas and their scientific underpinning; additional research; or directed remediation.

MEDIC ST 5006AHO/BHO
Medical and Scientific Attachment 4

2 units - full year

Attachments, common program & research

Restriction: MBBS students only

Prerequisite: Year 4 MBBS Exam

Assessment: Details provided at start of year

Students will be offered options for three-week medical and scientific attachments. These attachments will have a structured program of learning activities and may be used to offer a student the opportunity for: immersion in a broad spectrum of clinical or non-clinical specialty areas and their scientific underpinning; additional research; or directed remediation.

MEDIC ST 5007AHO/BHO
Medical and Scientific Attachment 5

2 units - full year

Attachments, common program & research

Restriction: MBBS students only

Prerequisite: Year 4 MBBS Exam

Assessment: Details provided at start of year

Students will be offered options for three-week medical and scientific attachments. These attachments will have a structured program of learning activities and may be used to offer a student the opportunity for: immersion in a broad spectrum of clinical or non-clinical specialty areas and their scientific underpinning; additional research; or directed remediation.

MEDIC ST 5009AHO/BHO **Acute and Chronic Care**

4 units - full year

Attachments, common program & research

Restriction: MBBS students only

Prerequisite: Year 4 MBBS Exam

Assessment: Details provided at start of year

The clinical attachments are a program of clinical education through a selection of placements so that students will be competent in history-taking, patient examination and management. This includes problem formulation, investigations, treatment (pharmacological and non-pharmacological), counselling, good communication skills, the practice of empathetic medicine, and a sound knowledge base that allows diagnosis and management of common disorders to be carried out under appropriate supervision. Some students will have the opportunity to undertake their training for an extended period of time in a rural or remote setting.

MEDIC ST 5010AHO/BHO **Paediatrics and Child Health**

5 units - full year

Attachments, common program & research

Restriction: MBBS students only

Prerequisite: Year 4 MBBS Exam

Assessment: Details provided at start of year

The clinical attachments are a program of clinical education through a selection of placements so that students will be competent in history-taking, patient examination and management. This includes problem formulation, investigations, treatment (pharmacological and non-pharmacological), counselling, good communication skills, the practice of empathetic medicine, and a sound knowledge base that allows diagnosis and management of common disorders to be carried out under appropriate supervision. Some students will have the opportunity to undertake their training for an extended period of time in a rural or remote setting.

MEDIC ST 5011AHO/BHO **Human Reproductive Health**

5 units - full year

Attachments, common program & research

Restriction: MBBS students only

Prerequisite: Year 4 MBBS Exam

Assessment: Details provided at start of year

The clinical attachments are a program of clinical education through a selection of placements so that students will be competent in history-taking, patient examination and management. This includes problem formulation, investigations, treatment (pharmacological and non-pharmacological), counselling, good communication skills, the practice of empathetic medicine, and a sound knowledge base that allows diagnosis and management of common disorders to be carried out under appropriate supervision. Some students will have the opportunity to undertake their training for an extended period of time in a rural or remote setting.

MEDIC ST 5012AHO/BHO **Common Program**

2 units - full year

Weekly 1/2 day program

Restriction: MBBS students only

Prerequisite: Year 4 MBBS Exam

Assessment: Details provided at start of year

The common program is a weekly 1/2 day program that integrates basic science with the clinical program.

MEDIC ST 5013HO **External Elective**

0 units - semester 2

Placement in external institution

Restriction: MBBS students only

Prerequisite: Year 4 MBBS Exam

Assessment: Details of placements provided to Dean of Medicine

Between Year 5 and year 6, students are required to undertake a placement at another institution, usually interstate or overseas.

MEDIC ST 5014AHO/BHO **Anaesthesia, Pain Medicine & Intensive Care V**

2 units - full year

Attachments, common program & research

Restriction: MBBS students only

Prerequisite: Year 4 MBBS Exam

Assessment Based on attendance, participation in discussions & knowledge

The clinical attachments are a program of clinical education through a selection of placements so that students will be competent in history-taking, patient examination and management. This includes problem formulation, investigations, treatment (pharmacological and non-pharmacological), counselling, good communication skills, the practice of empathetic medicine, and a sound knowledge base that allows diagnosis and management of common disorders to be carried out under appropriate supervision. Some students will have the opportunity to undertake their training for an extended period of time in a rural or remote setting.

LEVEL VI

MEDIC ST 6000 Final (Sixth Year) MBBS Assessment

0 units - semester 2

4 x 4 week placements, 16 week afternoon seminar program, 1 week program in ENT; 4 x 4 placement

Restriction: MBBS students

Assessment: To be advised

The Final Year of the program for the MBBS involves:
(a) 2 x 4 week placements under the supervision of the University of Adelaide's Departments of Medicine and Surgery and their clinical teachers at the Royal Adelaide Hospital, Queen Elizabeth Hospital, Lyell McEwin Hospital, Women's and Children's Hospital and Modbury Hospital; 4 week placement under the supervision of the Emergency Medicine Department/s; 4 week clinical elective: students will have choice in selecting this elective - some students may be required to complete a clinical elective in a specified area based on decisions made at the Year 5 Board of Examiners; seminar program on Friday afternoons; 1 week program in ENT, Ophthalmology and Dermatology. (b) Undertaking 4 x 4 week Specialist/Community or Ambulatory Placements (SCAPs) in the general areas of Medicine, Surgery, Primary Care and Psychiatry. Students have to complete a SCAP in each of these areas and they have considerable choice in defining their program. For Australian students at least one SCAP may be in a rural setting with this being optional for international students.

Through this program students will obtain results for the following component courses of MEDIC ST 6000 Final (6th Year) Assessment:

MEDIC ST 6001HO Clinical Elective and Specials Week VI

MEDIC ST 6002HO Medicine Internship and Common Program VI

MEDIC ST 6003HO Surgery Internship VI

MEDIC ST 6004HO Emergency Medicine Internship VI

MEDIC ST 6005HO Primary Care SCAP VI

MEDIC ST 6006HO Psychological Health SCAP VI

MEDIC ST 6007HO Medicine SCAP VI

MEDIC ST 6008HO Surgery SCAP VI

Each of the above courses is valued at 1.5 units and available only to MBBS students. Assessment for each course will be advised at the beginning of the year.

MEDIC ST 6009AHO/BHO Medicine Internship & Common Program VI

4 units - full year

Restriction: MBBS students only

Prerequisite: Year 5 MBBS exam

Assessment: To be advised at the start of the year

Syllabus details to be advised.

MEDIC ST 6010AHO/BHO Surgery Internship VI & Specials Week VI

4 units - full year

Restriction: MBBS students only

Prerequisite: Year 5 MBBS exam

Assessment: To be advised at the start of the year

Details to be advised.

MEDIC ST 6011AHO/BHO Emergency Department Internship VI

4 units - full year

Restriction: MBBS students only

Prerequisite: Year 5 MBBS exam

Assessment: To be advised at the start of the year

Syllabus details to be advised.

MEDIC ST 6012AHO/BHO Medicine/Surgery SCAP VI

4 units - full year

Restriction: MBBS students only

Prerequisite: Year 5 MBBS exam

Assessment: To be advised at the start of the year

Syllabus details to be advised.

MEDIC ST 6013AHO/BHO Primary Care SCAP VI

4 units - full year

Restriction: MBBS students only

Prerequisite: Year 5 MBBS exam

Assessment: To be advised at the start of the year

Syllabus details to be advised.

MEDIC ST 6014AHO/BHO Psychiatry SCAP VI

4 units - full year

Restriction: MBBS students only

Prerequisite: Year 5 MBBS exam

Assessment: To be advised at the start of the year

HONOURS

ANAES&IC 4000AHO/BHO Honours Anaesthesia and Intensive Care

24 units - full year

Restriction: B.Med.Sc. students, appropriately qualified B.Hlth.Sc. students, or permission of Head of Department

Assessment: To be advised at start of year

Students requiring further information concerning syllabuses and work required for the Honours degree of Bachelor of Medical Science are advised to consult the Head of the appropriate department as early as possible.

ANAES&IC 4100BHO/CHO/DHO Honours Anaesthesia & Intensive Care (2 yr) Final

24 units - full year

Restriction: BMedSc students or appropriately qualified BHSc students or permission of the Head of Discipline

Assessment: To be advised at start of year

Students requiring further information concerning syllabuses and work required for the Bachelor of Medical Science (Honours) or Bachelor of Health Science (Honours) are advised to consult the Head of the appropriate department as early as possible.

MEDICINE 4000AHO/BHO Honours Medicine

24 units - full year

Restriction: B.Med.Sc.students. appropriately qualified B.Hlth.Sc. students, or permission of Head of Department

Assessment: To be advised at start of year

Students requiring further information concerning syllabuses and work required for the Honours degree of Bachelor of Medical Science are advised to consult the Head of the appropriate department as early as possible.

MEDICINE 4100AHO/BHO Honours Medicine (Two Year) Final

24 units - full year

Restriction: BMedSc students. appropriately qualified BHlthSc students, or permission of Head of Department

Assessment: to be advised at start of year

Students requiring further information concerning syllabuses and work required for the Honours degree of Bachelor of Medical Science are advised to consult the Head of the appropriate department as early as possible.

OPHTHAL 4000A/B Honours Ophthalmology

24 units - full year

Restriction: B.Med.Sc. & B.Hlt.hSc. students, or by permission of Head of Discipline

Assessment: Details provided at start of academic year

Students requiring further information are advised to consult the Head of Discipline

ORT&TRAU 4000AHO/BHO Honours Orthopaedics and Trauma

24 units - full year

Restriction: B.Med.Sc.students. appropriately qualified B.Hlth.Sc. students, or permission of Head of Department

Assessment: To be advised at start of year

Students requiring further information concerning syllabuses and work required for the Honours degree of Bachelor of Medical Science are advised to consult the Head of the appropriate department as early as possible.

ORT&TRAU 4100AHO/BHO Honours Orthopaedics and Trauma (Two Year)

24 units - full year

Restriction: BMedSc students - appropriately qualified BHlthSc students

Assessment: to be advised

Students requiring further information concerning syllabuses and work required for the Honours degree of Bachelor of Medical Science are advised to consult the Head of the appropriate discipline as early as possible.

PAEDIAT 4000AHO/BHO Honours Paediatrics

24 units - full year

Restriction: BMedSc students. appropriately qualified BHlthSc students, BSc students or permission of Head of Discipline

Assessment: Details available on the Discipline of Paediatrics web site; includes project proposal, literature review, thesis

Students requiring further information concerning syllabuses and work required for the Honours degree of Bachelor of Medical Science are advised to consult the Head of the appropriate discipline as early as possible.

PAEDIAT 4100AHO/BHO Honours Paediatrics (Two Year)

24 units - full year

Syllabus details to be advised.

SURGERY 4000AHO/BHO Honours Surgery

24 units - full year

Syllabus details to be advised.

SURGERY 4001AHO/BHO Honours Surgery (Two Year)

24 units - full year

Syllabus details to be advised.

SURGERY 4002AHO/BHO Rural Health & Surgery Honours

24 units - full year

Syllabus details to be advised.

Microbiology

LEVEL II

MICRO 2500 Microbiology II

3 units - semester 1

27 x 1 hour lectures per semester; 8 x 1 hour tutorial + 20 hours practical per semester

Available for Non-Award Study

Prerequisite(s): BIOLOGY 1101 and BIOLOGY 1201 or BIOLOGY 1202. Alternatively a Pass or higher in ANAT SCI 1102 and ANAT SCI 1103 or equivalent.

Incompatible: MICRO 2502, MICRO 2504 and MICRO 2000 or equi

Assessment: Exam on lecture material, tutorial & practical assessment

This course is an introduction to microbiology that provides a strong grounding in fundamental aspects of the basic biology of bacteria as well as a strong grounding in molecular biology and microbial genetics. Emphasis is placed on the study of infectious diseases of humans, other animals and plants. Topics covered include: introduction to microorganisms and their environment, microbial structure and function; microbial molecular biology and genetics; bacterial viruses; structure; an introduction to pathogen-host interactions; new and emerging pathogens of humans and other animals; infectious disease and mechanisms by which microbial pathogens interact with animals and plants; biotechnological applications of bacteria. Students enrolled in this course will attend one or more of Practicals A, B and C offered by the School of Molecular and Biomedical Science. Refer to Current Students Online Enrolment information at www.sciences.adelaide.edu.au for further information.

MICRO 2501 Immunology & Virology II

3 units - semester 2

27 x 1 hour lectures per semester, 8 x 1 hour tutorial per semester, 1 x 4 hours practical per fortnight

Available for Non-Award Study

Prerequisite(s): BIOLOGY 1101 and BIOLOGY 1201 or BIOLOGY 1202. Alternatively a Pass or higher in ANAT SCI 1102 and ANAT SCI 1103 or equivalent.

Assumed Knowledge: MICRO 2500, MICRO 2502, MICRO 2504, MICRO 2000A or MICRO 2001A

Incompatible: MICRO 2503 and MICRO 2505 or MICRO 2000B or equiv

Assessment: Exam on lecture material, written reports, tutorial & practical assessment

This course introduces Immunology and Virology and is complementary to Microbiology II and equivalent courses. An integrated approach is used to study the mechanisms by which our immune system deals with pathogens. Topics covered in the Immunology section comprise innate and adaptive immunity, including T and B cell development, cell mediated and humoral immunity; receptors and cytokines; inflammatory responses; tolerance and autoimmunity; immunity to intra- and extra-cellular organisms such as bacteria, viruses and macroparasites. Topics covered in the Virology section include: information on structure, replication and classification of eukaryotic viruses; virus-host interactions; epidemiology of virus infections; virus vaccines, antiviral drugs and viral diagnostics. Students enrolled in this course will attend one or more of Practicals A, B and C offered by the School of Molecular and Biomedical Science. Refer to Current Students Online Enrolment information at www.sciences.adelaide.edu.au for further information.

MICRO 2502 Microbiology II (Biomedical Science)

3 units - semester 1

27 x 1 hour lectures per semester, 8 x 1 hour tutorial + 20 hours practical per semester

Restriction: BSc (Biomedical Science)

Prerequisite(s): BIOLOGY 1101 and BIOLOGY 1201 or BIOLOGY 1202

Assumed Knowledge: CHEM 1100 or CHEM 1101 and CHEM 1200 or CHEM 1201

Incompatible: MICRO 2500, MICRO 2504, MICRO 2000, MICRO 2004, MICRO 3003

Assessment: Examination of lecture material, tutorial & practical assessment

This course provides an introduction to microbiology. Students studying this course will gain a strong grounding in fundamental aspects of the basic biology and molecular nature of bacteria and bacterial viruses, their molecular biology and applications for biotechnology.

Topics covered include: introduction to microorganisms and their environment, microbial structure and function; prokaryotic molecular biology and genetics; bacterial viruses; structure; virus-host interactions; new and emerging pathogens; biotechnological applications of bacteria and viruses; mechanisms by which microorganisms cause disease in plants and animals. Students enrolled in this course will attend one or more of Practicals A, B and C offered by the School of Molecular and Biomedical Science. Refer to Current Students Online Enrolment information at www.sciences.adelaide.edu.au for further information.

MICRO 2503 Immunology & Virology II (Biomedical Science)

3 units - semester 2

27 x 1 hour lecture per semester, 8 x 1 hour tutorial per semester, 1 x 4 hours practical per fortnight

Restriction: BSc (Biomedical Science)

Prerequisite(s): BIOLOGY 1101 and BIOLOGY 1201 or BIOLOGY 1202. Alternatively a Pass or higher in ANAT SCI 1102 and ANAT SCI 1103 or equivalent.

Assumed Knowledge: MICRO 2502 or MICRO 2101

Incompatible: MICRO 2501, MICRO 2505, MICRO 2001B or equiv

Assessment: Exam on lecture material, written reports, tutorial & practical assessment

This course introduces Immunology and Virology and is complementary to Microbiology II and equivalent courses. An integrated approach is used to study the mechanisms by which our immune system deals with pathogens. Emphasis is also given to the fundamental roles of Immunology and Virology in Biomedical Science. Topics covered in the Immunology section comprise innate and adaptive immunity, including T and B cell development, cell mediated and humoral immunity; receptors and cytokines; inflammatory responses; tolerance and autoimmunity; immunity to intra- and extra-cellular organisms such as bacteria, viruses and macroparasites. Topics covered in the Virology section include: information on structure, replication and classification of eukaryotic viruses; virus-host interactions; epidemiology of virus

infections; virus vaccines, antiviral drugs and viral diagnostics. Students enrolled in this course will attend one or more of Practicals A, B and C offered by the School of Molecular and Biomedical Science. Refer to Current Students Online Enrolment information at www.sciences.adelaide.edu.au for further information.

MICRO 2504 Microbiology II (Biotechnology)

3 units - semester 1

27 x 1 hour lectures per semester, 8 x 1 hour tutorial + 20 hours practical per semester

Restriction: BSc (Biotechnology)

Prerequisite(s): BIOLOGY 1101 and BIOLOGY 1201 or BIOLOGY 1202

Assumed Knowledge: CHEM 1100 or CHEM 1101 and CHEM 1200 or CHEM 1201

Incompatible: MICRO 2500, MICRO 2502, MICRO 2000, MICRO 2004, MICRO 3003

Assessment: Examination of lecture material, tutorial & practical assessment

This course is an introduction to microbiology that provides a strong grounding in fundamental aspects of the basic biology of bacteria and bacterial viruses as well as aspects of molecular biology and genetics. Emphasis is placed on biotechnological applications of bacteria such as the cloning of bacterial genes, expression of recombinant proteins for therapeutic and industrial uses and development of biological control agents. Topics covered include: introduction to microorganisms and their environment, microbial structure and function; microbial molecular biology and genetics; bacterial viruses; new and emerging pathogens of humans and other animals; mechanisms by which micro-organisms cause disease in plants and animals; biotechnological applications of bacteria. Students enrolled in this course will attend one or more of Practicals A, B and C offered by the School of Molecular and Biomedical Science. Refer to Current Students Online Enrolment information at www.sciences.adelaide.edu.au for further information.

MICRO 2505 Immunology & Virology II (Biotechnology)

3 units - semester 2

27 x 1 hours lectures per semester, 8 x 1 hour tutorial per semester, 1 x 4 hours practical per fortnight

Restriction: BSc (Biotechnology)

Prerequisite(s): BIOLOGY 1101 and BIOLOGY 1201 or BIOLOGY 1202

Assumed Knowledge: MICRO 2504, MICRO 2002 or MICRO 2004

Incompatible: MICRO 2501, MICRO 2503, MICRO 2003B or equiv

Assessment: Exam on lecture material, written reports, tutorial & practical assessment

This course introduces Immunology and Virology and is complementary to Microbiology II and equivalent courses. An integrated approach is used to study the mechanisms by which our immune system deals with pathogens. Emphasis is also given to the fundamental roles of Immunology and Virology in Biotechnology. Topics covered in the Immunology section comprise innate and adaptive immunity, including T and B cell development, cell mediated and humoral immunity; receptors and cytokines; inflammatory responses; tolerance and

autoimmunity; immunity to intra- and extra-cellular organisms such as bacteria, viruses and macroparasites. Topics covered in the Virology section include: information on structure, replication and classification of eukaryotic viruses; virus-host interactions; epidemiology of virus infections; virus vaccines, antiviral drugs and viral diagnostics. Students enrolled in this course will attend one or more of Practicals A, B and C offered by the School of Molecular and Biomedical Science. Refer to Current Students Online Enrolment information at www.sciences.adelaide.edu.au for further information.

MICRO 2506 Medical Microbiology and Immunology II

3 units -

33 x 1 hour lectures, 5 x 1 hour tutorials

Restriction: This course is available to MBBS Level 2 students, and to MBBS level 3 students as an elective for 2010 only

Prerequisite(s): MBBS Level 1

Assumed Knowledge: BIOLOGY 1101 and BIOLOGY 1201

Incompatible: MICRO 3003

Assessment: Tutorials, Mid-Term Test and Exam

This course is an introduction to basic immunology, virology and microbiology for MBBS Level 2 students. Emphasis is first placed on understanding the fundamentals of these disciplines, with examples relevant to clinical and diagnostic medicine. Topics covered include:

Immunology include: Innate immunity; specific humoral effector mechanisms; cells and tissues of the immune system; antigen recognition by T cells; cell-mediated immunity, hypersensitivity; human leukocyte antigen (HLA) polymorphism, transplantation; autoimmunity; immunodeficiency.

Virology includes: virus classification, structure and replication; pathogenesis, epidemiology and control of virus infections; respirator, gastrointestinal and sexually transmitted viruses; virus diagnostic methods.

Microbiology includes: bacterial structure, classification and growth; mechanisms of gene transfer; diagnostic microbiology; mechanisms of bacterial pathogenesis; sterilisation and disinfection; meningitis and encephalitis; antibiotics and resistance; medical mycology and parasitology.

LEVEL III

MICRO 3000 Infection and Immunity IIIA

6 units - semester 1

3 x 1 hour lectures per week, 1 hour tutorial & 3 x 5 hours practical per fortnight

Available for Non-Award Study

Prerequisite(s): MICRO 2500 and MICRO 2501 or equiv

Incompatible: MICRO 3102

Assessment: Exam on lecture material, practical component, performance in tutorials

This advanced course examines the molecular basis of interactions of bacterial pathogens with their environment and various hosts, especially those which infect humans. Bacterial pathogens of global and medical significance that will be highlighted in detail include: *Streptococcus pneumoniae*, *Salmonella* sp., *Shigella* sp., *Escherichia coli*; *Mycobacterium*; and *Neisseria* sp. Particular emphasis is given to the use of molecular biological approaches for study of bacterial infectious disease pathogenesis, and biotechnological applications, including vaccine development will also be highlighted.

Topics to be explored include: bacterial pathogens - global significance of infectious disease; principal approaches for investigating host-pathogen interactions; virulence factors which promote colonisation and damage to the host; cell surface polysaccharides and proteins; role of antigenic and phase variation in virulence and disease; gene regulation, especially in relation to expression of virulence factors; stress responses; invasion and intracellular survival and multiplication; resistance and avoidance of innate host defences; bacterial toxins; role of bacteriophage and other genetic elements in evolution of pathogenesis; antibiotic resistance; vaccines and therapeutic interventions; genomic approaches to analysis of virulence; food safety microbiology

The lecture program is complemented by tutorials, which extend skills in exploring and critically assessing the scientific literature, and practicals which develop advanced experimental skills for the study of bacterial pathogenic mechanisms.

MICRO 3001 Infection and Immunity IIIB

6 units - semester 2

3 x 1 hour lectures per week, 3 x 5 hours practical per fortnight, 3 x 1.5 hour tutorial per semester

Available for Non-Award Study

Prerequisite(s): MICRO 2500 and MICRO 2501 or equiv

Assumed Knowledge: MICRO 3000

Incompatible: MICRO 3202 or equiv

Assessment: Exam on lecture material, written reports, practical & tutorial assessment

This is an advanced course in immunology and virology. The course includes detailed examination of the cellular and molecular biology of the immune system, immune responses to microbial pathogens and other antigenic stimuli and immunisation against infections in humans and animals. Detailed attention will be given to major virus infections and typical host immune responses, the experimental models used to study viruses and antiviral therapies including chemotherapies and vaccination. Topics to be covered include: differentiation and activation of leukocytes; functions of leukocyte subsets; cell biology of antigen processing and presentation; molecular recognition of antigen; molecular and cellular bases of inflammation; signal transduction in immune cells; characteristics and functions of cytokines; mechanisms of immunoregulation; cellular communication and leukocyte traffic through tissues; production and use of monoclonal antibodies; local immunity at mucosal surfaces; immunity to infectious agents, including bacteria, viruses and

parasites; inflammatory and autoimmune diseases such as asthma and arthritis; control and prevention of infections; strategies for the design and use of vaccines and gene therapy; important diseases will be considered as specific examples. Viruses to be studied will include examples chosen from those responsible for hepatitis, human immunodeficiency, respiratory and gastrointestinal infections and diseases of the skin and nervous systems.

MICRO 3003 Medical Microbiology and Immunology III

6 units - semester 1

3 x 1 hour lectures, hour tutorial, 6 hours practical per week

Available for Non-Award Study

Prerequisite: PATHOL 2000 or Year 1 MBBS

Incompatible: MICRO 2000A/B, MICRO 2001A/B and MICRO 2003A/B or MICRO 2002

Assessment: Written exams, practical exercises

The microbiology component of the course deals with the following: isolation, morphology, physiology and classification of bacteria of medical importance; the principles of action of antibiotics and chemotherapeutic agents; introduction to sterilisation and disinfection; the role of micro-organisms in human disease; an outline of infections caused by important bacterial pathogens; and principles of prophylaxis and prevention. Virology is discussed as principles of viral replication; an outline of human virus infections, epidemiology of virus infections; collection of specimens for viral diagnosis; an outline of common approaches to diagnosis in virology; and principles of treatment and prevention of infection. In immunology, there is discussion of the principles of host defences; an outline of mechanisms involved in adaptive immunity; application of these principles to vaccination and understanding sero-diagnosis; and an introduction to allergy, hypersensitivity, autoimmunity and transplantation. The course is related, whenever possible, to clinical material.

MICRO 3102 Infection & Immunity IIIA (Biomedical Science)

6 units - semester 1

3 x 1 hour lectures per week, 1 hour tutorial & 3 x 5 hours practical per fortnight

Restriction: BSc (Biomedical Science)

Prerequisite(s): MICRO 2503 and MICRO 2504 or equiv

Incompatible: MICRO 3000

Assessment: Exam on lecture material, practical component activities, performance in symposia/seminars

This advanced course examines the molecular basis of interactions of bacterial pathogens with their environment and various hosts, especially those which infect humans. Bacterial pathogens of global and medical significance that will be highlighted in detail include: *Streptococcus pneumoniae*, *Salmonella* sp., *Shigella* sp., *Escherichia coli*; *Mycobacterium*; and *Neisseria* sp. Particular emphasis is given to the use of molecular biological approaches for study of bacterial infectious disease pathogenesis, and biotechnological applications, including vaccine development will also be highlighted.

Topics to be explored include: bacterial pathogens - global significance of infectious disease; principal approaches for investigating host-pathogen interactions; virulence factors which promote colonisation and damage to the host; cell surface polysaccharides and proteins; role of antigenic and phase variation in virulence and disease; gene regulation, especially in relation to expression of virulence factors; stress responses; invasion and intracellular survival and multiplication; resistance and avoidance of innate host defences; bacterial toxins; role of bacteriophage and other genetic elements in evolution of pathogenesis; antibiotic resistance; vaccines and therapeutic interventions; genomic approaches to analysis of virulence; food safety microbiology.

The lecture program is complemented by tutorials, which extend skills in exploring and critically assessing the scientific literature, and practicals which develop advanced experimental skills for the study of bacterial pathogenic mechanisms.

MICRO 3202 **Infection and Immunity IIIB (Biomedical Science)**

6 units - semester 2

3 x 1 hour lectures per week, 3 x 5 hours practical per fortnight, 3 x 1.5 hour tutorial per semester

Restriction: BSc (Biomedical Science)

Prerequisite(s): MICRO 2502 and MICRO 2503 or equiv

Assumed Knowledge: MICRO 3102

Incompatible: MICRO 3001

Assessment: Exam on lecture material; written reports; practical & tutorial assessment

This is an advanced course in immunology and virology. The course includes detailed examination of the cellular and molecular biology of the immune system, immune responses to microbial pathogens and other antigenic stimuli and immunisation against infections in humans and animals. Detailed attention will be given to major virus infections and typical host immune responses, the experimental models used to study viruses and antiviral therapies including chemotherapies and vaccination. Topics to be covered include: differentiation and activation of leukocytes; functions of leukocyte subsets; cell biology of antigen processing and presentation; molecular recognition of antigen; molecular and cellular bases of inflammation; signal transduction in immune cells; characteristics and functions of cytokines; mechanisms of immunoregulation; cellular communication and leukocyte traffic through tissues; production and use of monoclonal antibodies; local immunity at mucosal surfaces; immunity to infectious agents, including bacteria, viruses and parasites; inflammatory and autoimmune diseases such as asthma and arthritis; control and prevention of infections; strategies for the design and use of vaccines and gene therapy; important diseases will be considered as specific examples. Viruses to be studied will include examples chosen from those responsible for hepatitis, human immunodeficiency, respiratory and gastrointestinal infections and diseases of the skin and nervous systems.

HONOURS

MICRO 4000A/B **Honours Microbiology and Immunology**

24 units - full year

Prerequisite: Satisfactory performance in Level III courses offered by School of Molecular and Biomedical Science - students from other schools/institutions who have passed suitable Level III courses may be considered

Intending Honours candidates should consult the Discipline Leader of Microbiology and Immunology during the final year of the B.Sc.

Candidates will normally be expected to start the program at the beginning of February, but this may be altered in special circumstances. Candidates are required to devote their full time to a special program of study in Microbiology, Immunology or Virology. This will involve theoretical studies, seminars and a research project under the direction and supervision of one or more staff members.

Examination of a thesis presenting the results of the research project undertaken is an essential part of the assessment procedure. Full details of assessment procedures may be obtained from the Discipline.

Music

LEVEL I

COMP 1500A/B **Composition I**

6 units - full year

0.5 hour individual tuition; 1.5 hour seminar in technical studies; 1.5 hour practical workshop per week

Restriction: music degree students only

Prerequisite: audition

Incompatible: COMP 1002, 7349

Assessment: folio of exercises, compositions, including recordings where possible: 50%; technical studies assignments, participation: 25%; composers' workshop assignments, presentations: 25%

Individual tuition: develops skills in the fundamentals of composition and expands knowledge of styles, structures, notation and score presentation. Technical studies: compositional methods and analysis. Composers' workshop: the performance of students' compositions based on projects.

ENS 1002A/B **Jazz Choir: Level I**

3 units - full year

3-4 hours rehearsal per week; additional rehearsals for concerts may be required

Restriction: music degree students only

Prerequisite(s): audition

Incompatible: ENS 1001A/B, 8784

Assessment: ensemble achievement in rehearsals/performances and individual contribution - 100% attendance required except in cases of approved leave

Rehearsal and performance of accompanied and unaccompanied choral works in a variety of jazz styles: ongoing development of choral, musical and ensemble skills to a high level. Following auditions, students will be allocated to either the 'Adelaide Connection' or 'A Kind of Blue' jazz choirs.

ENS 1004A/B Jazz Big Band: Level I

3 units - full year

3-4 hours rehearsal per week, additional sectional concert rehearsals may be required

Restriction: music degree students only

Prerequisite(s): audition

Incompatible: ENS 1005A, ENS 1006A, 5889

Assessment: ensemble achievement in rehearsals/performances and individual contribution -100% attendance required except in cases of approved leave

Develops musicianship in the large ensemble context by focussing on the skills of reading, listening, stylistic interpretation, intonation, blend. Rehearsals and performances within the Big Band jazz tradition. Following auditions, students will be allocated to either Big Band One, Two or Three as appropriate.

ENS 1009A/B Elder Conservatorium Symphony Orchestra I

3 units - full year

up to 5 hours Orchestra rehearsal per week, additional rehearsals for concerts may be required

Restriction: priority given to music degree students - other students may audition for limited number of places

Prerequisite(s): audition

Assessment: individual graded assessments of relevant repertoire; 100% attendance and participation required except in cases of approved leave. Full details available in course outline.

Rehearsals and performance of repertoire for symphony orchestra.

ENS 1010A/B Elder Conservatorium Wind Orchestra I

3 units - full year

3 or 4 hours supervised rehearsals per week; additional rehearsals for concerts may be required

Restriction: music degree students only

Prerequisite(s): audition

Incompatible: 9300

Assessment: individual graded assessments of relevant repertoire; 100% attendance and participation required except in cases of approved leave. Full details available in course outline.

Rehearsals and performance of repertoire for wind ensemble and/or orchestra.

ENS 1011A/B Jazz Guitar Band: Level I

3 units - full year

3-4 hours rehearsal per week, additional sectional & concert

rehearsals may be required

Restriction: music degree students only

Prerequisite(s): audition

Incompatible: ENS 1012B Jazz Guitar Band Two I part 2; 5889 Large Jazz Ensemble I

Assessment: ensemble achievement in rehearsals/performances and individual contribution - 100% attendance required except in cases of approved leave

Develops musicianship in the large ensemble context by focussing on the skills of reading, listening, stylistic interpretation, intonation, blend. Rehearsals and performances of specialised arrangements. Following auditions, students will be allocated to Jazz Guitar Band One or Two as appropriate.

ENS 1017A/B Percussion Ensemble I

3 units - full year

2 hours supervised rehearsals per week

Restriction: music degree students only

Prerequisite(s): audition

Incompatible: 3665

Assessment: individual graded assessments of relevant repertoire; 100% attendance and participation required except in cases of approved leave. Full details available in course outline.

Rehearsals and performance of repertoire for percussion ensemble.

ENS 1023A/B Chamber Orchestra

3 units - full year

2.5 hour rehearsal per week

Restriction: priority given to music degree students - other students may audition for limited number of places

Prerequisite(s): audition

Incompatible: 8341

Assessment: individual graded assessments of relevant repertoire; 100% attendance and participation required except in cases of approved leave. Full details available in course outline.

Through the study of an appropriate and balanced selection of chamber orchestra repertoire, students will develop advanced techniques in ensemble playing with particular focus on musicianship, rehearsal discipline and performance experience.

ENS 1025A/B Elder Conservatorium Chorale I

3 units - full year

2.5 hour rehearsal per week; performances as scheduled, additional rehearsals for concerts may be required

Restriction: enrolment subject to audition & number of places. Priority given to music degree students but course is also available to non-music students

Prerequisite(s): audition

Incompatible: 8784

Assessment: individual graded assessments of relevant repertoire; 100% attendance and participation required except in cases of approved leave. Full details available in course outline.

Rehearsal and performance of accompanied and unaccompanied chamber choral works in a variety of

musical and choral styles: on-going development of choral, musical and ensemble skills to a high level.

ENS 1026A/B **Adelaide Voices I**

3 units - full year

2.5 hour rehearsal per week, performances as scheduled, additional rehearsals for concerts may be required

Restriction: enrolment subject to audition & number of places. Priority given to music degree students but course is also available to non-music students

Prerequisite(s): audition

Assessment: individual graded assessments of relevant repertoire; 100% attendance and participation required except in cases of approved leave. Full details available in course outline.

Rehearsal and performance of accompanied and unaccompanied chamber choral works in a variety of musical and choral styles: on-going development of choral, musical and ensemble skills to a high level.

ENS 1027A/B **Bella Voce I**

3 units - full year

2 hour rehearsal per week, performances as scheduled, additional rehearsals for concerts may be required

Restriction: enrolment subject to audition & number of places. Priority given to music degree students but also available to non-music students

Prerequisite(s): audition

Assessment: individual graded assessments of relevant repertoire; 100% attendance and participation required except in cases of approved leave. Full details available in course outline.

Rehearsal and performance of accompanied and unaccompanied choral works for female voices in a variety of musical and choral styles: on-going development of choral, musical and ensemble skills to a high level.

ENS 1030 **Chamber Music IA**

1.5 units - semester 1

1 hour workshop, 1 hour unsupervised rehearsal per week, 5 hours supervised rehearsals per semester

Restriction: music degree students or by audition

Prerequisite(s): audition

Incompatible: 3269

Assessment: satisfactory attendance and participation at workshops, participation in rehearsals and performances, end of semester practical exam

Rehearsal and performance of works for chamber ensemble (i.e. one person to a part). This may include works prepared in Chamber Music Workshop, Brass Ensemble, Percussion Ensemble and Guitar Ensemble.

Note: Students wishing to take this course are encouraged to form a group prior to enrolment. Confirmation of enrolment will be dependant upon the availability of a place within a viable ensemble.

ENS 1031 **Chamber Music IB**

1.5 units - semester 2

1 hour workshop, 1 hour unsupervised rehearsal per week, 5 hours supervised rehearsals per semester

Restriction: music degree students or by audition

Prerequisite(s): ENS 1030 Chamber Music IA or audition

Incompatible: 3269 Chamber Music I

Assessment: satisfactory attendance and participation at workshops, participation in rehearsals and performances, end of semester practical exam

Rehearsal and performance of works for chamber ensemble (i.e. one person to a part). This may include works prepared in Chamber Music Workshop, Brass Ensemble, Percussion Ensemble and Guitar Ensemble.

Note: Students wishing to take this course are encouraged to form a group prior to enrolment. Confirmation of enrolment will be dependant upon the availability of a place within a viable ensemble.

GENMUS 1001 **From Elvis to U2 I**

3 units - semester 1

1 x 2 hour & 1 x 1 hour lectures per week

Restriction: Ability to play or read music not a requirement

Available for Non-Award Study

Assessment: essay 40%, exam 60%

A survey of popular music since the 1950s. The focus is on significant groups, artists, and trends from a range of styles including Rhythm and Blues, Rock and Roll, Folk Rock, The Beatles, Soul, Metal, Funk, Disco, Punk, Hip-Hop, Grunge, Alternative, Electronica and Mainstream Pop.

Throughout the course, attention is given to the impact of socio-cultural environments and evolving music technologies upon the aesthetics and production of popular music.

GENMUS 1003 **Musics of the World I**

3 units - semester 2

1 x 2 hour & 1 x 1 hour lectures per week

Available for Non-Award Study

Prerequisite: ability to play/read music not a requirement

Incompatible: 5448, 9751 1423, 2673

Assessment: essay 40%, exam 60%

Introduction to the music of selected world cultures. Representative examples may be drawn from Australia and the Pacific, Asia, Africa, the Americas, Europe, and the Middle East. The course presents music as a form of cultural expression in a range of traditional and contemporary contexts, from ceremonial and other traditional modes of performance to popular hybrid forms referred to as 'world music'.

GENMUS 1014 **Sound & Media**

3 units - semester 2

1 x 2 hour, 1 x 1 hour lectures per week

Available for Non-Award Study

Assessment: essay 50%; exam 50%

Study of: the use of sound in the media, with particular attention to film and television; the concepts of montage and collage and their application to sound, music, film and image; detailed scene analysis of examples from classic movies; psychological and aesthetic aspects of sound in film; the role of sound in the media.

GENMUS 1026A/B Perspectives in Music Technology I

3 units - full year

2 x 1 hour seminars per week

Restriction: priority given to music degree students - other students may audition for limited number of places

Available for Non-Award Study

Prerequisite(s): GENMUS 1026A required for part 2

Assessment: papers/presentations 35%, exams 65%

Seminar 1: Cultural and historical analysis of new technologies and their impact on the creation, performance, representation and reception of music.
Seminar 2: Scientific analysis and understanding of music technology and it's associated fields. Areas explored include the physics and psychophysics of sound; acoustics; electronic synthesis and processing; and audio and MIDI theory.

JAZZ 1000A/B Jazz Performance I

9 units - full year

1 hour individual tuition p/w; jazz forum (using small jazz ensembles) 1.5 hours p/w; technique/repertoire class (masterclass) according to instrumental/vocal specialisation 1 hour p/w; small jazz ensemble 1 hour supervised p/w - all over 24 weeks

Restriction: music degree students only

Prerequisite(s): audition

Incompatible: 1662, ENS 1019A/B

Assessment: semester 1 - 20 min technique/performance exam 20%, Small Jazz Ensemble 15%, teacher's report 5%; semester 2 - final 25 min practical exam 40%, teacher's report 5%, Small Jazz Ensemble 15% (final practical exam must be passed in order to pass course)

Through the study of appropriate technical and jazz repertoire, students develop advanced technical skills together with a sound understanding of jazz style/interpretative principles. They are expected to perform their chosen repertoire with accuracy and fluency, displaying rhythmic control together with a well developed creative and expressive sense. They need to demonstrate jazz improvisation in appropriate styles and a strong conceptual understanding of the compositions performed together with an ability to communicate with their audience.

Small Jazz Ensemble: studies the roles of band leader, soloist, sideman, rhythm section player in rehearsal, recording band and concert stage environments. Topics include: repertoire - analysis of tune structure; playing in different tempi and keys; arrangements; leader roles; ensemble communication; solo and accompaniment roles; group awareness, active listening and response; levels of density; balance; group phrasing; matching time and feel; changing feel; playing in different styles; colla voce; solo structure; solo intensification; soloing within constraints; playing in different combinations; trading 4s

and 8s; stop choruses and solo breaks; playing in context, maintaining mood; recovering from mistakes; group dynamics (personal); tuning; individual sound; relaxation; playing with confidence; energy; dynamics; articulation and colour.

JAZZ 1003A/B Jazz Improvisation I

3 units - full year

1 hour lecture, 2 hour tutorial per week (including 1 hour Afro-American rhythms)

Restriction: music degree students only

Incompatible: 7321/4391

Assessment: assignments & participation in class 20%, end of semester written & practical exams 60%, rhythm class exam 20%

Provides a foundation of common practice Jazz improvisational skills in the areas of rhythmic feel/flow, simple formulaic harmonic structures, line construction and motivic application.

Students develop and apply jazz improvisational techniques and apply basic improvisational techniques of rhythm, scales & patterns in jazz repertoire. The study of various styles beginning with dixieland, swing and blues through to early Bebop styles is considered. One hour of contact time each week will be devoted to the practical application of Afro-American rhythms.

MUSCORE 1005 Music Foundations I: Jazz

3 units - semester 1

1 hour aural, 1 hour choir, 2x1 hour workshops per week

Restriction: music degree students only

Incompatible: 1268, 5549I, 7705, 7320, 2107

Assessment: choir - demonstration of individual sight singing ability & involvement in 1 performance per semester 30%; aural - as required for stream/level 30%; workshop (50% assignments & assessment, 50% exam) 40%. Note: must pass workshop component to pass overall

Aural: Refer to MUSCORE 1007.

Choir: Development of music aural skills through choral singing, emphasis on sight-reading, aural development and vocal skills. Workshop: study of jazz theory as applied through the keyboard and taught in the keyboard laboratory including guidelines for critical listening, study and practical application of scales (tetrachords, modes of the major and minor scales, blues scale), major and minor harmony concepts including diatonic chord function and chord voicing, chord and scale relationship, smooth voice leading, diatonic and tritone substitution, chord extensions, reading and playing chord progressions. Introduction to acoustics and the perception of sound.

MUSCORE 1006 Music in Context I: Jazz

3 units - semester 2

1 hour aural, 1 hour choir, 2x1 hour workshops per week

Restriction: music degree students only

Prerequisite(s): MUSCORE 1005

Incompatible: 5549, 7705, 7320, 2107

Assessment: choir - demonstration of individual sight singing ability & involvement in 1 performance per semester 30%; aural - as required for stream/level 30%; workshop (50% assignments & assessment, 50% exam) 40%. Note: must pass workshop component to pass overall

Aural: Refer to MUSCORE 1007.

Choir: Development of music aural skills through choral singing, emphasis on sight-reading, aural development and vocal skills.

Workshop: Study of jazz theory as applied through the keyboard including study and practical application of secondary dominants, cyclic progressions and turnarounds, rhythm changes, extended and altered chords, diminished scales and harmony, cadences and deceptive/delayed resolution, tune analysis, chord-scale relationships, reading and playing chord progressions.

MUSCORE 1007 **Introduction to Theory & Analysis of Music I**

3 units - semester 1

1 hour lecture, 1 hour tutorial, 1 hour aural per week

Incompatible: MUSCORE 1001, MUSCORE 1003

Assessment: theory - assignments 40%, exam (including repertoire listening test) 30%, aural - as required for stream/level 30%

The components of this course collectively provide a strong basis for the development of musicianship and musical understanding.

Lecture: introduction to musical acoustics and perception; concepts of consonance, dissonance and other core elements in Western and non-Western music; survey of analytical approaches to music, including traditional harmonic analysis, analyses of rhythm and timbre, and analyses incorporating non-Western concepts.

Tutorial: reinforcement of lecture material through exercises, discussion and expanded repertoire listening.

Aural: development of skills in identifying and notating melodic, harmonic and rhythmic units; development of critical listening skills through study of basic musical elements such as texture, timbre, articulation, dynamics, form, and structure.

MUSCORE 1008 **Contrapuntal Analysis & Composition I**

3 units - semester 2

1 hour lecture, 1 hour tutorial, 1 hour aural per week

Assumed Knowledge: SACE Stage 2 Musicianship or AMEB Grade 5 theory

Assessment: theory - assignments 40%, exam (including repertoire listening test) 30%, aural - as required for stream/level 30%

The components of this course collectively provide a strong basis for the development of musicianship and musical understanding.

Lectures: introduction to technique of C16th species counterpoint; introduction to analysis and technique of C18th counterpoint especially as represented in the work of J.S. Bach; harmonic conventions as applicable to understanding counterpoint. Brief survey of contrapuntal styles from the Pre-Renaissance to the Twentieth Century.

Tutorials: reinforcement of lecture material through exercises, discussion and expanded repertoire listening.

Aural: development of skills in identifying and notating melodic, harmonic and rhythmic units; development of critical listening skills through study of basic musical elements such as texture, timbre, articulation, dynamics, form, and structure.

MUSCORE 1009 **Foundations of Music History IA**

3 units - semester 1

1 hour lecture; 1 hour tutorial; 1 hour choir per week

Assessment: history - essay 40%, short written assignments 20%; Library Skills Workbook 10%; choir - demonstration of individual sight-singing ability & involvement in one performance 30%

Lectures will cover the broad sweep of Western music history from ancient Greece to the nineteenth century. Tutorials will reinforce lecture material through discussion and expanded repertoire listening, and will develop research and writing skills. Choir will develop aural skills through choral singing, with emphasis on sight-reading, aural development and vocal skills.

MUSCORE 1010 **Foundations of Music History IB**

3 units - semester 2

1 hour lecture; 1 hour tutorial; 1 hour choir per week

Assessment: history - essay 45%, short assignments 25%; choir - demonstration of individual sight-singing ability & involvement in one performance 30%

Lectures will cover the broad sweep of Western music history from the nineteenth century to the present day, with excursions into popular and non-Western musics. Tutorials will reinforce lecture material through discussion and expanded repertoire listening, and will develop research and writing skills. Choir will develop aural skills through choral singing, with emphasis on sight-reading, aural development and vocal skills.

MUSPED 1001 **Pedagogy Studies 1**

3 units - semester 1

1 hour lecture, 2 hour tutorial per week

Restriction: music degree students only

Assumed Knowledge: well established instrumental/vocal performance skills and theoretical knowledge

Assessment: written exam 50%, folio of materials and teaching resources 50%

Participants are introduced to the theoretical principles of music education and the processes whereby such principles can form the foundations of instrumental/vocal learning that is meaningful to beginning pupils of various ages and in various delivery modes. Tutorials allow for discussions concerning teaching and learning particular instrumental and vocal specialties in a variety of styles and genres and participants are required to research and catalogue available music materials that are appropriate for the acquisition of skills, knowledge and understanding specific to particular age groups and modes of learning.

MUSST 1000A/B Studies In Music I

6 units - full year

1 x 2 hour & 1 x 1 hour lectures, 1 hour tutorial per week

Incompatible: GENMUS 1001 & 1003

Assessment: exam & essay as per GENMUS 1001 & 1003 75%, brief tutorial research and/or presentation 25%

Studies in Music Pt 1 & 2 combines lectures and assessments from the courses GENMUS 1001 From Elvis to U2 and GENMUS 1003 Musics of the World, with an additional weekly tutorial. The tutorial and related assessments are designed to extend understanding of music in its social and performative contexts, and to provide increased focus on music research and communication skills.

MUSST 1010A/B Studies in Composition I

3 units - full year

1.5 hour technical studies seminar, 1.5 hour practical workshop per week

Prerequisite: basic score reading skills

Incompatible: COMP 1001/1002

Assessment: semester 1: technical studies assignments & participation 20%, composers' workshop assignments & participation 20%; semester 2 - technical studies assignments & participation 30%, composers' workshop assignments & participation 30%

Study of the fundamentals of composition in various styles and genres with an emphasis on contemporary classical repertoire. Technical studies seminar: compositional methods and analysis (basic score reading skills will be required). Workshop: project-based composition leading to performance of students' works.

MUSTECH 1003A/B Music Technology

6 units - full year

2 x 1 hour seminars & 2 hour workshop for 12 weeks

Restriction: music degree students only

Prerequisite: audition

Assessment: portfolio 25%; projects 75%

Seminars: through the practical study of software and hardware students will develop skills in the use and application of studio and desktop music technology. This will include editors, processors, sequencers, microphones, mixing desks and recording devices used in the areas of studio, audio, MIDI, sound design (such as multimedia, film and game sound), electronic and computer music, sonic arts and media production.

Workshop: students will engage with the concepts of music technology through the development of creative, theoretical and technical skills via workshops, presentations, listening, industry focus and research.

PERF 1002A/B Functional Musicianship I

3 units - full year

2 hour practical workshop per week

Restriction: music degree students or by audition

Available for Non-Award Study

Prerequisite: audition

Assessment: regular practical exercises, 1 individual practical assessment per semester

For pianists: Development of practical skills in the areas of sight reading, transposition, keyboard harmony and improvisation (semester 1), figured bass, score reading, modulation and rapid learning (semester 2).

For guitarists: Development of practical skills in the areas of sight reading, harmonic analysis, rapid learning and ensemble playing.

PERF 1004B Voice Practicum 1

3 units - full year

Language lecture 1 hour per week; Performance class 2 hours per week over 9 weeks

Restriction: only music degree students specialising in Classical Performance (Voice)

Prerequisite(s): audition

Assessment: semester 1: language class exam 20%, participation 5%; Performance class ongoing presentation of repertoire 20%; semester 2: Language class exam 20%, assignment 10%, participation 5%; Performance class ongoing presentation of repertoire 20%.

Study of basic grammar, phonetics and the Italian language as it relates to the requirements for classical singing; participation in Performance class.

PERF 1500A/B Classical Performance I

9 units - full year

28 hours of tuition; Classical Performance Forum 2 hours per week; technique/repertoire class, organised according to instrumental/vocal specialisation, 36 hours (usually 1.5 hours per week/24 weeks)

Restriction: music degree students only

Prerequisite(s): audition

Assessment: semester 1: 20 minute technique assessment or equivalent 30%, teacher assessment 10%; semester 2: 25 minute end of year practical exam 50%, teacher's assessment 10% (end of year practical exam must be passed in order to pass course)

Classical performance specialisations are available in a variety of instruments or in voice. Students must enrol in the relevant tuition class for their specialisation.

Through the study of appropriate technical and recital literature, students develop technical skills together with a sound understanding of interpretative principles. They are expected to perform their chosen repertoire with accuracy and fluency, displaying rhythmic control together with a well developed expressive sense.

PERF 1505A/B Classical Vocal Performance I

6 units - full year

28 hours of tuition, Classical Performance Forum 2 hours per week/24 weeks; technique/repertoire class 2 hours per week

Restriction: only music degree students specialising in Classical Performance (Voice)

Prerequisite(s): audition

Assessment: semester 1: 20 minute practical assessment, including 2-3 vocalises as the technical component 30%; teacher assessment 10%; semester 2: 25 minute practical exam 50%; teachers assessment 10% (final practical exam must be passed in order to complete course)

Through individual tuition and the study of appropriate technical and recital literature, students develop technical vocal skills together with a sound understanding of interpretative principles. They are expected to perform their chosen repertoire from memory with accuracy and fluency, displaying rhythmic control together with a well developed expressive sense.

PERF 1600A/B **Practical Study I: Performance**

6 units - full year

12 hours tuition; Practical study Forum 2 hours per week; technique/repertoire class, organised according to instrumental/vocal specialisation, 36 hours (usually 1.5 hours per week/24 weeks)

Restriction: music degree students only

Prerequisite(s): audition

Assessment: semester 1: teacher assessment 5%, 10 minute practical assessment 35%; semester 2: teacher assessment 5%, 15 minute practical assessment 55% (end of year practical assessment must be passed in order to pass course)

Practical study (Classical performance) specialisations are available in a variety of instruments, or in voice. Students must enrol in the relevant tuition class for their specialisation. Development of technique and repertoire on an instrument or voice at levels appropriate to an individual student's potential.

LEVEL II

COMP 2500A/B **Composition II**

6 units - full year

0.5 hour individual tuition; 1.5 hour seminar in technical studies; 1.5 hour practical workshop per week

Restriction: music degree students only

Prerequisite: COMP 2500A

Incompatible: COMP 2002, 1548

Assessment: folio of exercises, compositions, including recordings where possible: 50%; technical studies assignments, participation: 25%; composers' workshop, participation: 25%

Individual tuition: develops skills in composition for various instrumental and vocal ensembles and expands knowledge of styles, structures, notation and score presentation. Technical studies: advanced study in the resources, techniques and styles of 20th century music. Composers' workshop: the performance of students' compositions based on projects.

ENS 2002A/B **Jazz Choir: Level II**

3 units - full year

3-4 hours rehearsal per week, additional rehearsals for concerts may be required

Restriction: music degree students only

Prerequisite(s): audition

Incompatible: ENS 2001A/B A Kind of Blue II; 8784 Large Vocal Ensemble II

Assessment: ensemble achievement in rehearsals/performance and individual contribution - 100% attendance required except in cases of approved leave

Rehearsal and performance of accompanied and unaccompanied choral works in a variety of jazz styles; on-going development of choral, musical and ensemble skills to a high level. Following auditions, students will be allocated to either the 'Adelaide Connection' or 'A Kind of Blue' jazz choirs.

ENS 2004A/B **Jazz Big Band: Level II**

3 units - full year

3-4 hours rehearsal per week, additional sectional and concert rehearsals may be required

Restriction: music degree students only

Prerequisite(s): audition

Incompatible: ENS 2005A/B, ENS 2006A/B, 4557

Assessment: ensemble achievement in rehearsals/performance and individual contribution - 100% attendance required except in cases of approved leave

Develops musicianship in the large ensemble context by focussing on the skills of reading, listening, stylistic interpretation, intonation, blend. Rehearsals and performances within the Big Band jazz tradition. Following auditions, students will be allocated to either Big Band One, Two or Three as appropriate.

ENS 2009A/B **Elder Conservatorium Symphony Orchestra II**

3 units - full year

Up to 5 hours orchestra rehearsal per week, additional rehearsals for concerts may be required

Restriction: priority given to music degree students - other students may audition for limited number of places

Prerequisite(s): audition

Assessment: individual graded assessments of relevant repertoire; 100% attendance and participation required except in cases of approved leave. Full details available in course outline.

Rehearsals and performance of repertoire for orchestra.

ENS 2010A/B **Elder Conservatorium Wind Orchestra II**

3 units - full year

3-4 hours supervised rehearsals per week; additional rehearsals for concerts may be required

Restriction: music degree students only

Prerequisite(s): audition

Incompatible: 6358

Assessment: individual graded assessments of relevant repertoire; 100% attendance and participation required except in cases of approved leave. Full details available in course outline.

Rehearsals and performance of repertoire for wind ensemble and/or orchestra.

ENS 2011A/B **Jazz Guitar Band: Level II**

3 units - full year

3-4 hours rehearsal per week, additional & sectional concert rehearsals may be required

Restriction: music degree students only

Prerequisite(s): audition

Incompatible: ENS 2012A/B, 4557

Assessment: ensemble achievement in rehearsals/performances and individual contribution - 100% attendance required except in cases of approved leave

Develops musicianship in the large ensemble context by focussing on the skills of reading, listening, stylistic interpretation, intonation, blend rehearsals and performances of specialised arrangements. Following auditions, students will be allocated to Jazz Guitar Band One or Two as appropriate.

ENS 2017A/B Percussion Ensemble II

3 units - full year

2 hours supervised rehearsals per week

Restriction: music degree students only

Prerequisite(s): audition

Incompatible: 4717

Assessment: individual graded assessments of relevant repertoire; 100% attendance and participation required except in cases of approved leave. Full details available in course outline.

Rehearsals and performance of repertoire for percussion ensemble.

ENS 2023A/B Chamber Orchestra II

3 units - full year

2.5 hours rehearsal per week

Restriction: priority given to music degree students - other students may audition for limited number of places

Prerequisite(s): audition

Incompatible: 9199

Assessment: individual graded assessments of relevant repertoire; 100% attendance and participation required except in cases of approved leave. Full details available in course outline.

Through the study of an appropriate and balanced selection of chamber orchestra repertoire, students will develop advanced techniques in ensemble playing with particular focus on musicianship, rehearsal discipline and performance experience.

ENS 2025A/B Elder Conservatorium Chorale II

3 units - full year

2.5 hour rehearsal per week; plus performance as scheduled, additional rehearsals for concerts may be required

Restriction: subject to audition & number of places - priority given to music degree students but places available to other students

Prerequisite(s): audition

Incompatible: 8463 Large Vocal Ensemble II

Assessment: individual graded assessments of relevant repertoire; 100% attendance and participation required except in cases of approved leave. Full details available in course outline.

Rehearsal and performance of accompanied and unaccompanied choral works in a variety of musical and choral styles; on-going development of choral, musical

and ensemble skills to a high level.

ENS 2026A/B Adelaide Voices II

3 units - full year

2.5 hours rehearsal per week; plus performances as scheduled; additional rehearsals for concerts may be required

Restriction: subject to audition & number of places - priority given to music degree students but places available to other students

Prerequisite(s): audition

Assessment: individual graded assessments of relevant repertoire; 100% attendance and participation required except in cases of approved leave. Full details available in course outline.

Rehearsal and performance of accompanied and unaccompanied chamber choral works in a variety of musical and choral styles; on-going development of choral, musical and ensemble skills to a high level.

ENS 2027A/B Bella Voce II

3 units - full year

2 hours rehearsal per week, plus performances as scheduled, additional concert rehearsals may be required

Restriction: subject to audition & number of places - priority given to music degree students but places available to other students

Prerequisite(s): audition

Assessment: individual graded assessments of relevant repertoire; 100% attendance and participation required except in cases of approved leave. Full details available in course outline.

Rehearsal and performance of accompanied and unaccompanied choral works for female voices in a variety of musical and choral styles; on-going development of choral, musical and ensemble skills to a high level.

ENS 2030 Chamber Music IIA*

1.5 units - semester 1

1 hour workshop per week, 1 hour of unsupervised rehearsals per week, 5 hours supervised rehearsals per semester

Restriction: music degree students or by audition

Prerequisite: ENS 1031

Incompatible: 7880 Chamber

Assessment: satisfactory attendance and participation at workshops, participation in rehearsals and performances, end of semester practical exam

Rehearsal and performance of works for chamber ensemble (i.e. one person to a part). This may include works prepared in Early Music Workshop, Brass Ensemble, Percussion Ensemble and Guitar Ensemble.

* Note: Students wishing to take this course are encouraged to form a group prior to enrolment. Confirmation of enrolment will be dependant upon the availability of a place within a viable ensemble.

ENS 2031 Chamber Music IIB*

1.5 units - semester 2

1 hour workshop, 1 hour unsupervised rehearsals per week; 5 hours supervised rehearsals per semester

Restriction: music degree students or by audition

Prerequisite: ENS 2030

Incompatible: 7880

Assessment: satisfactory attendance and participation at workshops, preparation in rehearsals and performances, end of semester practical exam

Rehearsal and performance of works for chamber ensemble (i.e. one person to a part). This may include works prepared in Early Music Workshop, Brass Ensemble, Percussion Ensemble and Guitar Ensemble.

* Note: Students wishing to take this course are encouraged to form a group prior to enrolment. Confirmation of enrolment will be dependant upon the availability of a place within a viable ensemble.

GENMUS 2005

Music, Media & Contemporary Society II

3 units - semester 2

3 hour lecture per week

Available for Non-Award Study

Prerequisite: ability to play/read music not a requirement

Incompatible: GENMUS 3005, 9801/5307, 4293/8324

Assessment: essay 40%, exam 60%

This course offers an examination of music performance and consumption practices in contemporary society. Drawing upon a range of examples from popular music, classical music, film music, and background music, the course considers the varied aesthetic and cultural uses of music and music media. At the same time, it looks at the interconnectedness of musical practices brought about through music-oriented technology. This may be seen especially in the general impact of recording technology on all forms of music-making and consumption, but also in the business and promotional practices associated with the global music industry, and in current issues related to music copyright. Throughout the course, an emphasis will be placed on developing students' ability to critically examine and discuss aspects of musical aesthetics, behaviour, function, and meaning.

GENMUS 2026A/B

Perspectives in Music Technology II

3 units - full year

(Seminar 1 - laboratory) 6 x 2 hour seminars per fortnight for 12 weeks (Seminar 2) 1 hour seminar per week for 12 weeks

Restriction: priority to music degree students - other students may audition for limited number of places

Prerequisite(s): GENMUS 2026A

Assessment: papers/project 50%; exams 50%

Seminar 1 (laboratory): Development of music technology through electronic processes. Areas explored may include handmade electronics, hacking, circuit bending, microprocessors and software.

Seminar 2: Analysis and understanding of compositional concepts and technology. Areas explored may include computer music, electroacoustics, music concrete and sound art.

JAZZ 2000A/B

Jazz Performance II

9 units - full year

1 hour individual tuition p/w; jazz forum (using small jazz ensembles) 1.5 hours p/w; technique/repertoire class (masterclass) according to instrumental/vocal specialisation 1 hour p/w; small jazz ensemble 1 hour supervised p/w - all over 24 weeks

Restriction: music degree students only

Prerequisite(s): JAZZ 1000A/B; JAZZ 2000A required for part 2

Incompatible: 8010, JAZZ 2004A/B

Assessment: semester 1: 20 minute technique/performance exam 20%, Small Jazz Ensemble 20%; semester 2: final 30 minute practical exam 40%, Small Jazz Ensemble 20% (final practical exam must be passed in order to pass course)

Through the study of appropriate technical and jazz repertoire, students develop advanced technical skills together with a sound understanding of jazz style/interpretative principles. They are expected to perform their chosen repertoire with accuracy and fluency, displaying rhythmic control together with a well developed creative and expressive sense. They need to demonstrate jazz improvisation in appropriate styles and a strong conceptual understanding of the compositions performed together with an ability to communicate with their audience.

Small Jazz Ensemble: studies the roles of band leader, soloist, sideman, rhythm section player in rehearsal, recording band and concert stage environments. Further develops skills in Jazz Improvisation, in the styles of Standards, Bop, Modal and Contemporary. Analysis of tune structure; playing in different tempi & keys; arrangements; leader roles; ensemble communication; solo and accompaniment roles; group awareness, active listening and response; levels of density; balance; group phrasing; matching time and feel; changing feel; playing in different styles; colla voce; solo structure; solo intensification; soloing within constraints; playing in different combinations; trading 4's & 8's; stop choruses and solo breaks; playing in context, maintaining mood; recovering from mistakes; group dynamics (personal) tuning; individual sound; relaxation; playing with confidence; energy; dynamics; articulation & colour.

JAZZ 2006A/B

Jazz Improvisation II

3 units - full year

1 hour lecture, 2 hours tutorial per week (including 1 hour Afro-American rhythms)

Restriction: music degree students only

Prerequisite: JAZZ 2006A

Incompatible: 9314

Assessment: Assignments, class participation 20%, written, practical exam at end of each assessment 60%, rhythm class exam 20%

Improvisation: development of phrasing and rhythm; forward motion, chromaticism, digital patterns, guide tones, use of altered scales; relaxation/playing at speed; accompanying, polyrhythms, reharmonisation, application of modes, pentatonic scales, melodic development techniques, polychords in contemporary improvisation; playing an introduction; playing a cadenza; unaccompanied playing; chord substitution systems.

JAZZ 2007A/B **Jazz Arranging Class II**

3 units - full year

1 hour lecture, 1 hour tutorial per week

Restriction: music degree students only

Assessment: assignments 65%, end of year submission of arrangement 35%

Advanced techniques of textural and harmonic procedures in jazz arranging for small and medium jazz ensembles. Study of the rhythm section, saxophone section, sketch score, score layout. Score reading and study of styles of contemporary arrangers & composers. Score and parts creation using computer software.

JAZZ 2600A/B **Practical Study II: Jazz**

6 units - full year

12 hours individual tuition; 1 hour performance class & 1.5 hours Jazz Performance forum per wk; 1 hour supervised small jazz ensemble per week - all over 24 weeks

Restriction: music degree students only

Prerequisite(s): JAZZ 1000A/B; JAZZ 2600A required for part 2

Incompatible: 7558

Assessment: semester 1: teacher's report 5%, ensemble laboratory 10%, 10 minute mid-year assessment 20%; semester 2: teacher's report 5%, 20 minute practical assessment 50%, ensemble laboratory 10% (end of year practical assessment must be passed in order to pass course)

Technique and repertoire on an instrument or voice at levels appropriate to an individual student's attainments. All students must attend an individual lesson and a 1 hour performance class particular to their major study.

MUSCOURSE 2003 **Music in Context IIA: Jazz**

3 units - semester 1

1 hour aural, 1 hour theory lecture, 1 hour theory tutorial, 1 hour history lecture, 1 hour history tutorial per week

Restriction: music degree students only

Prerequisite: MUSCOURSE 1005, MUSCOURSE 1006

Incompatible: 1222I, 1930, 2008, JAZZ 2003A/B

Assessment: aural - as required for stream 20%, theory (50% weekly assignments & tests, 50% exam) 40%, history (15% study skills assignment, 15% annotated bibliographic survey, 35% essay, 35% exam) 40%. Both history & theory must be passed to pass course overall

Aural: Refer to MUSCOURSE 2005.

Theory: development of an advanced knowledge of jazz harmony and melody. Considers the harmony of jazz standards (topics include minor key harmony, modal interchange, secondary and substitute dominants, tonicisation and modulation), theoretical aspects of the bebop style (rhythmic aspects, synchronised lines, harmonic super-imposition), symmetrical scales and diminished harmony, and the function of diminished chords in jazz harmony.

History: Facilitate understanding of social, economic and political factors involved in the development of Afro-American music from its West African roots to the present day; develop the ability to analyse the specific stylistic features of each historical period of jazz, including

transitional and related forms, and to identify major trends in the development of the music; develop ability to assess and place into historical perspective the innovations and developments of the major contributors from early jazz to contemporary styles. Topics include: analysis of various styles of jazz ranging from New Orleans to contemporary; musical concepts in jazz styles; roles of instruments; study of set works.

MUSCOURSE 2004 **Music in Context IIB: Jazz**

3 units - semester 2

1 hour aural, 1 hour theory lecture, 1 hour theory tutorial, 1 hour history lecture, 1 hour history tutorial per week

Restriction: music degree students only

Prerequisite: MUSCOURSE 2003

Incompatible: 1222, 1930, 2008, JAZZ 2003A/B

Assessment: aural - as required for stream 20%, theory (50% weekly assignments & tests, 50% exam) 40%, history (10% tutorial assignments, 30% group oral presentation, 35% essay, 25% exam) 40%. Both history & theory must be passed to pass course overall

Aural: Refer to MUSCOURSE 2005.

Theory: development of an understanding of the tonal organisation and rhythmic structure of contemporary jazz. Considers modal harmony (distinctive pitches within modes, modal cadences, modal composition and analysis), pentatonics (construction and usage of pentatonics, harmonising in fourths), and chord substitution (including study of diatonic and tritone substitution, use of altered and extended chords, and reharmonisation).

History: Facilitate understanding of social, economic and political factors involved in the development of Afro-American music from its West African roots to the present day; develop the ability to analyse the specific stylistic features of each historical period of jazz, including transitional and related forms, and to identify major trends in the development of the music; develop ability to assess and place into historical perspective the innovations and developments of the major contributors from early jazz to contemporary styles. Topics include: analysis of various styles of jazz ranging from New Orleans to contemporary; musical concepts in jazz styles; roles of instruments; study of set works.

MUSCOURSE 2005 **Western Music in Theory & Practice IIA: 1750-1850**

3 units - semester 1

2 x 1 hour lectures, 1 hour tutorial, 1 hour aural per week

Restriction: music degree students only

Prerequisite(s): MUSCOURSE 1007, MUSCOURSE 1008

Incompatible: MUSCOURSE 1004

Assessment: theory test 10%; assignments 10%; history essay 25%; repertoire listening test 10%; aural - as required for stream/level 20%; examination 25%

History lectures: key historical, aesthetic and philosophical trends in Western art music from early 18th century to mid-19th century.

Theory & Analysis lectures: analytical studies of thematic, harmonic, stylistic and formal aspects of Classicism and early Romanticism. Topics include: voice leading, chord

functions and progressions, secondary chord function, modulation, altered chords (+6, N6); formal procedures: phrase and period structures, binary and ternary forms, sonata form, variation form, song forms. Topics will be explored through analysis of a range of set works and through the study of composers including Haydn, Mozart, Beethoven, Schubert, Schumann and Berlioz.

Tutorials: reinforcement of lecture material through exercises, discussion and expanded repertoire listening.

Aural: further development of skills in identifying and notating melodic, harmonic and rhythmic units; development of critical listening skills through study of basic musical elements such as texture, timbre, articulation, dynamics, form and structure.

MUSCORE 2006 **Western Music in Theory & Practice IIB: 1850-1950**

3 units - semester 2

2 x 1 hour lectures, 1 hour tutorial, 1 hour aural per week

Restriction: music degree students only

Prerequisite: MUSCORE 2005

Incompatible: MUSCORE 2002

Assessment: theory - assignments 40%, history - essay 25%, repertoire listening test 15%, aural - as required for stream/level 20%

History - Idea and Ideology in late C19th and early C20th music.

Lectures: An exploration of aesthetic, intellectual and ideological trends in art and popular music from Richard Wagner to WWII.

Theory & Analysis - lectures: Analytical studies of thematic, harmonic, stylistic and formal aspects of late C19th- and C20th music. Topics will include chromatic harmony; the progressive expansion and subsequent dissolution of tonality; use of folk and modal materials, atonality and 12-tone composition.

Tutorials: Reinforcement of lecture material through exercises, discussion, and expanded repertoire listening.

Aural: further development of skills in identifying and notating melodic, harmonic and rhythmic units; development of critical listening skills through study of basic musical elements such as texture, timbre, articulation, dynamics, form, and structure.

MUSED 2001 **Music Education IIA**

3 units - semester 1

1 hour lecture, 2 hour workshop per week

Restriction: Music Education degree students only

Incompatible: 5553

Assessment: assignments 30%, exam 40%, journal of observation visits 30%

Stylistic aspects of writing for percussion and rhythm section instruments. Developing experience in percussion and rhythm section playing techniques. Introduction to the principles and processes of music learning, including the nature of musical ability, learning styles, environmental influences, and skill acquisition. Observation visits to a

variety of schools.

MUSED 2002 **Music Education IIB**

3 units - semester 2

1 hour lecture, 2 hour workshop per week

Restriction: Music Education degree students only

Prerequisite: MUSED 2001

Incompatible: 5553

Assessment: Woodwind methodology journal & practical demonstration 30%; essay 20%, journals of improvisation & composition 20% each; article review 10%

Woodwind methodology involving learning about the woodwind family, gaining experience in writing for and playing woodwind instruments and basic methodology. Functional musical skills including techniques of improvisation and composition in a variety of genres and styles. Music education history and philosophies. The development of music education in Australia. An overview of music education methodologies, including Orff, Kodaly, Dalcroze, Suzuki and Yamaha.

MUSED 2003A/B **Music Education Ensembles II**

3 units - full year

2 hour ensemble (with Music Education Level III), 1 hour lecture per week

Restriction: Music Education degree students only

Incompatible: 5553

Assessment: arranging exercises 20%, arrangement/s 70%, participation 10%

Participation in rehearsals and performance of the Music Education Band and Choir involving repertoire of various styles. Basic conducting and rehearsal techniques. Principles of arranging music for instrumental and vocal ensembles.

MUSPED 2001 **Pedagogy Studies II**

3 units - semester 2

1 hour lecture, 2 hour tutorial per week

Restriction: music degree students only

Prerequisite: MUSPED 1001

Assumed Knowledge: well-established instrumental/vocal performance skills and theoretical knowledge

Incompatible: MUSST 2003

Assessment: written examination 50%, folio of materials and teaching resources 50%

The educational significance of skills and understanding in general musicianship is explored in the context of pupil's overarching experience as learners. As part of this process, participants are also introduced to the principal established generic music teaching and learning methodologies including the Dalcroze, Orff, Suzuki and Yamaha approaches. Tutorials allow for discussion concerning teaching and learning particular instrumental and vocal specialities in a variety of styles and genres and participants are required to research and catalogue available music materials that are appropriate for the

acquisition of skills, knowledge and understanding specific to particular age groups and modes of learning at elementary to advancing levels of skill attainment.

MUSST 2001 **Approaches to Music IIA**

3 units - semester 1

2 hour lecture/discussion, 1 hour tutorial per week

Available for Non-Award Study

Assessment: assignment 30%, 2000 word essay 40%, exam 30%

Approaches to the cultural study of music. Investigation of the intellectual development and methods of music research drawing from Ethnomusicology and Musicology as applicable to non-western music, European classical music, popular music and music technology.

MUSST 2002 **Approaches to Music IIB**

3 units - semester 2

2 hour lecture, 1 hour tutorial per week

Available for Non-Award Study

Prerequisite: MUSST 2001

Assessment: assignment 20%, 3000 word essay 60%, oral presentation of research 20%

Case studies and methods for understanding traditional and contemporary music and culture.

MUSST 2003 **Instrumental Music Pedagogy II**

3 units - semester 1

1 hour workshop, 1 hour tutorial per week

Restriction: usually Music degree students only

Available for Non-Award Study

Prerequisite: well-established instrumental performance skills & theoretical knowledge

Incompatible: GENMUS 2003

Assessment: folio 70%, essay 30%

Introduction to the principal elements of instrumental music pedagogy. It is designed to equip those who may wish to undertake a limited amount of instrumental teaching with the knowledge and understanding to work empathetically and effectively with pupils, especially in a one-to-one situation. Lecture topics include the principles and philosophies underpinning the discipline, the structure and history of the profession, its examination systems and some of its recognised methodologies. Tutorials in string, wind, keyboard and other instruments concentrate on instrumental specific approaches at elementary levels with a pupil-centred focus.

MUSST 2006 **Orchestration II**

3 units - semester 2

2 hour workshop per week

Restriction: music degree students only

Prerequisite: MUSCORE 1004

Incompatible: MUSCORE 1003, 7736, 4851

Assessment: written test in week 5 focussing on practical matters

of instrumentation 20%; piano reduction from a full score 30%; orchestration from a full score 50%

A historical study of the development of orchestration from the classical period to the present day provides the framework for the analysis of orchestral techniques, style, texture, and colour. General concepts are introduced to students as well as the analysis of specific case studies from various periods. Students work on short exercises in class. Basic understanding of instrumental capabilities and score reading skills are assumed.

MUSST 2010A/B **Studies in Composition II**

3 units - full year

1.5 hour seminar in technical studies, 1.5 hour practical workshop per week

Prerequisite: basic score reading skills

Incompatible: COMP 2001/2002

Assessment: semester 1: technical studies assignments & participation 20%, composers' workshop assignments & participation 20%; semester 2: technical studies assignments 30%, composers' workshop assignments & participation 30%

Study of the fundamentals of composition in various styles and genres with an emphasis on contemporary classical repertoire. Technical studies seminar: compositional methods and analysis (basic score reading skills will be required). Workshop: project-based composition leading to performance of students' works.

MUSTECH 2003A/B **Music Technology II**

6 units - full year

2 x 1 hour seminars, 2 hour workshop per week for 12 weeks

Restriction: music degree students only

Prerequisite: MUSTECH 2003A

Assessment: portfolio 25%; projects 75%

Seminars: through the practical study of software and hardware students will develop skills in the use and application of studio and desktop music technology. This will include editors, processors, sequencers, microphones, mixing desks and recording devices used in the areas of studio, audio, MIDI, sound design (such as multimedia, film and game sound), electronic and computer music, sonic arts and media production.

Workshop: students will engage with the concepts of music technology through the development of creative, theoretical and technical skills via workshops, presentations, listening, industry focus and research.

PERF 2001A/B **Accompanying II**

3 units - full year

2 hour lecture/workshop per week

Restriction: music degree students: others by audition

Prerequisite: PERF 2001A

Assessment: 3 practical assessments 25% each, log book 25%

Introduction to the art of accompanying. Development of ensemble skills, rehearsal techniques and management

of the rehearsal process. Experience of piano duets and work as an accompanist and associate artist in first rehearsal situations with a variety of instrumentalists and vocalists.

PERF 2003A/B Stagecraft II

3 units - full year

1 x 2 hour workshop and 1 x 1 hour movement class per week

Restriction: music degree students only

Prerequisite(s): PERF 2003A required for PERF 2003B

Incompatible: 7255

Assessment: semester 1: workshop logbook, 15%, interactive tasks 20%; Movement class exercises 10%, active participation 5%; semester 2: workshop 1000 word essay 20%, interactive tasks 20%; Movement class exercises 10%, active participation 5%

The development of physical skills, knowledge and understanding of acting and stagecraft techniques as relevant to music drama. Particular emphasis is placed on presentation, teamwork and communication with an audience.

PERF 2004A/B Voice Practicum II

3 units - full year

Language lecture 1 hour per week; Performance class 2 hours per week over 9 weeks

Restriction: music degree students only

Prerequisite(s): PERF 1004A/B; PERF 2004A required for PERF 3004B

Incompatible: 3135

Assessment: semester 1: Language exam 20%, participation 5%; Performance class - ongoing presentation of repertoire 20%; semester 2: Language class exam 20%, assignment 10%, participation 5%; Performance class - ongoing presentation of repertoire 20%

Study of the German language as it relates to the requirements of classical singing; participation in Performance class.

PERF 2023 Conducting IIA

1.5 units - semester 1

2 hour workshop per week

Restriction: music degree students only

Incompatible: GENMUS 2023

Assessment: 2 practical assessments of elementary conducting techniques and rehearsal observation and review

Introduction to conducting techniques (all standard beat patterns; initial development of expressive gestures and skills for reflection of musical character; use of the left hand; entries, releases, fermata, tempo and character changes); score reading, analysis and marking; developing appropriate aural skills; effective rehearsal techniques and planning; repertoire and resources, including set works.

PERF 2500A/B Classical Performance II

9 units - full year

28 hours of tuition; Classical Performance Forum 2 hours per

week/24 weeks; technique/repertoire class, organised on instrumental/vocal specialisation, 36 hours (usually 1.5 hours per week /24 weeks)

Restriction: music degree students only

Prerequisite(s): PERF 2500A

Assessment: semester 1: 25 minute technique assessment or equiv 40%; semester 2: 35 minute end of year practical exam 60%, (end of year practical exam must be passed in order to pass course)

Classical performance specialisations are available in a variety of instruments or in voice. Students must enrol in the relevant tuition class for their specialisation.

Through the study of appropriate technical and recital literature, students develop advanced technical skills together with a sound understanding of interpretative principles. They are expected to perform their chosen repertoire with accuracy and fluency, displaying rhythmic control together with a well-developed expressive sense. They need to demonstrate a strong conceptual understanding of the works performed together with an ability to communicate with their audience.

PERF 2600A/B Practical Study II: Performance

6 units - full year

12 hours individual Tuition, Practical Study Forum 2 hours per wk, technique/repertoire class, organised on instrumental/ vocal specialisation, 36 hours (usually 1.5 hours per wk/24 wks)

Restriction: music degree students only

Prerequisite(s): PERF 2600A

Assessment: semester I: teacher assessment 5%, 15 minute practical assessment 35%; semester 2 - teacher assessment 5%, 20 minute practical assessment 55% (end of year practical assessment must be passed in order to pass course)

Practical study (Classical performance) specialisations are available in a variety of instruments, or in voice. Students must enrol in the relevant tuition class for their specialisation.

Development of technique and repertoire on an instrument or voice at levels appropriate to an individual student's potential.

LEVEL III

COMP 3500A/B Composition III

6 units - full year

0.5 hour individual tuition, 1.5 hour seminar in technical studies; 1.5 hour practical workshop per week

Restriction: music degree students only

Prerequisite: COMP 3500A

Incompatible: COMP 3002, 4862

Assessment: folio of exercises, compositions, including recordings where possible: 50%; technical studies assignments, participation: 25%; composers' workshop assignments, participation: 25%

Individual tuition: develops skills in composition for various instrumental and vocal ensembles and expands knowledge of styles, structures, notation and score presentation. Technical studies: advanced compositional and analysis techniques. Composers' workshop: the performance of students' compositions based on projects.

ENS 3002A/B
Jazz Choir: Level III

3 units - full year

3-4 hours rehearsal per week, additional concert rehearsals may be required

Restriction: music degree students only - consult relevant Academic Program Rules

Prerequisite(s): audition

Incompatible: ENS 3001A/B, 5106

Assessment: ensemble achievement in rehearsals/performances, individual contribution - 100% attendance required except in cases of approved leave

Rehearsal and performance of accompanied and unaccompanied choral works in a variety of jazz styles; on-going development of choral, musical and ensemble skills to a high level. Following auditions, students will be allocated to either the 'Adelaide Connection' or 'A Kind of Blue' jazz choirs.

ENS 3004A/B
Jazz Big Band: Level III

3 units - full year

3-4 hours rehearsal per week, additional sectional & concert rehearsals may be required

Restriction: music degree students only

Prerequisite(s): audition

Incompatible: ENS 3005A/B, ENS 3006B, 8964

Assessment: ensemble achievement in rehearsals/performances, individual contribution - 100% attendance required except in cases of approved leave

Develops musicianship in the large ensemble context by focussing on the skills of reading, listening, stylistic interpretation, intonation, blend. Rehearsals and performances within the Big Band jazz tradition. Following auditions, students will be allocated to either Big Band One, Two or Three as appropriate.

ENS 3009A/B
Elder Conservatorium Symphony Orchestra III

3 units - full year

up to 5 hours of supervised rehearsals (or equivalent) per week, additional rehearsals for concerts may be required

Restriction: priority to music degree students - other students may audition for limited number of places

Prerequisite(s): audition

Incompatible: 8163

Assessment: individual graded assessments of relevant repertoire; 100% attendance and participation required except in cases of approved leave. Full details available in course outline.

Rehearsal and performance of repertoire for symphony orchestra.

ENS 3010A/B
Elder Conservatorium Wind Orchestra III

3 units - full year

3-4 hours supervised rehearsals per week; additional rehearsals for concerts may be required

Restriction: music degree students only - consult relevant Academic Program Rules

Prerequisite(s): audition

Incompatible: 2705

Assessment: individual graded assessments of relevant repertoire; 100% attendance and participation required except in cases of approved leave. Full details available in course outline.

Rehearsals and performance of repertoire for wind ensemble and/or orchestra.

ENS 3011A/B
Jazz Guitar Band: Level III

3 units - full year

3-4 hours rehearsal per week, additional sectional & concert rehearsals may be required

Restriction: music degree students only

Prerequisite(s): audition

Incompatible: ENS 3012A/B, 8964

Assessment: ensemble achievement in rehearsals/performances and individual contribution - 100% attendance required except in cases of approved leave

Develops musicianship in the large ensemble context by focussing on the skills of reading, listening, stylistic interpretation, intonation, blend rehearsals and performances of specialised arrangements. Following auditions, students will be allocated to Jazz Guitar Band One or Two as appropriate.

ENS 3017A/B
Percussion Ensemble III

3 units - full year

2 hours supervised rehearsals per week

Restriction: music degree students only

Prerequisite(s): audition

Incompatible: 8677

Assessment: individual graded assessments of relevant repertoire; 100% attendance and participation required except in cases of approved leave. Full details available in course outline.

Rehearsals and performance of repertoire for percussion ensemble.

ENS 3023A/B
Chamber Orchestra III

3 units - full year

2.5 hours rehearsal per week

Restriction: priority to music degree students - other students may audition for limited number of places

Prerequisite(s): audition

Incompatible: 7399

Assessment: individual graded assessments of relevant repertoire; 100% attendance and participation required except in cases of approved leave. Full details available in course outline.

Through the study of an appropriate and balanced selection of chamber orchestra repertoire, students will develop advanced techniques in ensemble playing with particular focus on musicianship, rehearsal discipline and performance experience.

ENS 3025A/B
Elder Conservatorium Chorale III

3 units - full year

2.5 hour rehearsal per week; plus performances as scheduled, additional rehearsals for concerts may be required

Restriction: subject to audition & number of places - priority given to music degree students but places available to other students

Prerequisite(s): audition

Incompatible: 5106

Assessment: individual graded assessments of relevant repertoire; 100% attendance and participation required except in cases of approved leave. Full details available in course outline.

Rehearsal and performance of accompanied and unaccompanied choral works in a variety of musical and choral styles; on-going development of choral, musical and ensemble skills to a high level.

ENS 3026A/B **Adelaide Voices III**

3 units - full year

2.5 hour rehearsal per week; plus performances as scheduled, additional rehearsals for concerts may be required

Restriction: subject to audition & number of places - priority given to music degree students but places available to other students

Prerequisite(s): audition

Assessment: individual graded assessments of relevant repertoire; 100% attendance and participation required except in cases of approved leave. Full details available in course outline.

Rehearsal and performance of accompanied and unaccompanied chamber choral works in a variety of musical and choral styles; on-going development of choral, musical and ensemble skills to a high level.

ENS 3027A/B **Bella Voce III**

3 units - full year

2 hours per week, plus performances as scheduled, additional concert rehearsals may be required

Restriction: Subject to audition & number of places - priority given to music degree students but places available to other students

Prerequisite(s): audition

Assessment: individual graded assessments of relevant repertoire; 100% attendance and participation required except in cases of approved leave. Full details available in course outline.

Rehearsal and performance of accompanied and unaccompanied choral works for female voices in a variety of musical and choral styles; on-going development of choral, musical and ensemble skills to a high level.

ENS 3030 **Chamber Music IIIA***

1.5 units - semester 1

1 hour workshop, 1 hour unsupervised rehearsals per week; 5 hours supervised rehearsals per semester

Restriction: music degree students or by audition

Prerequisite: ENS 2031

Incompatible: 9050

Assessment: satisfactory attendance and participation at workshops, participation in rehearsals, performances, end of semester practical exam

Rehearsal and performance of works for chamber ensemble (i.e. one person to a part). This may include works prepared in Early Music Workshop, Brass Ensemble, Percussion Ensemble and Guitar Ensemble.

* Note: Students wishing to take this course are encouraged to form a group prior to enrolment. Confirmation of enrolment will be dependant upon the availability of a place within a viable ensemble.

ENS 3031 **Chamber Music IIIB***

1.5 units - semester 2

1 hour workshop, 1 hour unsupervised rehearsals per week; 5 hours supervised rehearsals per semester

Restriction: music degree students or by audition

Prerequisite(s): ENS 2031 and ENS 3030A for part 2

Incompatible: 9050

Assessment: satisfactory attendance and participation at workshops, participation in rehearsals, performances, end of semester practical exam

Rehearsal and performance of works for chamber ensemble (i.e. one person to a part). This may include works prepared in Early Music Workshop, Brass Ensemble, Percussion Ensemble and Guitar Ensemble.

* Note: Students wishing to take this course are encouraged to form a group prior to enrolment. Confirmation of enrolment will be dependant upon the availability of a place within a viable ensemble.

GENMUS 3005 **Music, Media & Contemporary Society III**

3 units - semester 2

1 x 3 hour lecture per week

Incompatible: GENMUS 3005A, 9801/5307, 4293/832

Assessment: essay 40%, exam 60%

This course offers an examination of music performance and consumption practices in contemporary society. Drawing upon a range of examples from popular music, classical music, film music, and background music, the course considers the varied aesthetic and cultural uses of music and music media. At the same time, it looks at the interconnectedness of musical practices brought about through music-oriented technology. This may be seen especially in the general impact of recording technology on all forms of music-making and consumption, but also in the business and promotional practices associated with the global music industry, and in current issues related to music copyright. Throughout the course, an emphasis will be placed on developing students' ability to critically examine and discuss aspects of musical aesthetics, behaviour, function, and meaning.

GENMUS 3011 **Village Voices: Greenwich Village in the 1960s III**

3 units - semester 1

3 hour lecture per week

Available for Non-Award Study

Assessment: 2,500 word essay 60%, 1000 word critical commentary 40%

This course will explore one of the most culturally fertile and vibrant eras of recent times (the 1960s) by focussing on a location (Greenwich Village, New York) that was a hub of artistic experimentation and collaboration, against

a background of social change and political turmoil. The course will explore the emergence of new art forms - both 'high art' and popular - and the dynamic interactions between artists in different disciplines, with a particular focus on music. The ability to read music or play an instrument is not required for this course.

Topics include: The Avant Garde: John Cage, Morton Feldman, Edgard Varese, Merce Cunningham, Robert Rauschenberg, Judson Dance Theatre; Poetry in Action: political activism in the work of Bob Dylan, Allen Ginsberg and The New York School; Less is More: minimalism in the arts and music: Phil Glass, Steve Reich, La Monte; Young, Phil Niblock, Sol LeWitt, Jasper Johns, Robert Morris, Donald Judd; Happenings, Fluxus and Conceptual Art: Allan Kaprow, George Maciunas, George Brecht, Philip Corner, Jonas Mekas, Harry Smith, Underground Cinema; Pop Art and Art Rock: Andy Warhol, The Velvet Underground, Lou Reed, The Fugs; Jazz at the Village Vanguard: Albert Ayler, Ornette Coleman, Cecil Taylor and Free Jazz.

GENMUS 3013 **Music & Ideology II/III**

3 units - biennial course

3 hour lecture per week

Available for Non-Award Study

Assessment: 2,500 word essay 70%; 1,000 word annotated bibliography 30%

This course examines the impact on western art and popular music of political, cultural and religious ideologies, with particular emphasis on the twentieth century to the present day. The ability to read music or play an instrument is not required for this course. Topics to be addressed include: Precursors: Music in Plato's republic, The Council of Trent, Mozart and Freemasonry; Richard Wagner: His dalliance with the political Right and later appropriation by Nazism; Shostakovich and socialist realism; The Congress for Cultural Freedom; The Avant-garde and French Cultural Politics; Woody Guthrie, Bob Dylan and the 1960s protest movement; Cornelius Cardew and Anti-imperialism; Midnight Oil and the political empowerment of Australian rock music; The role of music in contemporary Christian worship.

GENMUS 3026A/B **Perspectives in Music Technology III**

3 units - full year

2 x 1 hour seminar per week for 12 weeks

Restriction: priority to music degree students - other students may audition for limited number of places

Prerequisite(s): GENMUS 3026A

Assessment: paper 50%, project 50%

Seminar 1: Theoretical and practical research into new technologies and their application to music. Areas explored may include software control systems, musical instruments, recording and production, electronics, synthesis, psychoacoustics and algorithmic composition. Seminar 2: Specific scientific analysis and understanding of innovative sound and music technologies. Areas explored may include perception and understanding

of signal manipulation, new processing, interface and instrument building.

JAZZ 3000A/B **Jazz Performance III**

9 units - full year

1 hour individual tuition p/w; jazz forum (using small jazz ensembles) 1.5 hours p/w; technique/repertoire class (master class): organised by instrumental/vocal specialisation 1 hour p/w; small jazz ensemble 1 hour supervised p/w - all over 24 weeks

Restriction: music degree students only

Prerequisite(s): JAZZ 200A/B; JAZZ 3000A required for part 2

Incompatible: 7054, 3395

Assessment: semester 1: 30 minute mid year practical exam with a technical focus 20%, Small Jazz Ensemble 20%; semester 2 final 45 minute practical exam/recital 40%, Small Jazz Ensemble 20% (final practical exam must be passed in order to pass course)

Through the study of appropriate technical and jazz repertoire, students develop advanced technical skills together with a sound understanding of jazz style/interpretative principles. They are expected to perform their chosen repertoire with accuracy and fluency, displaying rhythmic control together with a well developed creative and expressive sense. They need to demonstrate jazz improvisation in appropriate style and a strong conceptual understanding of the compositions performed together with an ability to communicate with their audience.

Small Jazz Ensemble: studies the roles of band leader, soloist, sideman, rhythm section player in rehearsal, recording band and concert stage environments. Further develops advanced techniques of jazz improvisation in all styles, with an emphasis on contemporary techniques and styles. Small jazz ensemble: Topics include: repertoire - analysis of tune structure; playing in different tempi & keys; arrangements; leader roles; ensemble communication; solo and accompaniment roles; group awareness, active listening and response; levels of density; balance; group phrasing; matching time and feel; changing feel; playing in different styles; colla voce; solo structure; solo intensification soloing within constraints; playing in different combinations; trading 4s & 8s; stop choruses and solo breaks; playing in context, maintaining mood; recovering from mistakes; group dynamics (personal); tuning; individual sound; relaxation; playing with confidence; energy; dynamics; articulation & colour.

JAZZ 3005A/B **Jazz Improvisation III**

3 units - full year

1 hour lecture, 1 hour tutorial

Restriction: music degree students only

Prerequisite: JAZZ 3005A

Incompatible: 8075

Assessment: Ongoing assignments 40%; end of semester exams - written 20%, practical 40%

Further development of 'Standard' & 'Bop' material, in conjunction with Theory and third year Tunes List; modal styles: applications & exercises in pentatonics, altered pentatonics & fourths; solo development techniques, particularly application of tension/outside devices & methods; analysis of modal solos (e.g. Coltrane);

contemporary jazz styles; contemporary & polychord harmonies; chord/scale relationships; rhythmic devices/techniques (e.g. cross-rhythms, metric modulation, etc); playing/improvising in unusual forms, time-signatures and harmonies. Principles and practice of "Free Jazz".

JAZZ 3600A/B

Practical Study III: Jazz

6 units - full year

12 hours individual tuition; 1 hour performance class per week; 1.5 hours jazz performance forum per week; 1 hour supervised small jazz ensemble per week - all over 24 weeks

Restriction: music degree students only

Prerequisite(s): JAZZ 2600A/B; JAZZ 3600A required for part 2

Incompatible: 7268

Assessment: semester 1: 15 minute mid-year assessment 20%, teacher's report 5%, ensemble laboratory 10%; semester 2: teacher's report 5%, 25 minute prac. assessment 50%, ensemble laboratory 10% (end of year practical exam must be passed in order to pass course)

Technique and repertoire on an instrument or voice at levels appropriate to an individual student's attainments. All students must attend an individual lesson and a 1 hour performance class particular to their major study.

MUSCOURSE 3002

Music in Context IIIA: Jazz

3 units - semester 1

1 hour theory lecture, 2 hour tutorial, 1 hour jazz arranging lecture per week

Restriction: music degree students only

Prerequisite: MUSCOURSE 2003, MUSCOURSE 2004, JAZZ 2007B

Incompatible: 4838

Assessment: theory (25% weekly assignments & tests, 75% exam) 50%; jazz arranging (100% small assignments) 50%. Both theory and history components must be passed to pass the course overall

Jazz Theory: extensive study of chords, scales and modes and their relationships; research of standard harmonic progression and standard tunes; advanced chord substitution and polytonality. Jazz arranging and composition: further development of jazz arranging techniques and skills for medium to large ensembles (eg Big Band).

MUSCOURSE 3003

Music in Context IIIB: Jazz

3 units - semester 2

1 hour theory lecture, 2 hour tutorial, 1 hour jazz arranging lecture per week

Restriction: music degree students only

Prerequisite: MUSCOURSE 3002

Incompatible: 4838

Assessment: theory (25% weekly assignments & tests, 75% exam) 50%; jazz arranging (50% small assignments, 50% major assignment) 50%. Both theory and history components must be passed to pass the course overall

Jazz Theory: Advanced level study of the tonal organisation and rhythmic structure of contemporary jazz. Topics include: Investigation and study/application of the 'Lydian Chromatic Concept' by George Russell; study of other techniques/systems such as 12 tone

techniques, Eastern scales/techniques, and systems used by 20th century composers - Bartok, etc. Jazz arranging and composition: further development of jazz arranging techniques and skills for medium to large ensembles (eg Big Band) - submission of big band arrangement and compositions

MUSCOURSE 3005

Western Music in Theory & Practice III: 1950 Onward

3 units - semester 1

2 x 1 hour lectures, 1 hour tutorial, 1.5 hour workshop per week

Restriction: music degree students only

Prerequisite: MUSCOURSE 2005/2006

Incompatible: MUSCOURSE 3001, MUSCOURSE 3004

Assessment: theory assignments 30%, history essay 30%, repertoire listening test 25%, careers workshop assignments 15%

The history component of this course will explore the aesthetic, social, cultural, intellectual and ideological trends in music from 1950 to the present, both internationally and in Australia.

The theory lectures will include analytical studies of music including but not limited to: serialism and post-serialism, chance and indeterminacy, minimalism and complexity, computer music and free improvisation. The development of new theoretical and analytical approaches will also be discussed, together with the implications for composition, performance and listening. Tutorials will approach music from both historical and theoretical perspectives, reinforcing lecture material through practical exercises, discussion and repertoire listening. The careers workshop will involve leading music industry figures who will address topics related to the Australian music industry, including career options, arts funding, job applications and interview techniques, and accounting procedures.

MUSCOURSE 3999A/B

Jazz Theory for Music Education

3 units - full year

1 hour theory lecture, 1 hour tutorial per week

Restriction: Music Education students only

Prerequisite: MUSCOURSE 2004

Assessment: theory - weekly assignments, tests 25%, exam 75%

Extensive study of chords, scales and modes and their relationships; research of standard harmonic progression and standard tunes; advanced chord substitution and polytonality. Advanced level study of the tonal organisation and rhythmic structure of contemporary jazz. Topics include: Investigation and study/application of the 'Lydian Chromatic Concept' by George Russell; study of other techniques/systems such as 12 tone techniques, Eastern scales/techniques, and systems used by 20th century composers - Bartok, etc.

MUSED 3001

Music Education IIIA

3 units - semester 1

1 hour lecture, 2 hour workshop per week

Restriction: Music Education degree students only

Prerequisite: MUSED 2001/2002

Incompatible: 5364

Assessment: Strings methodology journal & practical demonstration 30%, essay 30%, curriculum assignments 40%

String instrument methodology involving learning about the orchestral string family, gaining experience in writing for and playing string instruments, and basic methodology. Classroom music curriculum studies - introduction to teaching principles, lesson planning, classroom management, and communication. Teaching strategies for junior secondary level (i.e. Years 8-10) music classes. Current curriculum documents. Psychological approaches to musical development and learning, including personality, motivation, creativity and social influences. An introduction to the application of technology in music education.

MUSED 3002 Music Education IIIB

3 units - semester 2

1 hour lecture, 2 hour workshop per week (may be taught in condensed format to accommodate Music Education Practicum III)

Restriction: Music Education degree students only

Prerequisite: MUSED 2001/2002

Incompatible: 5364

Assessment: Brass methodology journal & practical demonstration 30%; curriculum assignments and presentations 70%

Brass instrument methodology involving learning about the brass family, gaining experience in writing for and playing brass instruments, and basic methodology. Teaching strategies for secondary school music classes, particularly for aural, theory and listening areas. Issues in Music Education research including theories of learning, musical ability, and perception, technology, assessment and evaluation. Research in instrumental instruction.

MUSED 3003A/B Music Education Ensembles III

3 units - full year

2 hour ensemble (with Music Education Level II), 1 lecture per week

Restriction: Music Education degree students only

Incompatible: 5364

Assessment: arranging exercises 20%, arrangement/s 70%, participation 10%

Participation in and direction of rehearsals and performances of the Music Education band and choir involving repertoire in various styles. Instrumental and vocal ensemble rehearsal techniques. Advanced principles of arranging and composing music for ensembles.

MUSED 3004 Music Education Practicum III

3 units - semester 2

Restriction: Music Education degree students only

Prerequisite: MUSED 3001

Incompatible: 5364

Students will undertake one placement of supervised teaching practice (equivalent to 30 days/6 weeks) in a school. Students who successfully complete the course are given a non-graded pass.

MUSED 3005 Primary Music Curriculum

3 units - biennial course - may not be offered every year

1 x 3 hour workshop per week

Restriction: Music Education degree students only

Assessment: curriculum projects 50%; observation journal 20%; teaching resources 30%

Primary Music Curriculum is offered as a 3-unit elective in the Bachelor of Music Education program. This elective seeks to broaden the scope of the program to incorporate primary school music specialist training in addition to the existing secondary school focus. The elective is also available as an elective for students in the Bachelor of Music and Bachelor of Music Studies programs. The purpose of the course is to enable students to develop their knowledge of music education principles and practices for primary school level, through a mixture of focussed lecture/workshops and field placement. Students will be required to plan, prepare and present a folio of primary music curriculum materials based on their experiences at schools and during the workshops.

MUSPED 3001A/B Pedagogy Studies IIIB

3 units - full year

1 hour lecture per week, 12 hours workshop participation and 12 hours total teaching practice per semester

Restriction: music degree students only

Prerequisite: MUSPED 3001A or equiv, National Police Clearance

Assumed Knowledge: well-established instrumental/vocal performance skills and theoretical knowledge

Incompatible: MUSST 3004

Assessment: teaching practice 50%, workshop ensemble rehearsal or 2nd instrumental teaching folio 25%, written examination (Educational Psychology) 25%

This course is designed to assist participants to undertake, confidently, weekly supervised teaching practice with a variety of pupils in various settings on and off campus. Participants are introduced to the broad principles of Educational Psychology that underpin successful instrumental/vocal learning and teaching. They also extend their skills and knowledge either through performing contemporary popular music on their main or a second instrument in regular ensemble workshop rehearsals, or by undertaking pedagogy studies in a second instrument.

MUSST 3001 Approaches to Music III

3 units - semester 1

2 hour lecture/discussion, 1 hour workshop per week

Restriction: music degree students only

Prerequisite: MUSST 2002

Assessment: assignment 20%, 3000 word essay 60%, oral presentation of research 20%

Continued development of research concepts and methods applied to case studies from traditional and contemporary music and culture.

MUSST 3004 Instrumental Music Pedagogy III

3 units - semester 2

1 hour workshop, 1 hour tutorial per week

Restriction: usually Music degree students only

Available for Non-Award Study

Prerequisite: MUSST 2003 or equivalent prior knowledge & experience

Incompatible: GENMUS 3004

Assessment: written analysis 40%, teaching practice 60%

Development of an ability to foster the learning potential of pupils and designed for students who have already begun to teach an instrument. Congruent verbal and non-verbal behaviours, use of appropriate vocabularies, the development of diagnostic, evaluative and planning techniques, the encouragement of creative thinking in pupils and teaching for musical meaning are included in a non instrument specific workshop situation using demonstrating, video recording and reporting techniques.

MUSST 3005 Foundation for Honours III: Music Studies

3 units - semester 2

2 hour seminar

Assessment: assignment appropriate to student's major area of interest 30%, 3000 word essay 60%, oral presentation of research 10%

Further studies of approaches to researching music and scholarly presentation of outcomes. It provides foundations for honours level work in composition, ethnomusicology, musicology, music education, music technology and performance.

MUSST 3010A/B Studies in Composition III

3 units - full year

1.5 hour seminar in technical studies, 1.5 hour practical workshop per week

Prerequisite: basic score reading skills

Incompatible: COMP 3001/3002 Practical Study: Composition III

Assessment: semester 1: Technical studies assignments & participation 20%, composers' technical studies assignments & participation 20%; semester 2: Technical studies assignments & participation 30%, composers' workshop assignments and participation 30%

Study of the fundamentals of composition in various styles and genres with an emphasis on contemporary classical repertoire. Technical studies seminar: compositional methods and analysis (basic score reading skills will be required). Workshop: project-based composition leading to performance of students' works.

MUSST 3014 Rhythm in the 20th Century III

3 units - semester 2

2 hour seminar per week

Restriction: music degree students only

Assessment: compositional exercise (treatments of metered rhythms) 25%; compositional exercise (treatments of unmetered

rhythms) 25%; written analytical project (approved topic) approximately 2000 words 50%

The twentieth century witnessed an explosion in different approaches towards the composition of musical rhythm. Of all the aspects of traditional music theory rhythm has been the most neglected. This course tries to redress the balance: the aspects of rhythm that will be examined include those of relevance to the classical and jazz worlds. The following composers will be considered: Stravinsky, Bartok, Messiaen, Ives, Carter, Reich, Riley, Lutoslawski, Ligeti, Nancarrow.

MUSTECH 3003A/B Music Technology III

6 units - full year

2 x 1 hour seminar, 1 hour workshop for 12 weeks

Restriction: music degree students only

Prerequisite: MUSTECH 3003A Music Technology III part 1

Assessment: portfolio 25%, projects 75%

Seminars: through the practical study of software and hardware students will develop skills in the use and application of studio and desktop music technology. This will include editors, processors, sequencers, microphones, mixing desks and recording devices used in the areas of studio, audio, MIDI, sound design (such as multimedia, film and game sound), electronic and computer music, sonic arts and media production

Workshop: students will engage with the concepts of music technology through the development of creative, theoretical and technical skills via workshops, presentations, listening, industry focus and research.

PERF 3003A/B Stagecraft III

3 units - full year

1x2 hour workshop, 1x1 hour movement class per week

Restriction: music degree students only

Prerequisite(s): PERF 2003A/B. PERF 3003A required for PERF 3003B

Assessment: semester 1: workshop logbook, 15%, interactive tasks 20%; Movement class exercises 10%, active participation 5%; semester 2: workshop 1000 word essay 20%, interactive tasks 20%; Movement class exercises 10%, active participation 5%

The development of physical skills, knowledge and understanding of acting and stagecraft technique as relevant to music drama. Particular emphasis is placed on presentation, teamwork and communication with an audience.

PERF 3004A/B Voice Practicum III

3 units - full year

Language lecture 1 hour per week; Performance class 2 hours per week over 9 weeks

Restriction: music degree students only

Prerequisite(s): PERF 2004A/B; PERF 3004A required for PERF 3004B

Incompatible: 8434

Assessment: semester 1: Language exam 20%, participation 5%; Performance class - ongoing presentation of repertoire 20%; semester 2: Language exam 20%, assignment 10%, participation 5%; Performance class - ongoing presentation of repertoire 20%

Study of the German language as it relates to the requirements of classical singing; participation in Performance class.

PERF 3010 Accompanying III

3 units - semester 1

2 hour lecture/workshop per week

Restriction: music degree students, others by audition

Prerequisite: PERF 2001B or audition

Assessment: practical assessment & 2000 word written assignment

Investigation of the nature of the pianist's role as accompanist, associate artist, chamber musician and rehearsal pianist. Further development of ensemble skills, rehearsal techniques and management of the rehearsal process.

PERF 3023 Conducting IIIA

1.5 units - semester 1

2 hour workshop per week

Restriction: music degree students only

Prerequisite: PERF 2024 at Credit level or higher

Incompatible: GENMUS 3024, 5328

Assessment: 2 practical assessments plus written assignments (including score preparation, rehearsal planning, repertoire study and rehearsal observation & review)

Instrumental ensemble techniques. Continued development of specific skills and techniques for working with orchestras, concert bands and other instrumental ensembles; working with a variety of musical styles; advanced ensemble skills; developing a conductor's working knowledge of relevant instruments; effective rehearsal and problem solving; development of specific aural skills; working with a variety of musical styles and performance practices; repertoire and resources study including detailed score study of selected set works.

PERF 3024 Conducting IIIB

1.5 units - semester 2

2 hour workshop per week

Restriction: music degree students only

Prerequisite: PERF 3023

Incompatible: GENMUS 2024, 5328

Assessment: 2 practical assessments plus written assignments (including score preparation, rehearsal planning, repertoire study and rehearsal observation & review)

Choral techniques. Continued development of specific skills and techniques for working with choirs including developing choral tone; diction; working with a variety of musical and choral styles; introduction to choral singing in languages other than English; advanced ensemble skills; effective rehearsal and problem solving; development

of specific aural skills; working with a variety of musical styles and performance practices; repertoire and resources study including detailed score study of selected set works.

PERF 3500A/B Classical Performance

9 units - full year

28 hours tuition; Classical Performance Forum 2 hours per week, technique/repertoire class, organised on instrumental/ vocal specialisation, 36 hours (usually 1.5 hours per week/24 weeks)

Restriction: music degree students only

Prerequisite(s): PERF 2500A/B; PERF 3500A required for PERF 3500B

Assessment: semester 1: 30 minute technique assessment or equivalent 40%; semester 2: 45 minute end of year practical exam 60% (end of year practical exam must be passed in order to pass course)

Classical performance specialisations are available in a variety of instruments or in voice. Students must enrol in the relevant tuition class for their specialisation. Through the study of appropriate technical and recital literature, students develop advanced technical skills together with a sound understanding of interpretative principles. They are expected to perform their chosen repertoire with accuracy and fluency, displaying rhythmic control together with a well-developed expressive sense. They need to demonstrate a strong conceptual understanding of the works performed together with an ability to communicate with their audience.

Subject to special audition and interview and to the availability of suitably qualified teachers, selected students will be permitted to specialise in the area of orchestral studies. This will include a focus upon orchestral excerpts and audition material (including concert). Individual contracts, incorporating content and assessment, will be developed for each student.

PERF 3600A/B Practical Study III: Performance

6 units - full year

12 hours tuition; Practical Study Forum 2 hours p/w, technique/ repertoire class, organised according to instrumental/ vocal specialisation, 36 hours (usually 1.5 hours/24 wks)

Restriction: music degree students only - consult relevant Academic Program Rules

Prerequisite(s): PERF 3600A

Incompatible: any Level III Performance course worth 6 units

Assessment: semester 1 - teacher assessment 5%, 15 minute practical assessment 35%; semester 2 - teacher assessment 5%, 25 minute practical assessment 55% (end of year practical assessment must be passed in order to pass course)

Classical performance specialisations are available in a variety of instruments, or in voice. Students must enrol in the relevant tuition class for their specialisation.

Development of technique and repertoire on an instrument or voice at levels appropriate to an individual student's potential.

LEVEL IV

MUSCOMP 4010A/B Honours Composition

24 units - full year

Restriction: approved honours music students only

Prerequisite(s): see Program Rule 5.6

Assessment: analytical project 25%; negotiated project 25%; final portfolio 50% - pass mark must be achieved in all three components to pass overall

The work undertaken through individual supervision each semester will focus primarily on the conception and realisation of original creative works. There is no particular stylistic or aesthetic requirement. Candidates are encouraged to develop their own, original creative 'voice'. Candidates will be encouraged to plan projects that might be realised with the performing forces available within the Elder Conservatorium of Music. Projects designed for external groups and organisations will also be encouraged. Practical assistance will be given, where possible to rehearse/perform/record candidates' pieces; but live performance is not guaranteed.

Each candidate will complete a composer attachment or internship negotiated by the Head of Composition with either an internal orchestra, large ensemble or choir, or a suitable external group or organisation. The duties of such an attachment will include; assisting the conductor/director of the ensemble; regular attendance at rehearsals; assistance with the preparation and editing of performance materials (e.g. checking parts against the conductor's score, editing string bowings and other performance articulation, transposing parts if necessary, etc).

MUSED 4001B Music Education IV

3 units - full year

2 hours/week workshop (24 hours per year scheduled around teaching practice blocks in sem 1 & 2)

Restriction: Music Education degree students only

Prerequisite(s): Music Education IIB

Assessment: year outline assignment 20%; curriculum assignments 2 x 40%

Classroom music curriculum studies for senior secondary level (Years 11 and 12), including SACE, IB and VET music studies. Current developments in arts education policies. Professional issues including ethics, copyright and policies.

MUSED 4002A/B Music Education Project IV

3 units - may not run every year

12 x 1 hour workshop

Restriction: Music Education degree students only

Prerequisite(s): MUSED 3004, MUSED 3002

Assessment: repertoire review 25%; observation notes 25%; ensemble direction 25%; arrangement 25%

The course seeks to further develop ensemble direction

and arranging skills, and to provide opportunities to evaluate conducting and arranging skills of self and others. The course seeks to extend knowledge of playing standards of published repertoire either for school ensembles or for individual instrument families.

Workshop topics include: advanced arranging techniques; rehearsal management, ensemble techniques and conducting skills. Fieldwork will involve observation of at least 4 different ensembles. Where appropriate, students will be encouraged to participate whilst observing each ensemble, to assist the conductor with any sectional rehearsals, and to conduct at least one piece with each ensemble.

HONOURS

ETHNO 4003A/B Honours Ethnomusicology

24 units - full year

Prerequisite(s): see Program Rule 5.6

Assessment: 6000 word research paper 25%; negotiated project 25%; 12,000 word dissertation 50% - pass mark must be achieved in all three components to pass overall

A program of seminars and individual supervision in the theory and practice of ethnomusicology. Students will complete: 1) research paper (25% - equivalent to 6 units): theory and methods of ethnomusicology including major concepts, research issues, transcription and editing, analysis, case studies. 2) negotiated project (25% - equivalent to 6 units): an activity that complements major study e.g. editing, professional activity (such as affiliation with a professional society), fieldwork, a research project, a recording project, performance project or component from another Music Honours program. 3) major research project (50% - equivalent to 12 units) - topic of choice as approved by Honours Coordinator.

MUSICED 4006A/B Honours Music Education

24 units - full year

Restriction: approved honours music students only

Prerequisite(s): see Program Rule 5.6

Assessment: 6000 word research paper on an agreed topic 25%; negotiated project 25% (subject to audition, a minor recital of 35 minutes may be presented for this); 12,000 word dissertation 50% - pass mark must be achieved in all three components to pass overall

A program of seminars and individual tuition. Students will complete individual research assignments and a balanced proportion of related fieldwork. Subject to audition, a minor recital of 35 minutes may be presented in lieu of a minor project.

MUSICOL 4011A/B Honours Musicology

24 units - full year

Prerequisite(s): see Program Rule 5.6

Assessment: 6000 word research seminar paper 25%; negotiated project 25%; 12,000 word dissertation 50% - pass mark must be achieved in all three components to pass overall

A program of seminars and individual supervision in the theory and practice of musicology. Students will complete: 1) research paper (25% - equivalent of 6 units): theory and methods of musicology including major concepts, research issues, transcription and editing, analysis, contemporary and historical studies; 2) negotiated project (25% - equivalent of 6 units): an activity that complements major study e.g. editing, professional activity (such as affiliation with a professional society), music criticism, a research project, a recording project, performance project or component from another Music Honours program; 3) major research project (50% - equivalent of 12 units): topic of choice as approved by Honours Coordinator.

MUSTECH 4001A/B Honours Music Technology

24 units - full year

Restriction: approved honours music students only

Prerequisite(s): see Program Rule 5.6

Assessment: Major research project 50%; creative project 25%; 2 x 20 minute seminar presentations 25% - pass mark must be achieved in all three components to pass overall

A program of seminars and individual supervision in the theory and practice of music technology. Students will complete individual research projects in music technology that may include areas such as electronic and computer music composition; programming and software design; sound engineering and production; sound design and media; electronics; the sonic arts; instrument building. Major research project (which may include dissertation, research reports, software documentation, or other approved forms of submission relevant to the research): at least 50% - equivalent of 12 units; composition or creative work: at least 25% - equivalent of 6 units; in approved cases, students may take 25% - equivalent of 6 units or more from a course/component of another Music Honours program.

PERF 4005A/B Honours Performance

24 units - full year

28 hours individual tuition in performance supported by fortnightly performance workshops of 1.5 hours duration, plus a weekly 1 hour Honours research seminar in semester 1

Restriction: approved honours music students only

Prerequisite(s): see Program Rule 5.4

Assessment: Major recital 50%; minor recital 25%; 6,000 word research project 25% - pass mark must be achieved in all three components to pass overall

The course consists of a number of topics : Recital 1 (50% - equivalent to 12 units) (65 minute recital)- content and format will not be prescribed as the repertoire may include solo works, chamber music, orchestral material, concerti, accompaniment etc. Recital programs will be subject to approval. Recital 2 (25% - equivalent to 6 units) (35 minute recital) - content and format will not be prescribed as the repertoire may consist of solo works, chamber music, orchestral material, concerti, accompaniment etc. Recital programs will be subject to approval. Research project (6,000 words) that focuses on

the identification and articulation of research questions and problems relating directly to performance.

PERF 4006A/B Honours Music Pedagogy

24 units - full year

Restriction: approved honours music students only

Prerequisite(s): see Program Rule 5.4

Assumed Knowledge: MUSST 2003/3004 or equivalent

Assessment: 2 x 20 minute seminar presentations/demonstrations 25%; 6000 word or 2 x 3000 word projects 25%; 12,000 word dissertation 50% - pass mark must be achieved in all three components to pass overall

A program of seminars, individual supervisions and workshops with a focus on the teaching, learning and related processes involved in piano or stringed instrument performance practice. Fieldwork is likely to include involvement in instrumental teaching programs on and off campus.

Music: VET

LEVEL I

VETMUS 1501 Music Industry & Business Management

1 units - semester 2

6 hours lectures

Restriction: pre-degree VET music students only

Assessment: regular short tests concerned with knowledge and understanding of essential elements

Matters concerned with the music industry, its organisations, products and issues relevant to working in the industry will be explored. Students will be encouraged to strategically monitor their participation in relevant music and other networks. Copyright requirements to protect creative work and performance from unauthorised use will be investigated.

VETMUS 1502 Occupational Health & Safety

1 units - semester 1 or semester 2

6 hours workshops

Restriction: pre-degree VET music students only

Assessment: regular short tests concerned with knowledge and understanding of essential elements

Occupational health and safety, emergency situations and personal safety in the music industry will be examined and evaluated. Students will develop essential knowledge and skills in established procedures and understanding of legal requirements.

VETMUS 1503 Assignment Writing and Research Skills

1 units - semester 1 or semester 2

5 x 1 hour workshops

Restriction: pre-degree VET music students only

Assessment: assignment 70%, library skills workbook 30%, study skills

Identification, location and use of a wide variety of research instruments in both electronic and non-electronic systems will be investigated. Effective application of this research, its notation and acknowledgment will also be examined.

VETMUS 1504A/B Career Management

2 units - full year

8 x 1.5 hour workshops per semester

Restriction: pre-degree VET music students only

Assessment: written test & folio concerned with knowledge and understanding of essential elements

Image development, planning promotional activities, communicating strategically to achieve planned commercial outcomes and the development and expansion of artistic product will be explored. Students will be encouraged to strategically monitor their participation in relevant music and other networks.

VETMUS 1505 Copyright Law

1 units - semester 2

4 x 1 hour workshops

Restriction: pre-degree VET music students only

Assessment: regular short tests concerned with knowledge & understanding of essential elements

The skills and knowledge required to protect creative work and performance from unauthorised use are examined and evaluated. Students will develop essential knowledge and skills in established procedures and understanding of legal requirements.

VETMUS 1601A/B History & Literature

2 units - full year

1 hour lecture per week

Restriction: VET music students only

Assessment: Assignments 70%, exam 30%

Students will increase their understanding of the general trends in the evolution of western music, the major styles, composers and works of the standard musical eras, and the basic analysis techniques which can be applied to this field of study.

VETMUS 1602A/B Aural Development (Certificate IV)

2 units - full year

1 hour lecture per week

Restriction: pre-degree VET music students only

Assessment: assignments 70%, exam 30%

Students will be allocated to an appropriate stream based on a placement test. Development of skills in identifying and notating melodic, harmonic and rhythmic

units; development of critical listening skills through study of basic musical elements such as texture, timbre, articulation, dynamics, form and structure. This part of the course is divided into six progressive streams for varying skill levels and areas of particular development.

VETMUS 1602A/B Aural Development (Certificate IV)

2 units - full year

1 hour class per week

Restriction: pre-degree VET music students only

Assessment: as required by stream/level

Students will be allocated to an appropriate stream based on a placement test. Development of skills in identifying and notating melodic, harmonic and rhythmic units; development of critical listening skills through study of basic musical elements such as texture, timbre, articulation, dynamics, form and structure. This part of the course is divided into six progressive streams for varying skill levels and areas of particular development.

VETMUS 1605A/B Ensemble (Certificate IV)

2 units - full year

2 hours rehearsal per week

Restriction: pre-degree VET music students only

Assessment: regular performances in appropriate ensemble

Students will increase their effectiveness as members of an instrumental group by developing musically interactive skills, empathy, diagnostic and evaluative ability through regular performance in a small or large ensemble at an appropriate level.

VETMUS 1606A/B History of Commercial Music

2 units - full year

1 hour class per week

Restriction: VET music students only - consult relevant Academic Program Rules

Assessment: Assignments 70%, exam 30%

The history and development of jazz, rock and other forms of popular music are studied in order to develop of understanding of the various styles and artists who have significantly contributed to the evolution of commercial music. The development of research skills is emphasised.

VETMUS 1607A/B History of 20th Century Music

2 units - full year

1 hour lecture per week

Restriction: pre-degree VET music students only

Assessment: presentation 20%, 2 x exams 80%

Students will expand their knowledge and understanding of 20th century western art music. Significant developments in music language styles, noteworthy composers and their works will be investigated and students will gain facility in researching, evaluating and writing about these developments.

VETMUS 1608A/B
Theory of Music (Certificate IV)

2 units - full year

1 hour seminar per week

Restriction: pre-degree VET music students only

Assessment: exam at the end of each semester

Students will develop an understanding of the fundamental principles of music theory, particularly with regard to functional harmony, music notation, harmonic and melodic construction and learn to view these historically.

VETMUS 1609A/B
Individual Tuition (Certificate IV)

4 units - full year

12 hours individual tuition per year

Restriction: pre-degree VET music students only

Assessment: end of year exam 60%, teacher's report 5%

Students will develop to appropriate levels on an instrument or voice their technical skill, scope of repertoire, stylistic awareness and interpretive ability.

VETMUS 1610A/B
Individual Tuition (Certificate III)

3 units - full year

12 hours individual tuition per year

Restriction: pre-degree VET music students only

Assessment: end of year exam 60%, teacher's report 5%

Students will develop to appropriate levels on an instrument or voice their technical skill, scope of repertoire, stylistic awareness and interpretive ability.

VETMUS 1611A/B
Aural Development (Certificate III)

2 units - full year

1 hour class per week

Restriction: pre-degree VET music students only

Assessment: as required for stream/level

Students will be allocated to a stream based on a placement test. Development of skills in identifying and notating melodic, harmonic and rhythmic units; development of critical listening skills through study of basic musical elements such as texture, timbre, articulation, dynamics, form and structure. This part of the course is divided into six progressive streams for varying skill levels and areas of particular development.

VETMUS 1612A/B
Ensemble (Certificate III)

2 units - full year

2 hours rehearsal per week

Restriction: pre-degree VET music students only

Assessment: regular performances in appropriate ensemble

Students will increase their effectiveness as members of an instrumental group by developing musically interactive skills, empathy, diagnostic and evaluative ability through

regular performance in a small or large ensemble at an appropriate level.

VETMUS 1613A/B
Theory of Music (Certificate III)

2 units - full year

1 hour seminar per week

Restriction: pre-degree VET music students only

Assessment: exam at the end of each semester

Students will develop secure basic knowledge, understanding and written skills in elementary level music theory and song writing in various genres.

VETMUS 1614A/B
Aural Development (Diploma)

2 units - full year

1 hour class per week

Restriction: pre-degree VET music students only

Assessment: as required for stream/level

Students will be allocated to a stream based on a placement test. Development of skills in identifying and notating melodic, harmonic and rhythmic units; development of critical listening skills through study of basic musical elements such as texture, timbre, articulation, dynamics, form and structure. This part of the course is divided into six progressive streams for varying skill levels and areas of particular development.

VETMUS 1615A/B
Concepts of Music (Certificate IV)

6 units - full year

1 hour lecture, 1 hour tutorial, 1 hour aural per week

Restriction: pre-degree VET music students only

Assessment: assignments 50%, exams 50%

Theory: Students will study and apply scales, chord types, chord progressions, digital patterns, 12-bar blues and rhythm changes in all keys. Scales will include the blues scale, modes, bebop scales, diminished and whole-tone scales. Aural: Development of skills in identifying and notating melodic, harmonic and rhythmic units; development of critical listening skills through study of basic musical elements such as texture, timbre, articulation, dynamics, form and structure. This part of the course is divided into five progressive streams for varying skill levels and areas of particular development. Students will be allocated to an appropriate stream based on a placement test. Refer to MUSCORE 1001.

History: The history and development of jazz, rock and other forms of popular music are studied in order to develop an understanding of the various styles and artists who have significantly contributed to the evolution of commercial music. The development of research skills is emphasised.

VETMUS 1701A/B
Jazz Styles 1

3 units - full year

1 hour lecture per week

Restriction: VET music students only

Assessment: Ongoing assignments 50%, listening exams 50%

A broad study, analysis and application of the various styles of jazz, ranging from early New Orleans to Contemporary.

VETMUS 1702A/B **Jazz Theory 1**

2 units - full year

1 hour lecture per week

Restriction: pre-degree VET music students only

Assessment: 2 written exams 50%, research project 25%, presentations 25%

This course aims to provide a theoretical framework which students can apply within jazz improvisation, composition and arranging. It considers the nomenclature of chords, functional harmony and the study of advanced harmony, aural aspects, jazz rhythms and phrasing. All theoretical aspects are followed by practical applications.

VETMUS 1703A/B **Jazz Piano Class 1**

2 units - full year

1 hour per week

Restriction: pre-degree VET music students only

Corequisite(s): VETMUS 1702A/B Jazz Theory 1

Assessment: assignments, projects, exercises 25%, written & practical semester exams 75%

This course aims to provide sufficient stylistic knowledge and technique to allow the student to use keyboard as a means of self accompaniment and relating to other courses (eg, Theory, Arranging, Performance).

VETMUS 1704A/B **Jazz Performance 1: VET**

4 units - full year

24 hours individual tuition per year

Restriction: pre-degree VET music students only

Assessment: attendance at Jazz Forum & relevant performance class, mid-year exam 30%, end of year exam 60%, teacher's report 2 x 5%

Students will develop to appropriate levels on an instrument or voice their technical skill, scope of repertoire, stylistic awareness and interpretive ability.

VETMUS 1705A/B **Improvisation 1**

3 units - full year

1 hour lecture, 1 hour tutorial, 1 hour Applied Rhythm Class per week

Restriction: pre-degree VET music students only

Assessment: assignments, participation in class, written & practical exams: Improvisation 80%, Rhythm 20%

This course enables students to develop and apply improvisation techniques. It considers the application of basic jazz improvisational techniques such as rhythm, modal scales and patterns to jazz repertoire.

VETMUS 1707A/B **Small Ensemble (Jazz Certificate IV)**

2 units - full year

3 hours rehearsal per week (1 hour supervised)

Restriction: pre-degree VET music students only

Assessment: exams (30 minutes playing time) 50%, continuous assessment 50%

Students will gain ensemble experience and sensitivity by developing musically interactive skills, empathy, improvisation, through a regular rehearsal and performance schedule of various styles of jazz.

VETMUS 1708A/B **Jazz Masterclass**

2 units - full year

1 hour seminar per week

Restriction: pre-degree VET music students only

Assessment: ongoing exercises/assignments and performances

Jazz Instrumental or Vocal Masterclass for each specialisation provides technical and stylistic support for the major study (instrument or voice). Discussions, demonstrations and performances will be used to inform on specific issues of the major study.

VETMUS 1709A/B **Jazz Forum**

1 units - full year

1.5 hours workshop per week

Restriction: pre-degree VET music students only

Assessment: attendance, participation, written comments by students

This course provides listening, performing and critical analysis experience for small jazz ensembles (typically 2-7 players). All students enrolled in Small Jazz Ensemble courses will perform several times each year at Jazz Forum, and in addition be called upon for comments within discussion sessions, regarding the performances of ensembles.

VETMUS 1750A/B **Individual Tuition (Jazz Diploma)**

4 units - full year

24 hours individual tuition

Restriction: pre-degree VET music students only

Assessment: semester 1: teacher assessment 5%, 10 minute practical exam 30%; semester 2: teacher assessment 5%, 15 minute practical exam 60%

Students will develop their technical skill, scope of repertoire, stylistic awareness and interpretive ability to appropriate levels on an instrument or voice

VETMUS 1751A/B **Small Ensemble (Jazz Diploma)**

3 units - full year

3 hours rehearsal per week (1.5 hours supervised)

Restriction: pre-degree VET music students only

Corequisite(s): VETMUS 1755 and 1756 Sound Production A and B

Assessment: 2 exams (30 minutes playing time) 50%; continuous assessment 50%

Students will gain ensemble experience and sensitivity by developing musically interactive skill, empathy, and improvisation expertise through a regular rehearsal and performance schedule of various styles of jazz.

VETMUS 1752A/B Jazz Diploma Workshop

4 units - full year

2 hour workshop

Restriction: pre-degree VET music students only

Assessment: weekly class exercises & participation 50%, written & practical exam at end of each semester 50%

Students will study and practically apply improvisational concepts, including rhythmic and motivic improvisation, understanding chord progressions, applying scales to chord progressions, and constructing an improvised solo.

VETMUS 1753A/B Jazz Diploma Forum

1 units - full year

1.5 hours jazz performance forum per week

Restriction: pre-degree VET music students only

Assessment: attendance, participation, written comments by students

The course provides listening, performing and critical analysis experience for small jazz ensembles (typically 2-7 players). All students enrolled in Small Jazz Ensemble will perform once each semester in Jazz Forum, and in addition will be called upon for comments within discussion sessions regarding the performances of ensembles.

VETMUS 1754A/B Jazz Accompaniment

2 units - full year

1 hour tutorial per week

Restriction: pre-degree VET music students only

Assessment: weekly class exercises/participation 50%, practical exam end of each semester 50%

Students will study jazz rhythm section instruments including basic piano skills in chord voicing and accompaniment and basic skills on the drum kit playing a variety of styles and rhythmic patterns. Students will develop knowledge of jazz accompaniment through listening and discussion, and will practically apply their learning through opportunities to act as accompanists in ensembles on both keyboard and drum kit.

VETMUS 1755 Sound Production A

2 units - semester 1

1 hour seminar and 1 hour workshop per week

Restriction: pre-degree VET music students only

Assessment: project 50%; practical examination 20%; theory examination 30%

Students will develop the skills and knowledge required to

operate a sound reinforcement system for a production in the cultural industries, the technical, communication and leadership competencies required to plan and manage technical production for a music recording and the skills and knowledge required to record sound, using a variety of digital and analogue recording equipment in a studio or on location for a production in the cultural industries.

VETMUS 1756 Sound Production B

2 units - semester 2

1 hour seminar and 1 hour workshop per week

Restriction: pre-degree VET music students only

Assessment: project 50%; practical examination 20%; theory examination 30%

Students will develop the skills and knowledge required to operate a sound reinforcement system for a production in the cultural industries, the technical, communication and leadership competencies required to plan and manage technical production for a music recording and the skills and knowledge required to record sound, using a variety of digital and analogue recording equipment in a studio or on location for a production in the cultural industries.

VETMUS 1801A/B Composition Class

2 units - full year

1.5 hours class per week

Restriction: pre-degree VET music students only

Assessment: end of semester submission of a non-serial composition using 20th/21st century styles/techniques (written, performed & recorded) 50%

Development of practical composition skills based on styles and techniques from 1900 to the present day. Compositional models will be examined and analysed to identify the compositional techniques and stylistic features to be applied and explored through students' own original creative work.

VETMUS 1802A/B Keyboard Musicianship (Certificate IV) Major

2 units - full year

1 hour workshop per week

Restriction: pre-degree VET music students only

Assessment: exam at end of each semester

Students will expand their skills and knowledge in applied harmony, keyboard musicianship (sight reading, reading from chord symbols, transposition, score reading), keyboard technique and stylistic performance practice.

VETMUS 1804A/B Performance Class

2 units - full year

1.5 hours class per week

Restriction: pre-degree VET music students only

Assessment: regular performances in class

The knowledge, critical evaluation and communication skills of participants will be extended in the context of a broadly based performance forum.

VETMUS 1807A/B **Technique & Repertoire Class**

3 units - full year

1.5 hours class per week

Restriction: pre-degree VET music students only

Assessment: regular performances in class

Technical accuracy, stylistic fidelity and interpretive ability will be developed in the context of a performance forum with a specialist focus.

VETMUS 1808A/B **Keyboard Musicianship (Certificate IV) Minor**

2 units - full year

1 hour workshop per week

Restriction: pre-degree VET music students only

Assessment: exam at end of each semester

Students will expand their skills and knowledge in applied harmony, keyboard musicianship (sight reading, reading from chord symbols, transposition, score reading), keyboard technique and stylistic performance practice.

VETMUS 1850A/B **Individual Tuition (Classical Diploma)**

4 units - full year

12 hours individual tuition

Restriction: VET music students only

Assessment: End of year exam 30%, teacher's report 5%

Students will develop their technical skill, scope of repertoire, stylistic awareness and interpretive ability to appropriate levels on an instrument or voice

VETMUS 1851A/B **Ensemble (Classical Diploma)**

3 units - full year

3 hours rehearsal per week (1.5 hours supervised)

Restriction: pre-degree VET music students only

Corequisite(s): VETMUS 1755 and 1756 Sound Production A and B

Assessment: regular performances in appropriate ensemble

Students will gain ensemble experience and sensitivity by developing musically interactive skill, empathy, and improvisation expertise through a regular rehearsal and performance schedule of various styles of classical music.

VETMUS 1852A/B **Classical Diploma Forum**

1 units - full year

1.5 hours VET/Practical Study Forum

Restriction: pre-degree VET music students only

Assessment: attendance, participation

The course provides listening, performing and critical analysis experience. All enrolled students will perform at least one solo item and will be asked for comments concerning the performances being audited

VETMUS 1853A/B **Music Language Studies**

4 units - full year

2 hour workshop per week

Restriction: pre-degree VET music students only

Assessment: 2 x exams at the end of each semester

Students will study and apply theoretical and constructional concepts in music through discussion, examination and evaluation of the principal developments in classical music compositional practice during the 18th, 19th and 20th centuries.

VETMUS 1855A/B **Keyboard Musicianship (Classical Diploma) Minor**

2 units - full year

1 hour workshop per week

Restriction: pre-degree VET music students only

Assessment: exam at end of each semester

Students will expand their skills and knowledge in applied harmony, keyboard musicianship, keyboard techniques and styles with particular reference to the principal developments in classical music compositional practice during the 18th, 19th and 20th centuries.

VETMUS 1856A/B **Keyboard Musicianship (Classical Diploma) Major**

2 units - full year

1 hour workshop per week

Restriction: VET music student only

Assessment: exam at end of each semester

Students will expand their skills and knowledge in applied harmony, keyboard musicianship, keyboard techniques and styles with particular reference to the principal developments in classical music compositional practice during the 18th, 19th and 20th centuries.

VETMUS 1911A/B **Audio Studies (Certificate IV)**

4 units - full year

1 hour seminar, 1 hour workshop per week

Restriction: pre-degree VET music students only

Assessment: mid-semester assignment 20%; project 40%; examination 40%

Students will study music software for digital audio sequencing, editing, processing and production. Students will gain technical knowledge whilst achieving creative outcomes in the area of digital audio. Areas explored include recording, tracking, mixing, post-production, mastering, looping and sound-design. Software may include Cubase, GarageBand, Logic, Pro Tools, Reason and Live.

VETMUS 1912A/B **MIDI Studies (Certificate Level)**

4 units - full year

1 hour seminar, 1 hour workshop per week

Restriction: pre-degree VET music students only

Assessment: mid-semester assignment 20%; project 40%; examination 40%

Students will study music software for MIDI sequencing and editing. Students will gain practical skills and technical knowledge whilst achieving creative outcomes in the area of MIDI. Areas examined include the MIDI protocol, systems setup, software and hardware implementation, virtual instrumentation, MIDI scoring and performance and advanced techniques. Software may include Cubase, GarageBand, Logic, ProTools, Reason and Live.

VETMUS 1913A/B Music Technology Forum (Certificate IV)

3 units - full year

2 hour seminar per week

Restriction: pre-degree VET music students only

Assessment: technical and creative assignments and presentations

Students will embrace and extend their practical skills, technical knowledge and creative development in the area of music technology. This will be achieved through a range of methods including specialist workshop topics, project participation, performance, industry and artist talks and presentations.

VETMUS 1951A/B Concepts of Music (Diploma)

3 units - full year

1 hour lecture, 1 hour aural session per week

Restriction: pre-degree VET music students only

Assessment: assignments 50%, exams 50%

Theory: Students will study and apply scales, chord types, chord progressions, digital patterns, 12-bar blues and rhythm changes in all keys. Scales will include the blues scale, modes, bebop scales, diminished and whole-tone scales. Aural: Development of skills in identifying and notating melodic, harmonic and rhythmic units; development of critical listening skills through study of basic musical elements such as texture, timbre, articulation, dynamics, form and structure. This part of the course is divided into five progressive streams for varying skill levels and areas of particular development. Students will be allocated to an appropriate stream based on a placement test. Refer to MUSCORE 1001.

VETMUS 1952A/B Sound Engineering (Studio)

4 units - full year

1 hour seminar and 1 x 2 hour workshop per week

Restriction: pre-degree VET music students only

Assessment: mid-semester assignment 20%; project 40%; examination 40%

Students will gain practical skills and technical knowledge in the area of studio sound engineering, recording and production. Areas covered include signal flow and gain structure, studio equipment, microphone placement and selection, recording, mixing effects, film sound, post-production, mastering and session management.

VETMUS 1953A/B Audio Studies (Diploma)

4 units - full year

1 hour seminar, 1 hour workshop per week

Restriction: pre-degree VET music students only

Assessment: mid-semester assignment 20%; project 40%; examination 40%

Students will study music software for digital sequencing, editing, processing and production. Students will gain practical skills and technical knowledge whilst achieving creative outcomes in the area of digital audio. Areas explored include recording, tracking, mixing, post-production, mastering, looping and sound-design. Software used includes Pro Tools, Bias Peak, Logic and Live.

VETMUS 1954A/B MIDI Studies (Diploma)

4 units - full year

1 hour seminar, 1 hour workshop per week

Restriction: pre-degree VET music students only

Assessment: mid-semester assignment 20%; project 40%; examination 40%

Students will study music software for MIDI sequencing and editing. Students will gain practical skills and technical knowledge whilst achieving creative outcomes in the area of MIDI. Areas examined include the MIDI protocol, systems setup, software and hardware implementation, virtual instrumentation, MIDI scoring and performance and advanced techniques. Software may include Cubase, GarageBand, Logic, ProTools, Reason and Live.

VETMUS 1955A/B Music Technology Forum (Diploma)

3 units - full year

2 hour seminar per week

Restriction: pre-degree VET music students only

Assessment: technical and creative assignments and presentations

Students will embrace and extend their practical skills, technical knowledge and creative development in the area of music technology. This will be achieved through a range of methods including specialist workshop topics, project participation, performance, industry and artist talks and presentations.

VETMUS 1956 Sound Engineering (Live)

2 units - semester 1 or semester 2

1 x 2 hour workshop per week

Restriction: pre-degree VET music students only

Assessment: mid-semester test 30%; practical examination 35%; theory examination 35%

Students will learn about the process of live sound engineering, reinforcement, production and management. Areas covered include PA setup, signal flow and gain structure, live sound equipment, microphone placement and selection, troubleshooting, pre-production, setup and session management.

Nursing Science

LEVEL I

NURSING 1000 Human Sciences IA

6 units - semester 1

Lectures, tutorials, workshops, labs, online teaching

Assessment: To be advised

This course will introduce students to the human sciences that provide the foundation of effective nursing practice. It will be comprised of the following modules that will facilitate student learning of: (i) Human Biology IA: the functional organisation of the body, the cell and its function, body fluids and chemistry, Homeostasis and control of the body functions. (ii) Microbiology, Immunology and Infection Control IA: classification of microbes and the basic principles of infection control. (iii) Health and Illness A: the physiological basis of health and illness, terminology, body image, sexuality and theories of health, illness and disease. Evidence based practice (EBP) and research in health care. (iv) Medication and Management IA: safe use of medicines, legislation governing administration and prescribing, modes of administration, fundamental skills for basic drug dose calculations and nomenclature and classification systems.

NURSING 1001 Nursing Practice IA

6 units - semester 1

Workshops and clinical placement

Assessment: To be advised

This course will be comprised of the following modules: (i) Nursing as a Profession IA: the role of nurses in the provision of health care, history and nursing knowledge. Regulation of practice, legislation governing practice, The Australian Nursing and Midwifery Council Competencies, professional codes of practice and standards of practice. (ii) Therapeutics of Clinical Nursing IA: integration of the knowledge and attitudes learned throughout the program with the skills required for effective nursing practice. The foundation nursing skills involved in supporting patients in the activities of daily living, providing basic hygiene, principles of basic nutrition, manual handling, standard precautions and an introduction to basic life support will be practiced. Technology used in nursing care and occupational health and safety of nurses will be considered. Learning will be facilitated through workshops and clinical placements. The clinical cycle placement will be in an acute setting. (iii) Health Assessment IA: skills of interviewing, inspection, palpation, percussion and auscultation and recording vital signs. (iv) Communication and Psychosocial Care IA: effective communication between nurses and their patients and with members of the community and other health professionals. Human emotions, spirituality and death and dying. Trans-cultural

nursing: cultural safety in nursing.

NURSING 1002 Human Sciences IB

6 units - semester 2

Lectures, tutorials, workshops, labs, online learning

Assessment: To be advised

This course will build on Human Sciences IA and Nursing Practice IA. It will be comprised of the following modules that will facilitate student learning of: (i) Human Biology IB: structure and function of the body using the systems approach. (ii) Microbiology, Immunology and Infection Control IB. (iii) Medication Management IB: complex concepts of pharmacokinetics in relation to nursing practice. (iv) Health and Illness B: building on student's prior learning regarding the physiological basis of health and illness, nutrition, terminology, body image and sexuality. Student learning will be progressed regarding the theories of health, illness and disease. EBP and research in health care.

NURSING 1003 Nursing Practice IB

6 units - semester 2

Workshops and clinical placements

Assessment: To be advised

The course will be comprised of the following modules: (i) Nursing as Profession IB: ethics law, accountability and responsibility. (ii) Therapeutics of Clinical Nursing IB: this module will build on prior student learning in Therapeutics of Clinical Nursing IA with further integration of knowledge, attitudes and skills required for practice. Introduction to more complex skills required for safe and therapeutic nursing care. Students will have the opportunity to begin to learn how to practice in accordance with the ANC National Nursing Competency Standards for the Registered Nurse. Learning will be facilitated through workshops and clinical placements. The clinical cycle placement will be an acute setting. (iii) Health Assessment IB: continuing student's learning of nursing assessment. (iv) Communication and Psychosocial Care IB: building on student's learning of psychosocial care that developed from their learning in Nursing Practice IA and their experiential learning. (v) Trans-cultural Nursing IB: further concepts of cultural safety in nursing will be explored. Issues relating to providing care for Aboriginal and Torres Strait islander people and their families will be considered. The factors that need to be considered in caring for people with diverse cultures such as migrants will also be explored.

NURSING 1101NA Foundations of Nursing Practice I

3 units - semester 1

Intensive daily lectures and tutorials in weeks 1-2, 6-7, 11-12

Restriction: Only available to Bachelor of Nursing (Post Registration) students in Singapore

Assessment: Learning Portfolios

This course is designed to facilitate student learning about development of nursing as a profession and discipline. It will focus on professional issues and the elements of practice that distinguish nursing as a profession. These include healthcare ethics, law and advocacy. The students will be required to identify and describe how these issues relate to their current practice.

The curriculum includes the following content specified by the Singapore Nursing Board curriculum requirements: Healthcare Ethics and Law.

NURSING 1102NA Health Assessment

3 units - semester 1

Intensive daily lectures and tutorials in weeks 1-2, 6-7, 11-12

Restriction: Only available to Bachelor of Nursing (Post Registration) students in Singapore

Assessment: Case presentation and report

This course will enable students to build on their existing knowledge and skills to develop advanced clinical reasoning and problem solving skills. The topics for assessment have been based on the most common causes of mortality and morbidity as reported by the Singapore Ministry of Health in their statistics for 2007. It will link with Complex Clinical Practice. Students will be asked to consider a complex patient scenario based on their own practice setting. The skills required for advanced comprehensive physical, mental and psychosocial assessment will be identified and practiced. Behavioural issues will be identified and the implications these have for nursing practice will be discussed. This scenario will then be further developed in Complex Clinical Practice where the advanced pathophysiology and pharmacology will be the focus of study. It is anticipated that students will learn not only from their own cases but also from those presented by the other students. In presenting their case studies the students will further develop their own teaching skills.

The curriculum includes the following content specified by the Singapore Nursing Board curriculum requirements: Health and Physical assessment, Teaching and Learning, Pathophysiology, Applied Pharmacology, Behavioural Sciences and Sociology.

NURSING 1103NA Foundations of Nursing Practice II

3 units - semester 2

Intensive daily lectures in weeks 1 and 12, tutorials weeks 2,4,6,8,10

Restriction: Only available to Bachelor of Nursing (Post Registration) students in Singapore

Assumed Knowledge: Foundations of Nursing Practice I

Assessment: Learning portfolio and presentation

This course will build on Foundations of Nursing Practice I and will focus on the evolution of nursing knowledge, management and leadership, and the principles and practice of teaching and learning.

The curriculum includes the following content specified by the Singapore Nursing Board curriculum requirements:

Nursing Theories & Clinical Application, Teaching & Learning, and Nursing Management.

NURSING 1104NA Complex Clinical Practice

3 units - semester 2

Intensive daily lectures in weeks 1 and 12 and tutorials in weeks 2,4,8,10

Restriction: Only available to Bachelor of Nursing (Post Registration) students in Singapore

Assumed Knowledge: Health Assessment

Assessment: Case presentation and case report

This course will build on Health Assessment and will continue the focus on the development of advanced clinical reasoning and problem solving skills. Students will continue their work on a complex patient scenario based on their own practice setting; however this course will focus on the advanced pathophysiology and pharmacology relating to the chosen case. The patient scenarios from Health Assessment will be reviewed by the lecturer/teacher prior to the commencement of this course and weekly sessions relating to specific aspects of these cases will be scheduled. It is anticipated that students will learn not only from their own cases but also from those presented by the other students. In presenting their case studies the students will further develop their own teaching skills.

The curriculum includes the following content specified by the Singapore Nursing Board curriculum requirements: Health and Physical assessment, Teaching and Learning, Pathophysiology, Applied Pharmacology, and Behavioural Sciences and Sociology.

LEVEL II

NURSING 2000 Human Sciences IIA

6 units - semester 1

Lectures, tutorials and workshops

Restriction: B. Nurs students only

Prerequisite: Human Science IA/IB

Assessment: To be advised

This course will build on the learning from Human Sciences and Nursing Practice IA & IB. It will be comprised of the following modules that will facilitate student learning: (i) Human Pathophysiology IIA: human pathophysiology of the cardiovascular, respiratory systems endocrine, reproductive, haematological and lymphatic systems. (ii) Child & Youth Health: this module will facilitate student learning of the issues surrounding child and youth health. In particular the factors that influence the physical and social development of children and adolescents will be considered. (iii) Pharmacology and Complementary Therapies A: the pharmacological treatment of diseases using an evidence based, systems approach. There will also be content on natural remedies and therapies for common conditions.

NURSING 2001

Nursing Practice IIA

6 units - semester 1

Lectures, tutorials & clinical placement

Restriction: B.Nurs students only

Prerequisite: Nursing Practice IA, Nursing Practice IB

Assessment: To be advised

This course will build on the learning from Human Sciences and Nursing Practice IA & IB. It will be comprised of the following modules that will facilitate student learning of: (i) Nursing as a Profession IIA: further learning of legal and ethical issues. (ii) Therapeutics of Clinical Nursing IIA: this module will introduce students to further nursing and technological skills that when integrated with theory and professional attitudes, provide the foundation for competent nursing practice. Students will have the opportunity to begin to practice in accordance with the ANC National Nursing Competency Standards for the Registered Nurse. Learning will be facilitated through workshops and clinical placements. The Clinical Cycle will be a placement rural, paediatric, midwifery and community setting. (iii) Health Assessment IIA: this module will assist students in learning more advanced assessment skills. The recognition of abnormal findings of physical, and psychosocial assessments relating to the systems considered in Pathophysiology IIA will be explored. Basic assessment skills for specific populations will also be introduced. (iv) Communication & Psychosocial Care IIA: building on the student's learning of psychosocial care and developed from their learning in Nursing Practice IA and their experiential learning. This module will assist students to communicate effectively and provide care of people with particular needs.

NURSING 2002

Human Sciences IIB

6 units - semester 2

Lectures, tutorials and workshops

Restriction: B. Nurs students only

Prerequisite: Human Science IA/IB

Assessment: To be advised

This course will build on previous Human Sciences and Nursing Practice courses. It will be comprised of the following modules that will facilitate student learning of: (i) Human Pathophysiology IICD: this topic will further facilitate student learning in human pathophysiology, nursing therapeutics and treatment for the neurological, special senses: gastrointestinal, urinary, renal, musculoskeletal and integumentary systems. (ii) Human Development: a description human development from conception to aging. (iii) Pharmacology & Complementary Therapies B: this module will facilitate student learning of the pharmacology treatment of disease for common pathological conditions using evidence based, systems approach. Natural remedies and complementary therapies for pathophysiological conditions will also be considered.

NURSING 2003

Nursing Practice IIB

6 units - semester 2

Lectures, tutorials and clinical placement

Restriction: B. Nurs students only

Prerequisite: Nursing Practice IA/IB

Assessment: To be advised

This course will build on previous Human Sciences and Nursing Practice Courses. It will be comprised of the following modules that will facilitate student learning of:

(i) Nursing as a Profession IIB: this module will facilitate student learning of the legal and ethical issues surrounding professional nursing practice. This module will also assist students to continue to develop skills necessary for the planning and coordination of nursing care.

(ii) Therapeutics of Clinical Nursing IIB: this module will introduce students to further nursing and technological skills that, when integrated with theory and professional attitudes, provide the foundation for competent nursing practice. Students will have the opportunity to begin to practice in accordance with the ANC National Nursing Competency Standards for the Registered Nurse. Learning will be facilitated through workshops and clinical placements. The Clinical Cycle will be placement rural, paediatric, midwifery, community and acute setting.

(iii) Health Assessment IIB: this module will assist students in learning more advanced assessment skills. The recognition of abnormal finding of physical, and psychosocial assessments relating to the systems considered in Pathophysiology IICD will be explored.

(iv) Communication and Psychosocial Care IIB: this module will assist students' learning of issues relating to communication and psychosocial care of children and youths and those with special needs including and those relating to the pathophysiological conditions explored in Human Pathophysiology IICD. These issues will also be discussed in relation to the particular need of indigenous people and their communities.

LEVEL III

NURSING 3000

Human Sciences IIIA

6 units - semester 1

Approximately six lectures and two tutorials per week

Restriction: B. Nurs Students Only

Prerequisite: Human Sciences IIA/IIB

Assessment: To be advised

This course will builds on the previous Human Sciences courses and will facilitate students' learning of nursing therapeutics for complex illnesses. It will contain three modules. Nursing a Critically Ill Patient module which will facilitate the student's learning in the therapeutic nursing care of the critically ill patient. Nursing a patient in the Perioperative Environment module which will facilitate the

student's learning in the specialty of Perioperative nursing. Child and Youth Health module which will facilitate the students learning in the specialty of paediatric nursing. This course aims to allow the student to consolidate the synthesis of theoretical knowledge with practical nursing interventions.

NURSING 3001 Nursing Practice IIIA

6 units - semester 1

Approximately two lectures and two tutorials, plus 24 hours of Clinical Placement per week over an extended academic year

Restriction: B. Nurs Students Only

Prerequisite: Nursing Practice IIA/IIB

Assessment: To be advised

This course will build on the human and technical skills learned in the first two years of the program. It will be comprised of the four modules. Nursing as a Profession IIIA which describes the professional and legal issues associated with the role of the Registered Nurse. Health Assessment IIIA which introduces the skills necessary for a thorough nursing assessment such as interview, inspection and auscultation. Therapeutics of Clinical Nursing IIIA which is a practical 'hands on' subject. Communication & Psychosocial Care IIIA which facilitates the learning of the psychosocial care of patients with particular needs - in this semester this refers to patients in critical care, Perioperative and paediatric environments. Clinical Cycle will be a placement in critical care, Perioperative and paediatric environments. The students will have the opportunity to apply the theory from the specialist areas of critical care, Perioperative and paediatrics to the clinical setting.

NURSING 3002 Human Sciences 3B

6 units - semester 2

Approximately six lectures and two tutorials per week

Restriction: B. Nurs Students Only

Prerequisite: Human Sciences IIA/IIB and Human Sciences IIIA

Assessment: To be advised

This course will further facilitate students' learning of complex illnesses. It will contain three modules. Nursing the Patient with Mental Health Problems which will facilitate the students learning in the therapeutic care of the mentally ill patient. Nursing the Patient with Cancer will facilitate the students learning in the specialty of oncology nursing. Nursing the patient with special needs will facilitate the student's learning in the nursing of patients with chronic illness or disability and those who require palliation. This course aims to allow the student to consolidate the synthesis of theoretical knowledge with practical nursing interventions.

NURSING 3003 Nursing Practice IIIB

6 units - semester 2

Approximately two lectures and two tutorials, plus 24 hours of Clinical Placement per week over an extended academic year

Restriction: B. Nurs Students only

Prerequisite: Nursing Practice IIA/IIB and Nursing Practice IIIA

Assessment: To be advised

This course will further build on the human and technical skills learned in the first years of the program. It will be comprised of four modules.

Module 1: Therapeutics of Clinical Nursing IIIB - a practical 'hands on' oriented subject. This module will allow the student to consolidate your learning of nursing that when integrated with theory and professional attitudes, provide the foundation for competent nursing practice. Module 2: Nursing as a Profession IIIB - facilitates the learning of the professional issues related to nursing practice including occupational health and safety, regulation of practice, nurses and their role in the changing structure of health care. This module will also assist you to explore the issues relating to your transition from a student to registered nurse. Module 3: Health Assessment IIIB - this module facilitates the student to improve your assessment skills for a more comprehensive nursing assessment including interviewing and carrying out appropriate physical assessments of patient with mental health problems, with cancer or with special needs. Module 4: Communication and Psychosocial Care IIIB - facilitates the learning of the psychosocial care of patients with particular needs - in this semester it refers to patients with mental health problems, patients with cancer and again patients with special needs.

HONOURS

NURSING 4000AHO/BHO Honours Clinical Nursing

24 units - full year

Syllabus details to be advised.

NURSING 4100A/B Honours Nursing (Two Year)

24 units - full year

Syllabus details to be advised.

Obstetrics & Gynaecology

LEVEL III

OB&GYNAE 3000 Human Reproductive Health III

6 units - semester 2

1 lecture, 3 hours problem based learning workshops and laboratory based research training per week

Restriction: B. Health.Sc, B.Psych(Hons) students, B.Sc students subject to approval by their Faculty

Prerequisite: ANAT SC 1102A/B, PATHOL 2000

Assessment: Written, oral assessment 70%, peer assessment of contribution to problem based learning & retraining: must be satisfactory, exam 30%

This course presents major aspects of human reproductive biology and function and technologies. Students will obtain insights into current understanding of the developmental biology of reproduction in humans and the application of reproductive technology to human health and disease. Students will be introduced to the social, medical, scientific, moral and ethical issues associated with human reproduction and its regulation, in the control of fertility, treatment of infertility and other applications such as stem cell biology. Students will gain sufficient understanding to critically evaluate past, present and emerging methods of investigation and management of reproductive function. The topic will be introduced through focused studies of human population dynamics and the contribution of developmental biology to adult health. The biology and pathology of fertilisation, implantation, embryonic and fetal growth and development and of adaptation to pregnancy will be addressed, together with developmental programming of physiological fitness throughout life and the risk of cardiovascular and related diseases in humans. The course concludes with the influence of reproductive hormones on human behaviour. Understanding will be developed at the molecular, cellular and physiological levels, through lectures, problem-based learning and research training, involving reproduction and relevant technologies.

HONOURS

OB&GYNÆ 4000AHO/BHO Honours Obstetrics and Gynaecology

24 units - full year

Restriction: appropriately qualified B.Hlth.Sc, B.Med.Sc, B.Sc students or permission of Head of Discipline

Assessment: To be advised at start of year, includes literature review, research seminars & thesis

Students requiring further information concerning syllabuses and work required for the Honours degree are advised to consult the Head of Discipline as early as possible. Potential projects are listed on the discipline.

OB&GYNÆ 4100AHO/BHO Honours Obstetrics & Gynaecology (Two Year)

24 units - full year

Restriction: Appropriately qualified B.Hlth.Sc, B.Med.Sc, B.Sc students or permission of Head of Discipline

Assessment: To be advised at start of year, includes literature review, research seminars & thesis

Students requiring further information concerning syllabuses and work required for the Honours degree are advised to consult the Head of Department as early as possible. Potential projects are listed on the departmental website.

Oenology

LEVEL I

OENOLOGY 1000EX/NW Introductory Grape and Wine Knowledge I

3 units - semester 1

External: 5 day Residential School in Mid Semester Break; Internal: 1 x 2 hour Lecture per week, 3 x 3 hour Practical per Semester

Restriction: B Wine Marketing, Dip Wine Marketing

Assessment: Semester written exams, practical tests

Grapevine morphology, growth and development; grape berry development; changes in grape berry composition during ripening; physiology of smell and taste; basic winemaking principles. Practical exercises sessions designed to train student's palate in wine sensory evaluation and to differentiate between Australian wine types and styles.

OENOLOGY 1001EX/NW Vineyard and Winery Operations I

3 units - semester 2

External: 5 day Residential School in Mid Semester Break; Internal: 1 x 2 hour Lecture, 5 day residential school in Mid Semester Break

Restriction: B Wine Marketing, Dip Wine Marketing

Prerequisite: OENOLOGY 1000NW/1000EX

Assessment: Semester written exams, practical tests

Climatic requirements for grapevines; vineyard design, establishment and operations including pruning, irrigation, canopy management, soil management and pest and disease management; characteristics of major white wine grape varieties; principles and practices of white and sparkling wine production; major white wine styles of the world; oak in winemaking.

Practical sessions relate to lecture topics and include viticulture exercises and wine sensory evaluation.

OENOLOGY 1018NW Foundations of Wine Science I

3 units - semester 1

1 x 2 hour Lecture per week, 3 x 3 hour Practical per Semester, 5 day residential school in Mid Semester Break

Restriction: BSc (Viticulture), B Oenology

Assessment: Written exam & practical exam

Grapevine morphology, growth and development; grape berry development; changes in grape berry composition during ripening; physiology of smell and taste; basic winemaking principles. Practical exercise sessions designed to train student's palate in wine sensory evaluation and to differentiate between Australian wine types and styles. This course shares lectures and practicals with Introductory Grape and Wine Knowledge (OENOLOGY 1000NW) Extra material is provided for Viticulture and Oenology students covering some aspects in greater scientific depth.

LEVEL II

OENOLOGY 2500EX/NW Vineyard and Winery Operations II

3 units - semester 1

External: 5 day Residential School in Mid Semester Break; Internal: 1 x 2 hour Lecture per week, 5 day residential school in Mid Semester Break

Restriction: B Wine Marketing, Dip Wine Marketing

Prerequisite: OENOLOGY 1001NW or OENOLOGY 1001EX

Assessment: Exam, practical tests, reports

Characteristics of major red wine grape varieties; principles and practices of red wine production; major red wine styles of the world; red wine faults; techniques for grapevine improvement and biotechnology, as applied to the wine industry; wine packaging, bottling operations and quality standards; sensory science. Practical sessions relate to lecture topics and will include tasting sessions.

OENOLOGY 2501WT Microbiology for Viticulture and Oenology II

3 units - semester 1

1 hour Lectures, 1 hour Tutorial, 4 hour Practical per week

Restriction: BSc (Viticulture)

Assumed Knowledge: BIOLOGY 1202, BIOLOGY 1101 and OENOLOGY 1018NW

Assessment: Practical attendance, reports, exam, tutorial exercises

An introduction to the biology of microorganisms and invertebrates of importance in agriculture and natural ecosystems with particular emphasis on viticulture and oenology. Topics to be considered include: microbial growth, energy sources and nutritional categories; form and function of major groups of microorganisms; classification and identification; beneficial and deleterious activities of microorganisms; features of saprophytic, pathogenic, symbiotic and commensal lifestyles; determinants of pathogenicity and resistance; interactions of microorganisms and environment; nature and occurrence of Botrytis, yeasts and bacteria associated with the vineyard and winery, and their influence on grape and wine quality; interactions between wine yeast and bacteria; spoilage and selected strains of yeast in wine; nutritional requirements and wine processing parameters affecting growth and activity of wine yeast; practical skills for manipulating microorganisms and invertebrates and studying their activities.

OENOLOGY 2502WT Sensory Studies II

3 units - semester 2

2 x 1 hour Lectures, 4 hour Practical per week

Restriction: B Oenology, BSc (Viticulture)

Assumed Knowledge: BIOLOGY 1202, BIOLOGY 1101, OENOLOGY 1018NW, CHEM 1100 or CHEM 1101, CHEM 1102 or CHEM 1201

Assessment: Exams, written exercises, presentations, practicals

This course provides a scientifically based introduction to sensory evaluation and its relationship to the winemaking process, and promotes the development of technically

accurate wine assessment skills. The physiology of taste receptors, olfaction and the structure of oral mucosa are examined. Recent advances in knowledge including the function of signal transduction molecules and protein structure are used to explain current models of flavour, astringency and taste perception. Basic flavour chemistry of grapes and wine and wine faults is introduced. An introduction to sensory measurement theory, psychophysics, aroma and taste interactions, threshold measurement and the psychological and physiological factors affecting perception is presented. The concept of adaptation and its application to the sensory evaluation of wines, and elements of good sensory practice including data collection and statistical analysis are described. The practical program will be used to develop basic skills in sensory assessment of wines leading to the interpretation of wine characteristics in terms of wine style and quality. This is achieved by a progressive development of sensory skills, using model solutions to depict basic tastes and their interactions, followed by detailed examination of white and red table, fortified and sparkling wines, and wine and food interactions.

OENOLOGY 2503WT Introductory Winemaking II

3 units - semester 2

1 x 2 hour Lecture, 4 hour Practical per week

Assumed Knowledge: BIOLOGY 1202, BIOLOGY 1101, OENOLOGY 1018NW, CHEM 1100 or CHEM 1101, CHEM 1200 or CHEM 1201

Assessment: Practical Reports, Assignments, Exam

Introduction to the Australian wine industry. Chemistry and uni processes of winemaking. Production of table wines, including dry floral fruity white, full bodied white, sweet white, rosé, medium and full bodied red wines. Introduction to wine stabilisation and maturation processes.

LEVEL III

OENOLOGY 3001WT Research Project: Oenology III

3 units - semester 1 or 2

10 hours per week /1 semester or equiv. on project

Assessment: literature review, research proposal, seminar

Enrolment subject to the approval of the Head of Discipline

The course comprises a small research project to be undertaken during the 4th year of the course under the supervision of a staff member in the Discipline. Students wishing to undertake a research project should consult the Course Coordinator before the beginning of the 4th year.

OENOLOGY 3003WT Wine Packaging and Quality Management III

3 units - semester 1 or 2

2 lectures, 4 hours practicals/field trips per week

Restriction: UWA students only

Prerequisite: OENOLOGY 3007WA and OENOLOGY 3047WA

Assessment: Practical, reports, written assignments & exams

Science and technology of bottling and packaging systems including chemical and physical properties of packaging materials, principles of filling machinery, design and process control of wine filling/packaging systems.

Wine and food laws and commercial forces as quality standards. Taints and residues in grapes and wine as quality issues. Approaches and systems of quality management using the wine industry as a focus, including the development of corporate quality cultures, standards and specifications. Visits will be made to commercial plants.

OENOLOGY 3007WT Stabilisation and Clarification III

3 units - semester 1

Up to 6 hours per week including lectures and practicals

Restriction: UWA students only

Prerequisite: OENOLOGY 2024WA

Assessment: Practicals, reports, written assignments, exam

Principles and practices of wine clarification and stabilisation. Protein, tartrate, metal, colour oxidative, and microbiological stability and stability testing of wine. Wine clarification by means of settling, centrifugation, filtration and fining.

OENOLOGY 3016WT Cellar and Winery Waste Management III

3 units - semester 1

Average of 6 hours per week including lectures, tutorials, practicals &/or field work

Restriction: UWA students only

Prerequisite: OENOLOGY 2024WA

Corequisite: OENOLOGY 3047WA

Assessment: Final exam, practical reports & tutorial papers

Vintage planning; occupational health and safety, winery record keeping; microbial control, cellular hygiene; winery waste management, environmental management.

OENOLOGY 3033WT Industry Experience (Oenology) III

4 units - semester 1

10 weeks work experience

Prerequisite: OENOLOGY 7010WT, OENOLOGY 7047WT and OENOLOGY 7022WT

Assessment: Written diary, written report, poster presentation

This course is largely practically orientated, based on work experience at a commercial winery during vintage. A specified level of proficiency in the following operations is expected: grape receipt and weighbridge; crushing; draining and pressing; fermentation and postfermentation operations and quality control procedures. Furthermore, an understanding of the contribution of each of the specified unit operations to the overall winemaking process is required.

OENOLOGY 3037WT Distillation, Fortified & Sparkling Winemaking III

3 units - semester 2

Up to 6 hours per week including lectures and practicals - some practical components may be held in mid semester break

Restriction: UWA students only

Prerequisite: OENOLOGY 2024WA, OENOLOGY 2022WA and OENOLOGY 3016WA

Assessment: Practical reports, assignments, written exam

Distillation principles and wine distillation practices. Production of Australian and overseas grape spirits for fortified wine and brandy production. Production of potable distilled beverages other than brandy. Legal requirements of fortified wine production and distillation. Production of Australian and overseas sparkling wine styles. Sensory evaluation of spirits, fortified and sparkling wines.

OENOLOGY 3045WT Advances in Oenology III

3 units - semester 2

Average of 6 hours per week including lectures, tutorials, practicals &/or field work

Restriction: UWA students only

Assumed Knowledge: OENOLOGY 2024

Assessment: Written exam, reports on practical exercises, industry visits

Current research and practices in oenology. Particular emphasis will be placed on grape and wine phenolics and flavour compounds; methods of analysis in wine science; yeast biochemistry including nutrition, sugar transport, nitrogen and organic acid metabolism, ethanol toxicity, sulphur dioxide production and tolerance, yeast aroma compounds; the malolactic fermentation - biochemical and molecular approaches. Wine industry visits will focus on modern practices and recent developments to increase production efficiencies and wine quality.

OENOLOGY 3046WT Fermentation Technology III

3 units - semester 2

Average of 6 hours per week including lectures, tutorials, practicals &/or field work

Restriction: UWA students

Prerequisite: OENOLOGY 2024WA and OENOLOGY 2022WA

Assessment: Exam, written work, practical reports, group oral presentations

This practical course provides students with the opportunity to gain hands on winemaking experience that expands on areas of fermentation technology and preparation of wine for bottling post vintage. The course introduces students to the planning and managing of winemaking strategies, and importantly complements the theory covered in the other wine technology courses for table wine production. Another objective of this course is to help students make a considerable progression in the development of their wine sensory evaluation skills

OENOLOGY 3047WT Winemaking at Vintage III

3 units - semester 1

Average of 6 hours per week including lectures, tutorials, &/or practicals

Restriction: UWA students only

Prerequisite: OENOLOGY 2024WA and OENOLOGY 2022WA

Corequisite: OENOLOGY 3016WA

Assessment: To be advised

This practical course provides students with the opportunity to gain hands on winemaking experience over the vintage period. The course introduces students to the planning and managing of winemaking strategies. It covers all aspects of grape processing, white juice preparation and red wine fermentation and is designed to complement the theory covered in the other wine technology courses for table wine production. This course also aims to help students make a considerable progression in the developments of their wine sensory evaluation skills.

OENOLOGY 3500WT Industry Experience (Viticulture & Oenology) III

3 units - semester 1 or semester 2

10 weeks work experience (full-time employment)

Restriction: Bachelor of Oenology

Prerequisite(s): OENOLOGY 3047WT and OENOLOGY 3016WT

Assessment: Written diary, written report, oral presentation

This course is largely practically orientated, based on work experience at a commercial winery during vintage. A specified level of proficiency in the following operations is expected: grape receipt and weighbridge; crushing; draining and pressing; fermentation and post-fermentation operations and quality control procedures. Furthermore, an understanding of the contribution of each of the specified unit operations to the overall winemaking process is required. Students can undertake this course in either semester.

HONOURS

OENOLOGY 4002AWT/BWT Honours Oenology

12 units - full year

40 Hours a week

Prerequisite: Credit or higher in two relevant Level III courses as approved by the Head of Discipline

Assessment: Thesis, seminars, remainder as deemed appropriate to the student's program

This course comprises a substantial research project of the student's choosing on a topic acceptable to the Discipline of Wine and Horticulture, two seminars on that topic, and coursework, essays or other assignments deemed appropriate to the individual student's honours program.

OENOLOGY 4003AWT/BWT Honours Wine Science (Two Year)

24 units - full year

20 hours per week for 40 weeks over a 2 year period

Prerequisite(s): Credit or higher in relevant Level III courses as approved by the Head of Discipline

Assessment: Thesis, seminar, remainder as deemed appropriate to the student's program

This course comprises a substantial research project of the student's choosing in a topic acceptable to the head of School of Agriculture, Food and Wine, two seminars on that topic, and coursework, essays or other assignments deemed appropriate to the individual student's honours program.

OENOLOGY 4004AWT/BWT Honours Wine Science

24 units - full year

40 hours per week for 40 weeks

Prerequisite: Credit or higher in relevant Level III courses as approved by the Head of Discipline

Assessment: Thesis, seminars, remainder as deemed appropriate to the student's program

This course comprises a substantial research project of the student's choosing in a topic acceptable to the head of School of Agriculture, Food and Wine, two seminars on that topic, and coursework, essays or other assignments deemed appropriate to the individual student's honours program.

Oral Health

LEVEL I

ORALHLTH 1200HO First Annual Oral Health Examination

ORALHLTH 1201AHO/BHO Dental and Health Science IOH

6 units - full year

7 hours per week including class meetings/learning laboratories/tutorials

Restriction: BOH students only

Corequisite: DENT 1202AHO/BHO, DENT 1203AHO/BHO, DENT 1204AHO/BHO

Assessment: Tests, practical assessments, assignments, written exams (OSCA), presentations

This stream aims to introduce students to the oral cavity. It also provides an introduction to the areas which support the practice of an oral health practitioner. Problem-based learning allows students to use a systematic approach to investigating various oral conditions which will affect their prospective client group. In addition to this, students are introduced to the behavioural sciences and psychology relevant to their role in the dental team. Topics include: dental terminology and morphology, preventive dentistry, cariology, fluoride, developmental psychology, behavioural science in dentistry, and nutrition.

ORALHLTH 1202AHO/BHO Clinical Practice IOH

8 units - full year

12 hours per week including class meetings/clinical/practical sessions

Restriction: BOH students only

Corequisite: DENT 1201AHO/BHO Dental and Health Science IOH, DENT 1201AHO/BHO, DENT 1203AHO/BHO, DENT 1204AHO/BHO

Assessment: Tests, practical assessment, assignments, journals, viva voces & written exams

This stream aims to provide students with an opportunity to integrate theoretical and practical skills. Students will be given an opportunity to gain operative experience at the chairside, technical and office management levels. Topics include infection control, occupational health and safety, dental records, pre-clinical studies, applied dental clinical practice and radiography.

ORALHLTH 1203AHO/BHO **Human Biology IOH**

6 units - full year

8 hours per week including class meetings/laboratory sessions/research-based practical sessions/tutorials

Restriction: BOH students only

Corequisite: DENT 1201AHO/BHO, DENT 1202AHO/BHO, DENT 1204AHO/BHO

Assessment: Assignments, tutorial & laboratory exercises, tests, viva voces, written exams

This stream aims to provide the student with the biological grounding upon which the practice of dentistry rests. It is an introduction to the anatomy and physiology of the human body and in particular the teeth and orofacial regions. Topics include: basic biochemistry, general anatomy and physiology, general histology, oral histology and embryology, anatomy and physiology of the head and neck, microbiology and immunology.

ORALHLTH 1204AHO/BHO **General Studies IOH**

4 units - full year

3.5 hours per week

Restriction: BOH students only

Corequisite: DENT 1201AHO/BHO, DENT 1202AHO/BHO, DENT 1203AHO/BHO

Assessment: Written reports, assignments, written exams and groups projects

This stream aims to provide the student with a range of skills to support their role as an oral health professional. Topics include communication and learning, computing, evidence-based dentistry and behavioural science. Communication and learning introduces students to the educational philosophy and various study skills of the BOH program and emphasises the need to be proficient in all modes of communication. Computing will provide the student with a basic understanding of computing fundamentals, electronic record keeping and literature searches. Evidence-based dentistry will provide students with an appreciation of the nature and scope of statistics applied to dentistry. It will provide the students with an understanding of different study designs used in dental research and a working knowledge of basic statistics, interpretation and data analysis. Behavioural science will introduce the student to skills required for managing patients of different ages and the approaches necessary to facilitate positive health behaviours.

LEVEL II

ORALHLTH 2200HO **Second Annual Oral Health Examination**

ORALHLTH 2201AHO/BHO **Dental & Health Science IOH**

4 units - full year

7.5 hours per week including class meetings/learning laboratories/tutorials

Restriction: BOH students only

Prerequisite: DENT 1201A/BHO, DENT 1200HO

Corequisite: DENT 2202AHO/BHOH, DENT 2203AHO/BHO, DENT 2204AHO/BHO

Assessment: Tests, assignments, viva voces, seminars, written exams

This stream aims to build upon the knowledge gained in first year, as well as introduce new areas of contemporary dental practice. It consolidates the role of the oral health practitioner in community dental health issues and develops the knowledge of cariology, prevention and health promotion. Topics include: cariology, fluoride, community health and health promotion.

ORALHLTH 2202AHO/BHO **Clinical Practice IOH**

12 units - full year

18 hours per week including laboratory/clinical sessions

Restriction: BOH students only

Prerequisite: DENT 1202A/BHO, DENT 1200HO

Corequisite: DENT 2201AHO/BHO, DENT 2203AHO/BHO, DENT 2204AHO/BHO

Assessment: Observation, journals, viva voces, practical exams, written exams

This stream aims to build upon Clinical Practice I with regard to the consolidation of preventive, periodontal and restorative clinical skills, through manikin exercises and provision of treatment for selected patients. Strong emphasis is placed on the ability to consistently apply quality assurance principles and processes in oral health practice.

Topics include clinical dental hygiene practice, operative dentistry (theory & practical), pedodontics, clinical dental therapy practice and periodontics.

ORALHLTH 2203AHO/BHO **Human Biology IOH**

4 units - full year

3 hours per week class meetings/research-based practical sessions/tutorials

Restriction: BOH students only

Prerequisite: DENT 1203A/BOH, DENT 1200HO

Corequisite: DENT 2201AHO/BHO, DENT 2202AHO/BHO, DENT 2204AHO/BHO

Assessment: Practical tests, viva voces & written exams

This stream aims to prepare the student to understand the medical aspects of clinical dentistry, pharmacology, local anaesthetics and the role of the oral health practitioner in the management of medical and dental emergencies in

dental practice. Topics include applied oral microbiology, medicine and pharmacology, pathology, applied oral pathology.

ORALHLTH 2204HO **General Studies IIOH**

4 units - semester 1

3 hours per week

Restriction: BOH students only

Prerequisite: DENT 1200HO

Corequisite: DENT 2201AHO/BHO, DENT 2202AHO/BHO, DENT 2203AHO/BHO

Assessment: Assignments, tests, written exams, journal reviews

This stream aims to equip the student with the skills to analyse and review journal articles. Furthermore, students will have the opportunity to gain skills in the process of collecting, collating and analysing data. Topics include evidence-based dentistry, biostatistics, epidemiology and social context of dentistry.

ORALHLTH 2205AHO/BHO **Dental Hygiene Clinical Practice**

12 units - full year

19 hours per week including laboratory/clinical sessions

Restriction: Qualified Dental Therapists only

Corequisite: ORALHLTH 2203AHO/BHO

Incompatible: Course advice must be received from the Dental School prior to enrolment in this course

Assessment: Observation, journals, viva voces, practical exams, written exams

This stream introduces students to clinical practice of a Dental Hygienist and provides a foundation for patient management and oral health practice as a career. Students will work through a range of clinical and laboratory based exercises centred on the provision of patient care, clinical skills and knowledge. Students work in a collaborative environment and learning will be supported by independent study and discussion of findings in class. Strong emphasis is placed on the ability to consistently apply quality assurance principles and processes in oral health practice. Topics include infection control, occupational health and safety, dental records, preventive dentistry and the management of periodontal disease, development of manual dexterity skills and applied dental hygiene practice.

LEVEL III

ORALHLTH 3200HO **Third Annual Oral Health Examination**

ORALHLTH 3201AHO/BHO **Dental & Health Science**

8 units - full year

3.5 hours per week including class meetings/research-based practical sessions/tutorials

Restriction: BOH students only

Prerequisite: DENT 2201A/BHO, DENT 2200HO

Corequisite: DENT3202AHO/BHO, DENT3204AHO/BHO

Assessment: Assignments, tutorial & seminar presentations, OSCA, presentation patients and viva voces

This stream aims to further develop and consolidate the student's paedodontic clinical role. In addition the topics of gerodontology and dental public health will also give the student the opportunity to broaden their dental focus.

Topics include paedodontics, gerodontology, dental public health, panoramic radiography, early childhood caries, orthodontics, oral pathology, panoramic radiology and clinical dentistry for dental therapy practice.

ORALHLTH 3202AHO/BHO **Clinical Practice IIIIOH**

12 units - full year

16 hours per week including clinical sessions

Restriction: available to BOH students only

Prerequisite: ENT 2202A/BHO DENT 2200HO

Corequisite: DENT 3201AHO/BHO, DENT3204AHO/BHO

Assessment: Clinical practice, presentation of patient reports and viva voces

This stream aims to further develop the student's preventive, periodontal and operative role as an oral health practitioner. Topics include dental therapy practice, dental hygiene practice and clinical radiology.

ORALHLTH 3204AHO/BHO **Oral Health Elective IIIIOH**

4 units - full year

7 hours per week in semester 2

Restriction: BOH students only

Prerequisite: DENT 2200HO

Corequisite: DENT 3201AHO/BHO, DENT3202AHO/BHO

Assessment: Written reports, presentations

This stream aims to provide the student with the necessary research skills to undertake a major study and the opportunity to focus on a major research assignment to enhance their role as an oral health practitioner. Topics include research methodology and a major assignment.

Pathology

LEVEL II

PATHOL 2200 **Biology of Disease II**

3 units - semester 2

3 lectures/large group tutorials per week

Restriction: B.Hlth.Sc. & B.Psych (Hons) students only

Prerequisite: ANAT SC 1102, ANAT SC 1103

Assessment: 2.5 hour written exam 60%, 4 written assignments 40% continuous assessment

The course provides a general introduction to pathology, i.e. the scientific study of disease. Topics covered include the classification, causes and mechanisms of basic tissue processes which underlie disease (e.g. inflammation,

ischaemia, neoplasia) as well as discussion of the pathology of some common diseases (e.g. diabetes mellitus, ischaemic heart disease, and some cancers).

LEVEL III

PATHOL 3003 **General Pathology IIIHS**

6 units - semester 1

3 lectures, 2 hour practical per week, 1 hour tutorial per fortnight

Restriction: B.Hlth.Sc., B.Sc & B.Psych (Hons) students

Prerequisite: B.Hlth.Sc. students - pass in ANAT SC 1102, ANAT SC 1103, PATHOL 2000 ; Other students - pass in one or more of: PHYSIOL 2003, ANAT SC 2104 or equivs (may be waived in special circumstances by course coordinator)

Assessment: Exams, assignments

The aim of this course is to provide students with an overview of the causes and consequences of human disease. General topics covered include the nature and causes of cell injury and death; adaptive cellular changes; healing and repair, thrombosis, embolism and infarction and neoplasia. More detailed attention is given to cardiovascular, pulmonary and gastrointestinal diseases and common cancers and the pathology is correlated with major clinical symptoms and signs. The tutorials and practical classes provide an opportunity for students to examine macroscopic and microscopic specimens illustrating the pathology covered in lectures. A background knowledge of basic anatomy, histology and physiology is expected.

PATHOL 3100 **Topics in Forensic Sciences**

3 units - semester 2

2 lectures per week

Restriction: B.Hlth.Sc., B.Sc & B.Psych (Hons) students

Prerequisite: Pass in PATHOL 3003

Assessment: Exams, assignments

The aim of this course is to provide students with an overview of a variety of topics within the area of forensic sciences including pathology, toxicology, anthropology and odontology. It is not intended to provide students with a detailed knowledge of any of these areas, but rather provide insight into how they may be used to investigate crime. Topics to be covered include the changes in the body with death and decomposition; the pathology of wounds; burns; disaster victim identification; sudden death in children and adults; medical misadventure and drug related deaths. A background knowledge of basic anatomy and physiology is expected.

PATHOL 3200 **Neurological Diseases**

3 units - semester 2

2 Lectures, 2 hour practical, 1 hour large group tutorial per fortnight

Restriction: B. Hlth. Sc. & B. Psych (Hons) students

Prerequisite: B.Hlth. Sc. students - Pass in PATHOL 2000; Other Students - pass in one or more of PHYSIOL 2004, ANAT SC2104 or equiv (or approval of course coordinator)

Assessment: Exams, assignments, oral presentation

The aim of this course is to provide students with an understanding of a range of diseases and conditions affecting the central and peripheral nervous systems. General topics covered include the causes and consequences of raised intracranial pressure, headache, infections, tumours and dementia, as well as more specific disorders such as epilepsy and multiple sclerosis. Traumatic brain and spinal cord injury, stroke and the effects of alcohol and illicit drugs on the brain will also be discussed. The practical classes provide an opportunity for students to examine macroscopic and microscopic specimens illustrating selected pathologies covered in lectures.

HONOURS

PATHOL 4000A/B **Honours Pathology**

24 units - full year

Restriction: B.Med.Sc. & B.Hlth.Sc. students, or by permission of Head of Discipline

Assessment: Details provided at start of academic year

Students requiring further information are advised to consult the Head of Discipline.

PATHOL 4001A/B **Honours Pathology (Two Year)**

24 units - full year

Syllabus details to be advised.

Pharmacology

LEVEL II

PHARM 2100 **Drugs, Chemicals and Health**

3 units - semester 1

2 lectures, 1 tutorial and 1 workshop per week

Restriction: B.Hlth.Sci, B.Psych.(Hons.) students, B Eng (Pharmaceutical Engineering)

Prerequisite: At least one of the following ANAT SC 1102 Human Biology 1A or GENETICS 1000A/B Molecular and Cell Biology or ENV BIOL 1000A/B Biology 1 (or equiv)

Assessment: Exam on lecture material, assessment test, assignments

The course introduces students to basic pharmacological concepts and principles needed to understand the effects of drugs in humans. Students will gain an appreciation for how drugs interact with cellular target molecules, as well as for the cellular and physiological responses resulting from such interactions. These concepts will be illustrated by examining major drug classes and their use in the treatment of major human diseases, including drugs that influence the central nervous system.

PHARM 2200 Drugs, Chemicals and the Environment

3 units - semester 2

2 lectures per week, 1 tutorial per fortnight, 1 workshop per month

Restriction: B.Hlth.Sci, B.Psych (Hons) students, B Eng (Pharmaceutical Engineering)

Prerequisite: PHARM 2100

Assessment: Exam on lecture material, assessment test, assignments

The course will provide an appreciation for the potential negative health effects accompanying human exposure to foreign and naturally occurring chemicals. Specific classes of toxic substances and the mechanisms underlying their adverse effects will be surveyed. Students will also develop an understanding of the methods used by toxicologists to ensure chemicals that enter the human environment are safe.

LEVEL III

PHARM 3010 Pharmacology A III

6 units - semester 1

Weekly lectures, tutorials, practical sessions

Restriction: B.Health.Sc, B.Psych(Hons), B.Sc, B.Sc.(Biomed.Sc.), B.Sc.(Biotech.) B.Sc and Engineering students only

Quota will apply

Prerequisite: Minimum 6 units in either of level II biochemistry, chemistry or physiology courses, Or a minimum of 3 units in level II pharmacology or level II pathology

Incompatible: Not available to students who have passed any of: PHARM 3004, PHARM 3005, PHARM 3006

Assessment: Exam on lecture material, practical reports, assessment test

The course will provide students with an understanding of how new drugs are discovered and developed. Students will also gain an understanding of drug-receptor interactions and the problems encountered during the identification and design of new chemicals with promising pharmacological actions. The practical component of this course will provide laboratory and experimental proficiency for students, ensuring they gain an appreciation for studying drug actions at different levels of biological organisation, ranging from simple in vitro systems (e.g. organ baths) to whole animals.

PHARM 3011 Pharmacology B III

6 units - semester 2

Weekly lectures, tutorials, practical sessions

Restriction: B.Health.Sc, B.Psych(Hons), B.Sc, B.Sc.(Biomed.Sc.), B.Sc.(Biotech.) students only

Quota will apply

Prerequisite: PHARM 3010

Incompatible: Not available to students who have passed any of: PHARM 3007, PHARM 3008, PHARM 3009

Assessment: Exam on lecture material, research reports, assessment test

Particular emphasis is given to the key factors that

influence and govern the effects of drugs within the body, ranging from molecular determinants to physiological factors that control disposition of drugs within the body. In addition, students will cover topics in toxicology and selected systems pharmacology. The laboratory component of the course will provide proficiency in the design and execution of research projects using modern experimental methodologies. Students will explore a range of contemporary pharmacological problems while working on 10 week projects that span such areas as pharmacogenetics, pharmacokinetics, drug abuse, neuropharmacology and molecular toxicology.

HONOURS

PHARM 4000A/B Honours Pharmacology

24 units - full year

Prerequisite: Satisfactory performance in level III courses offered by Discipline of Pharmacology or acceptable alternative (subject to approval of Head of Discipline)

Assessment: To be advised at start of year

Intending candidates should consult the Honours Coordinator, Discipline of Pharmacology during the final year of their program

Candidates are required to give their full attendance to a special program of study and experimental work in the pharmacology laboratory, and to participate in a research project under the direction of a member of the academic staff. The results of the research project are to be embodied in a thesis in a form specified by the Discipline. Seminar presentations and a written assignment will also be required.

PHARM 4100B Honours Pharmacology (Two Year) Final

24 units - full year

Prerequisite(s): Satisfactory performance in level III courses offered by Pharmacology or acceptable alternative (subject to approval of Head of Discipline)

Assessment: to be advised at start of year

Intending candidates should consult the Honours Coordinator, Discipline of Pharmacology during the final year of their program.

Candidates are required to give their full attendance to a special program of study and experimental work in the pharmacology laboratory, and to participate in a research project under the direction of a member of the academic staff. The results of the research project are to be embodied in a thesis in a form specified by the Discipline. Seminar presentations and a written assignment will also be required.

PHARM 4200 Drug Discovery and Development

3 units - semester 1

2 x 1 hour lectures, 1 x 1 hour tutorial and 1 x 3 hour workshop

Restriction: Completion of 3rd year B.E (Pharm)

Prerequisite(s): Pass in PHARM 2100 Drigs, Chemicals and Health

Assessment: Exam on lecture material, assessment test, workshop presentations, assignments

Overall Aim: To provide an appreciation of drug discovery and development in an international setting. Students will gain an understanding of the problems encountered during the identification and design of new chemicals with promising pharmacological actions. The students will understand the Drug Development process from the time of first administration of an entity produced by the drug discovery process to humans through to registration of a drug with the relevant governmental agencies.

Summary of course:

1. Historical Aspects Milestones in Drug Discovery
2. Finding Drug-like Molecules: Chemical Consideration Physicochemical Factors - Physiological
3. New Methods in Drug Design - Computational & Combinatorial Approaches New Methods in Identifying Drug Targets - proteomics, genomics, etc
4. From drug-like entity to the bedside, overview of drug development
5. Pre-clinical toxicology
6. Ethical issues in clinical trials. Design and statistical considerations
7. The 'metrics': what outcomes should be measured (pharmacokinetic, pharmacodynamic, surrogate Pharmacodynamic, adverse effects, questionnaires, quality of life outcomes
8. Phase I Human Studies
9. Phase II Human Studies including special patient groups
10. Phase III Human studies including special patient groups
11. Bioequivalence and pharmacokinetics (clinical studies versus marketed formulation: effect of different formulations on PK and outcomes)
12. Good clinical practice. Post-marketing/ pharmacovigilance
13. Biotechnology products
14. Drug registration

Philosophy

LEVEL I

PHIL 1101

Argument and Critical Thinking

3 units - semester 2

3 contact hours per week

Available for Non-Award Study

Assumed Knowledge: ESL students are advised to consult Course Coordinator to discuss enrolment in the course

Assessment: 500 word essay & 1000 word essay 50%, 2 hour open book exam 50%

Argument is an activity we all engage in, with varying results, in every walk of life. Over the last two millennia philosophers have developed powerful methods for classifying arguments, and identifying common errors

in reasoning. Argument and Critical Thinking teaches these methods and applies them to real-life arguments, both written and spoken. It is thus an introduction to communication and applied logic. Among the topics we cover are the theory of legal argument, and the science-pseudoscience debate, which gives us a chance to discuss UFOs, parapsychology, Bigfoot, the Bermuda Triangle and alien abductions!

PHIL 1102

Mind and World

3 units - semester 1

3 contact hours per week

Available for Non-Award Study

Assessment: 400-500 word short essay (20%); 1000-1250 word essay (40%); exam (40%)

Being human is special. Humans are highly intelligent, language-using organisms, who are capable of building complex systems of knowledge, conscious of themselves and their world, and able to freely choose a path through life. So far as we know this combination of abilities is uniquely human. But each is somewhat puzzling. How can we be free if every event is determined by what comes before it? How can words and symbols, which are mere scribbles (or noises), have meanings? And how do organisms with bodies made of physical materials get to be conscious knowers? Philosophers have thought long and hard about these questions. Mind and World is an introduction to some of the answers they've discovered.

PHIL 1103

Morality, Society and the Individual

3 units - semester 2

3 contact hours per week

Available for Non-Award Study

Assessment: Short assignment (10%), 1400-1800 word essay (40%), 2 hour exam (40%), tutorial participation (10%)

Morality, Society and the Individual is an introduction to fundamental ideas about morality. The first half of the course considers the nature and origins of morality. We ask: Are there any principles or rules that can tell us the right way to live or how to act in situations where important interests conflict? Are moral rightness and wrongness relative to each individual? Can there be a non-religious basis for morality? Is morality simply self-interest in disguise (ethical egoism) or is there no basis for morality at all? The second half of the course surveys four influential kinds of theory which claim to identify the source of justified moral judgements. According to the first, the morally right thing to do is to promote some worthwhile goal such as the overall welfare of society. The second rejects this idea, holding that we have duties towards other persons which do not derive from the goal of promoting welfare. The third kind of theory grounds morality in what is required for successful human cooperation. The fourth takes a different approach. Instead of asking directly which kinds of actions are right and wrong, it focuses on the questions: What is the most admirable kind of life for a human being to lead, and what personal qualities contribute to leading such a life.

PHIL 1110

Logic I: Beginning Logic

3 units - semester 1

3 contact hours per week

Available for Non-Award Study

Assessment: 2 in-class tests, exam (all open book)

Logic is fundamental to the way we think, both in everyday life and in professional contexts. Whether an argument is good or bad depends upon its logical structure. Logic I teaches the basics of formal logic, using symbolic methods to represent the logical form of statements, and assess the validity of arguments. The course will give you insight into the logical function of statements and arguments, and increase the clarity of your own reasoning and thinking. No previous experience with symbolic techniques or mathematics is assumed. There are no prerequisites, but many students find that Argument and Critical Thinking is a useful preliminary.

ADVANCED LEVEL

PHIL 2030

Cognitive Science: Minds, Brains & Computers

3 units - Offered biennially

3 contact hours per week

Prerequisite: 12 units Level I Humanities/Social Sciences including 3 units in Philosophy; or 12 units Level I Psychology

Incompatible: PHIL 2013/3013

Assessment: 2 x approximately 2,500 words essays

This course provides an introduction to the philosophical and scientific foundations of Cognitive Science, which is a relatively new inter-disciplinary field of study that embraces aspects of philosophy, psychology, computer science and neuroscience. Philosophical topics to be discussed may include: the computer as a model of the mind; classical (digital) and connectionist (analog) computational theories of cognition; embodiment and distributed cognition; the impact of recent evolutionary approaches to cognition; developmental and psychiatric disorders; emotions. In addition students will be introduced to current scientific knowledge on the topics of perception; memory; learning and cognitive control.

PHIL 2042

Moral Problems

3 units - semester 2

3 contact hours per week

Prerequisite: 12 units Level I courses in any Faculty

Incompatible: PHIL 2011/3011

Assessment: Essays totalling 5,000 words

Living in the modern world means having to engage with many complex moral questions, not only in our personal lives but also when thinking about public policy. Moral Problems considers a range of current ethical controversies, including questions of life and death (abortion, infanticide, euthanasia, stem cell research, cloning), our obligations to animals and the

environment, and issues of justice (war, poverty, the rights of indigenous peoples, the justifiability of torture). The course will provide the tools to identify and understand the main ethical issues in these topics, and to explore, develop and properly defend your own moral views.

PHIL 2044

Philosophy of Religion

3 units - semester 2

3 contact hours per week

Prerequisite(s): 12 units Level I Humanities/Social Sciences, including 3 units in Philosophy; or 12 units in Science, Engineering, Computer & Mathematical Sciences, or Health Sciences

Incompatible: PHIL 2012/3012

Assessment: Essays totalling 5,000 words

Does God exist? What is faith? Do religious experience or recent research on the history of the physical universe indicate the existence of God? Or are we entitled to believe as a matter of faith? And does the issue matter anyway? These are some of the issues that will be central to this course. Other topics that may be covered include: Do pain, suffering and injustice show that there is not a good God? Is God to be conceived as a giant, invisible person, or in some other way? Are we justified in believing in miracles? Is there life after death? Might there be One True Religion, with the others deeply mistaken, or rather might there be more than one path to salvation or enlightenment? This may involve an examination of traditions other than the Judaeo-Christian one. Students completing this course should be able to: identify the main arguments surrounding the questions indicated above - evaluate the plausibility of those arguments, offering clearly articulated reasons for their evaluation.

PHIL 2045

Professional Ethics

3 units - offered biennially

3 contact hours per week

Prerequisite: 12 units Level I in any Faculty

Incompatible: PHIL 2023/3023

Assessment: 2 x 2,500 word essays 50% each

It is essential for professionals in any field to have an understanding of the ethical problems and principles in their field. But anyone, no matter what their job, must deal with many other professions as well. Part of professional ethics is the understanding of the ethics of other professions: how they interact and what can be expected from them as correct ethical behaviour. In turn, any professional will benefit from a critical scrutiny of their own ethics by those from other professions. The general principles of professional ethics will be examined, as well as the distinctive problems of the different fields. The course is taught in six modules of four lectures and two tutorials each, covering the ethics of several major professions: Business Ethics, Media Ethics, Police Ethics, Medical Ethics, Legal Ethics, and Research Ethics. Topics covered will also include: the nature of a profession, professional codes of ethics, confidentiality, whistle-blowing, the responsibility of business to the environment, uses and abuses of human research, and animal ethics in research.

PHIL 2048 Philosophy of Film

3 units - semester 1

3 contact hours per week

Prerequisite(s): 12 units Level I in any Faculty

Assessment: Discussion paper 20%, essay 40%, final exam 40% - total of 5,000 words

Films play a major role in contemporary society. How do we value, enjoy, understand, or learn from fiction films? This course will encompass some film aesthetics, film epistemology, and 'ethics of film'. Topics covered will include: filmic art and medium essentialism, cinematic authorship, film form and narrative, the 'paradox of fiction' and specific theories of spectator engagement that respond to it. The course will also examine the 'paradox of horror' (how can we enjoy in films things we would hate in reality?), and explore some other moral concerns in relation to film. Material will be primarily drawn from books and articles by analytical philosophers. The course will also include some film viewing.

PHIL 2049 Logic, Truth and Reason

3 units - Offered biennially

3 contact hours per week

Prerequisite(s): 12 units Level I Humanities/Social Sciences, including Logic I or Argument and Critical Thinking; or permission of Course Coordinator

Assessment: 2 x 2,500 word essays 50% each

Logic is fundamental to philosophy, computer science and mathematics. But is it a good model of the way humans think and reason? Are there types of reasoning which can't be captured in a formal system? Logic, Truth and Reason investigates such questions by exploring the philosophy of logic and cognitive science. We'll consider whether conditionals are truth-functional, whether possible worlds semantics adequately captures modal concepts such as possibility and belief, and how to deal with various kinds of logically 'tricky' statements (e.g. 'This sentence is false.'). We'll also explore the relationship between formal logic and reasoning, considering whether logic describes the way humans actually think, and what it tells us (if anything) about the mechanisms of thought.

The course does not make any use of symbols, and does not require familiarity with formal logic. However, Logic I is a useful preliminary.

PHIL 2050 Philosophy of Science

3 units - semester 1

3 contact hours per week

Prerequisite(s): 12 units Humanities and Social Sciences courses including 3 units of Philosophy or 12 units in Sciences, Engineering Computer & Mathematical Sciences, or Health Sciences

Incompatible: PHIL 2013, PHIL 3013

Assessment: 2 x 2500 word essays, each worth 50% of total mark

Science has a significant impact on our lives. Some have criticised it for being 'reductionist' and part of a general

dehumanisation of society. Others argue that the sciences are our only means of avoiding the many dangers we currently face. Philosophy of Science will examine these and other central issues in the contemporary philosophy of science, including: the objectivity of science, the nature of scientific method, the status of scientific knowledge, and the character of scientific explanation. The course will also explore the general picture of reality that emerges from modern science.

PHIL 2051 But Is It Art? A Philosophical Investigation

3 units - semester 2

3 contact hours per week

Available for Non-Award Study

Prerequisite(s): 12 units in any Faculty, including 3 units Philosophy
Incompatible: PHIL 2025, PHIL 3025

Assessment: 3600 word essay (60%), 2 x 1000 word reviews/
seminar papers (15% for the first and 25% for the second)

The nature of art is a topic that arouses considerable passion and debate. Everyone has an opinion, as revealed by the often repeated exclamation, "I don't know anything about art, but I know what I like!" But this saying raises more questions than it answers. After all, why do we assume that knowing what we like will have any bearing on the question of art?

This course will be structured around two different but related questions. First: How do we know when something is art? This is a tough question because for any definition of art currently on offer there seem to be examples that reveal the definition as either too narrow or too broad. Second: On what basis does the term 'art' have any meaning at all. What kind of thing is it meant to pick out? In addressing the first question, we'll examine the historical development of theories of art. In addressing the second, we'll consider a number of topical problems about art: authenticity and censorship, creativity or plagiarism, reproductions or multiple instances, artistic intention and indiscernibles (when is a pile of dirt not just a pile of dirt?), and the relation between Art and children's art.

HONOURS

PHIL 4401A/B Honours Philosophy

24 units - full year

Prerequisite: UG degree, credit average in courses contributing to a major in Philosophy or equiv. approved by Head of Discipline

Assessment: 3 x 5000-6000 word essays, 15000-18000 word thesis

Prospective Honours students should consult with the Honours Coordinator before the end of January.

Prospective Honours students are advised that at least one Honours option must be in a metaphysics/epistemology area, and at least one in a moral/social area; so that students should have included at least 4 units from each area in second or third year courses as preparation. This should be discussed with the Honours

Coordinator in third year. Honours Philosophy is organised jointly with the Philosophy Department at Flinders University and some courses will be offered by that Department.

The Honours program comprises of three semester-length courses and a thesis. Prospective Honours students should consult with the Honours Coordinator before the end of January.

The Philosophy discipline also offers specialist Honours programs in Logic and Cognitive Science, but with different entry requirements. For further information consult the Honours Coordinator.

Physics

LEVEL I

PHYSICS 1002 Astronomy I

3 units - semester 1

3 x 1 hour lectures, 1 tutorial per week, 5 x 3 hour evening practicals

Available for Non-Award Study

Assessment: Exam, practical work, essay

This course aims to present a survey of astronomical science, including highlights of modern exploration and the open questions in astronomy. Topics include the formation and characteristics of the Solar System, including the planets and minor members of the system; Telescopes; the Sun; the birth, life and death of stars; galaxies and dark matter; active galaxies and quasars; Big Bang cosmology. There are no formal prerequisites for the course, though mathematical literacy at year 10 level is assumed.

PHYSICS 1005 Physics, Ideas and Society I

3 units - semester 2

2 x 1 hour lectures, 1 hour tutorial per week

Available for Non-Award Study

Assessment: Essays, tutorial work

This course is non-mathematical in character and no previous knowledge of physics is assumed. It is taught in the style of the humanities and social sciences. Physics, Ideas and Society I is designed to provide an understanding of some of the principal currents of thought in physics and of the scientific background to some of the philosophical, political and social issues that confront society. Topics to be selected from the following - physics and its laws; the fundamental constituents of matter; people, energy and the earth; space, time and relativity; the universe.

PHYSICS 1007 Space Science and Astrophysics I

3 units - semester 1

3 x 1 hour lectures, 1 hour tutorial per week, 3 hours experimental/observational work per fortnight

Restriction: BSc (Space Science & Astrophysics)

Incompatible: PHYSICS 1002

Assessment: Exam, practical work, essay

This course aims to present a survey of astronomical science, including highlights of modern exploration and the open questions in astronomy. Topics include the formation and characteristics of the Solar System, including the planets and minor members of the system; Telescopes; the Sun; the birth, life and death of stars; galaxies and dark matter; active galaxies and quasars; Big Bang cosmology.

PHYSICS 1008 Physics Principles & Applications I

3 units - semester 1

3 x 1 hour lectures, 1 hour tutorial per week, 5 x 3 hour practicals per semester

Restriction: Students without SACE Stage 2 Physics or with a Subject Achievement score of less than 13 or equiv

Available for Non-Award Study

Incompatible: PHYSICS 1100 and PHYSICS 1101

Assessment: Written exam, tutorial work, practical work

This course provides an introduction to some of the principles of physics and their applications in agricultural and biological sciences. It is intended for students who have not studied SACE Stage 2 Physics, and who require familiarity with Physics principles and applications in their other studies. The course introduces concepts of force, energy, thermal physics, fluids and DC electricity. Students who pass this course and have completed SACE Stage 2 Mathematical Studies (or equiv.) may enrol in the semester 2 course PHYSICS 1102 Physics for the Life and Earth Sciences IB.

PHYSICS 1100 Physics IA

3 units - semester 1

3 x 1 hour lectures, 1 hour tutorial per week, 5 x 3 hour practicals per semester

Available for Non-Award Study

Prerequisite: SACE Stage 2 Physics, Math.Studies, Specialist Maths - in exceptional circumstances, high achieving students without Specialist Maths may be granted exemption on application to Head of Physics

Corequisite: MATHS 1011 - students may be permitted to enrol in Physics IA concurrently with MATHS 1013 on application to Head

Incompatible: PHYSICS 1101 and PHYSICS 1008

Assessment: Written exam, tutorial work, practical work

This calculus-based course is the foundation for a major in physics, and also provides a quantitative understanding of physics concepts applicable in biological and geological sciences, and in Engineering.

Measurement and uncertainties. Particle mechanics: Newton's law of motion, gravitation, work, energy, conservative forces, momentum, collisions. Thermal physics: heat, temperature, internal energy, kinetic theory of gases, thermodynamic processes. Electricity and magnetism: charge and current, electric field, Ohm's Law, DC circuits, Coulomb and Gauss' laws, electrostatics,

capacitance, magnetic field, Ampere and Faraday's laws, inductance, LC circuits. Practical problem solving.

PHYSICS 1101

Physics for the Life and Earth Sciences IA

3 units - semester 1

3 x 1 hour lectures, 1 hour tutorial per week, 5 x 3 hour practicals per semester

Available for Non-Award Study

Prerequisite: SACE Stage 2 Physics Subject Achievement score of at least 13 (or equiv), Mathematical Studies - other students may apply to Head of Physics for exemption

Incompatible: PHYSICS 1100 and PHYSICS 1008

Assessment: Written exam, tutorial work, practical work

This course provides an introduction to physics at university level for students who wish to major in biological or earth sciences (Physics IA/B and Mathematics IA/B are recommended for students interested in Biophysics or Geophysics). It includes significant material not in SACE Stage 2 Physics. The emphasis is on physics concepts and their application to relevant problems in the earth and biological sciences rather than on the more theoretical or mathematical development of the concepts. It includes a study of forces and equilibrium, mechanical stress, energy, fluids, heat and DC electricity. Applications to biology and physiology will be emphasised. Practical problem solving.

PHYSICS 1200

Physics IB

3 units - semester 2

3 x 1 hour lectures, 1 hour tutorial per week, 5 x 3 hour practicals per semester

Available for Non-Award Study

Prerequisite: PHYSICS 1100 (Conceded Pass or better)

Corequisite: MATHS 1012 - students may be permitted to enrol in Physics IB concurrently with MATHS 1011 on application to Head of Discipline

Assumed Knowledge: MATHS 1011 or 1013 and PHYSICS 1100

Incompatible: PHYSICS 1201 and PHYSICS 1003

Assessment: Written exam, tutorial work, practical work

This calculus-based course completes the Level I sequence for a major in physics, and also provides a quantitative understanding of physics concepts applicable in biological and geological sciences and in Engineering.

Rigid body mechanics: centre of mass, rotational motion, torque, angular momentum, equilibrium, oscillations
Waves and Optics: transverse and longitudinal waves, superposition, interference, standing waves, Fourier decomposition, Fermat's principle, geometric optics, physical optics, interference, Michelson interferometers, thin film interference, diffraction, resolution of telescopes.
Relativity and Quantum Physics: kinematics, time dilation, length contraction, Lorentz transformations, transformation of velocities, relativistic momentum and energy, X-rays as waves and photons, photoelectric and Compton effects, pair production, de Broglie waves, uncertainty principle, the quantum mechanical wave function. Practical problem solving.

PHYSICS 1201

Physics for the Life and Earth Sciences IB

3 units - semester 2

3 x 1 hour lectures, 1 hour tutorial per week, 5 x 3 hour practicals per semester

Available for Non-Award Study

Prerequisite: Either SACE Stage 2 Physics Subject Achievement score of at least 13 (or equiv) and Mathematical Studies or PHYSICS 1008 - other students may apply to Head of Physics for exemption

Assumed Knowledge: PHYSICS 1101 or PHYSICS 1008

Incompatible: PHYSICS 1200

Assessment: Written exam, tutorial work, practical work

This course provides an introduction to sensing and imaging as applied to biological systems and earth science. It is intended to provide a background in physics at university level for students who wish to major in biological sciences (Physics I and Mathematics I are recommended for students interested in Biophysics or Geophysics). The emphasis is on physics concepts and their application to relevant problems rather than on the more theoretical or mathematical development of concepts. It includes a study of oscillations, waves and sound, geometric and physics optics, electricity and magnetism, X-rays and radioactivity. Practical problem solving.

PHYSICS 1501

Physics for the Life & Earth Sciences I (Pre-Vet)

3 units - semester 1

3 x 1 hour lectures, 1 hour tutorial per week, 5 x 3 hour practicals per semester

Restriction: BSc (Animal Science: Pre-Vet)

Prerequisite: SACE Stage 2 Physics Subject Achievement score of at least 13 or equiv, Mathematical Studies - other students may apply to Head of Physics for exemption

Incompatible: PHYSICS 1508

Assessment: Written exam, tutorial work, practical work

The emphasis is on physics concepts and their application to relevant problems in the earth and biological sciences rather than on the more theoretical or mathematical development of the concepts. It includes a study of forces and equilibrium, mechanical stress, energy, fluids, heat and DC electricity. Applications to biology and physiology will be emphasised.

PHYSICS 1508

Physics Principles & Applications I (Pre-Vet)

3 units - semester 1

3 x 1 hour lectures, 1 hour tutorial per week, 5 x 3 hour practicals per semester

Restriction: BSc (Animal Science: Pre-Vet) without SACE Stage 2 Physics or with a Subject Achievement score of less than 13 or equiv

Incompatible: PHYSICS 1501

Assessment: Written exam, tutorial work, practical work

This course provides an introduction to some of the principles of physics and their applications in agricultural and biological sciences. It is intended for students who have not studied SACE Stage 2 Physics, and who require familiarity with Physics principles and applications in their other studies. The course introduces concepts of force, energy, thermal physics, fluids and DC electricity.

**PHYSICS 2510
Physics IIA**

3 units - semester 1

2 x 1 hour lectures, 1 x 1 hour tutorial, 1 x 4 hour practicals per week

Available for Non-Award Study

Prerequisite(s): PHYSICS 1100, PHYSICS 1200 and either MATHS 1012 or MATHS 2004 - Other students may apply to Head of Physics for exemption

Corequisite(s): MATHS 2101 and MATHS 2102

Incompatible: PHYSICS 2100 and PHYSICS 2004

Assessment: Tests, practical work, written exam

This course provides an introduction to quantum mechanics and continues the development of practical problem solving using laboratory experiments. Quantum Mechanics - Wave mechanics with examples from atomic, sub-atomic and solid state physics. Photons, Compton scattering, de Broglie hypotheses, Heisenberg Uncertainty Principle, probability distributions, probability density, plane waves, expectation values, operators, commutators, Schrodinger equation, energy quantisation, particle in one- and three-dimensional box, eigenstates and degeneracy, parity, compatible observables, polarised light, measurement, probability flux, one-dimensional bound states and scattering, barrier penetration, magic numbers, Fermi gas, harmonic oscillator.

Practical work includes laboratory experiments in instrumentation, general physics and modern physics.

**PHYSICS 2520
Physics IIB**

3 units - semester 2

2 x 1 hour lectures, 1 x 1 hour tutorial per week, 1 x 4 hour practicals per week

Available for Non-Award Study

Prerequisite(s): PHYSICS 2510, MATHS 2101 and MATHS 2102. Other students may apply to Head of Physics for exemption

Incompatible: PHYSICS 2200 and PHYSICS 2525

Assessment: Tests, practical work, written exam

This course provides an introduction to condensed maths physics, extends the level I introduction to optical physics and continues the development of practical problem solving using laboratory experiments. Optics - geometrical and physical optics; ray tracing, aberrations, polarisation, diffraction.

Condensed Matter Physics - Introduction to crystal structures: electronic, acoustic and photonic energy bands: crystal growth and defects: transport of electrons and holes: carrier generation and recombination: diodes and optoelectronics.

Practical work includes laboratory experiments in electromagnetism, optics, properties of solids, projects.

**PHYSICS 2525
Physics IIB (Optics and Photonics)**

3 units - semester 2

2 x 1 hour lectures, 1 x 1 hour tutorial per week, 1 x 4 hour practicals per week

Restriction: BSc (Optics and Photonics)

Prerequisite(s): PHYSICS 2510, MATHS 2101 and MATHS 2102 - Other students may apply to Head of Physics for exemption

Incompatible: PHYSICS 2200 and PHYSICS 2520

Assessment: Tests, practical work, written exam

This course provides an introduction to condensed maths physics, extends the level I introduction to optical physics and continues the development of practical problem solving using laboratory experiments. Optics - geometrical and physical optics; ray tracing, aberrations, polarisation, diffraction.

Condensed Matter Physics - Introduction to crystal structures: electronic, acoustic and photonic energy bands: crystal growth and defects: transport of electrons and holes: carrier generation and recombination: diodes and optoelectronics.

Practical work includes laboratory experiments in electromagnetism, optics, properties of solids, and photonics projects.

**PHYSICS 2530
Astrophysics II**

3 units - semester 2

2 x 1 hour lectures, 1 x 1 hour tutorial per week, 5 x 4 hour practicals per semester

Available for Non-Award Study

Prerequisite(s): PHYSICS 1100 or PHYSICS 1101, PHYSICS 1200 or PHYSICS 1201, MATHS 1012 or MATHS 2004 - Other students may apply to Head of Physics for exemption

Incompatible: PHYSICS 2010, PHYSICS 2201 and PHYSICS 2536

Assessment: Practical work, marked tutorials, essay, written exam

Protostars and star formation; stellar interiors and stellar evolution; supernovae and pulsars; introduction to the heliosphere; introduction to the local space environment.

Practical Work: astrophysics related experiments and observations.

**PHYSICS 2532ELEC
Classical Physics II**

3 units - semester 2

Restriction: B.E (Elec) & B.Sc(Physics)

Prerequisite(s): PHYSICS 2200, APP MTH 2000, APP MTH 2002

Incompatible: PHYSICS 2532

Assessment: Tests, Assignments, Final Examination

This course extends the level I introduction to thermal physics and mechanics. Classical Mechanics: Applications of Newton's Laws: damped oscillations, resonance, waves on a string, conservation laws, central forces, orbits and scattering. Non-inertial reference frames. Many-particle systems, rigid bodies, moment of inertia tensor, angular momentum, Euler's equations, precession and nutation.

Thermodynamics - equilibrium, 1st and 2nd laws, entropy, cyclic thermodynamic processes, applications.

PHYSICS 2534 Electromagnetism II

3 units - semester 2

3 x 1 hour lectures, 1 hour tutorial per week

Available for Non-Award Study

Prerequisite: PHYSICS 1100, PHYSICS 1200, MATHS 2101 and MATHS 2102 - Other students may apply to Head of Physics for exemption

Incompatible: PHYSICS 2002, PHYSICS 2200 and PHYSICS 2520

Assessment: Tests, written exam

This course extends the level I introduction to electricity and magnetism. Electrostatics and electric potential, Poisson and Laplace equations, boundary value problems and method of images, magnetostatics, electromagnetic induction, Maxwell's equations, electromagnetics waves. Circuit theory: revision of Kirchhoff's laws, RLC and AC circuits; complex impedance and AC circuits; filters, transfer functions.

Vector analysis; index notation, line, surface and volume integrals; curvilinear coordinates; Gauss and Stokes theorem, Gauss's law, Dirac delta function; vector rotation and tensors.

PHYSICS 2536 Space Science and Astrophysics II

3 units - semester 2

2 x 1 hour lectures, 1 x 1 hour tutorial per week, 5 x 4 hour practicals per semester

Restriction: BSc (Space Sci & Astrophysics)

Prerequisite(s): PHYSICS 1100, PHYSICS 1200 and either MATHS 1012 or MATHS 2004 - Other students may apply to Head of Physics for exemption.

Incompatible: PHYSICS 2010, PHYSICS 2201 and PHYSICS 2530

Assessment: Marked tutorials, essay, practical work, written exam

Protostars and star formation; stellar interiors and stellar evolution; supernovae and pulsars; introduction to the heliosphere; introduction to the terrestrial ionosphere and magnetosphere, and the local space environment. Practical Work: Projects

PHYSICS 2550 Physics, Ideas & Society II

3 units - semester 2

2 x 1 hour lectures, 1 x 1 hour tutorial per week

Available for Non-Award Study

Prerequisite(s): 6 units at level I

Incompatible: PHYSICS 1005 Physics Ideas & Society

Assessment: Major Essay, Tutorial assessment

This course is non-mathematical in character and no previous knowledge of physics is assumed. It is intended primarily for students of the humanities and social sciences and is taught in the style of those disciplines. Physics, Ideas and Society II is designed to provide and understanding of some of the principal currents of

thought in physics and of the scientific background to some of the philosophical, political and social issues that confront society. Topics will be selected from the following - physics and its laws; the fundamental constituents of matter; people, energy and the earth; space time and relativity; the universe.

LEVEL III

PHYSICS 3002 Experimental Physics III

3 units - semester 2

2 x 4 hours practical work per week

Prerequisite(s): PHYSICS 2510 and PHYSICS 2520 - other students may apply to the Head of Physics for exemption

Incompatible: PHYSICS 3537

Assessment: Laboratory work, formal report on selected experiment, open & closed book tests

Laboratory experiments in selected areas including atomic and nuclear physics, optics and electromagnetism, plus a practical analogue electronics course.

PHYSICS 3006 Advanced Dynamics and Relativity III

3 units - semester 1

3 x 1 hour lectures, 1 x 1 hour tutorial per week

Available for Non-Award Study

Prerequisite(s): PHYSICS 2532, PHYSICS 2534, MATHS 2101 or MATHS 2201, MATHS 2102 or MATHS 2202 - other students may apply to the Head of Physics for exemption

Assessment: Tests, assignments, written exam

This course will give students a working knowledge of analytical mechanics and relativity to the standard required for further study in physics.

Content will include: Mechanics - Lagrangian mechanics, variational techniques, conservation laws, Noether's theorem, small oscillations, Hamiltonian mechanics, Poisson brackets. Relativity - space-time vectors and tensors, relativistic mechanics, electrodynamics; field-strength tensor, Lienard-Wiechert potentials.

PHYSICS 3013 Astrophysics III

2 units - semester 1

2 x 1 hour lectures per week, 1 hour tutorial per fortnight

Available for Non-Award Study

Prerequisite(s): PHYSICS 2100 and PHYSICS 2200 - other students may apply to Head of Physics for exemption

Assessment: Written exam, tutorials, marked assignments

A survey of the universe at all scales and wave lengths/energies. Stellar astrophysics and studies of the interstellar medium and magnetic fields. Binary systems, x-ray binaries, active galactic nuclei. Gamma-ray astrophysics; radio and x-ray astronomy. Introductory cosmology.

PHYSICS 3014 **Atmospheric & Environmental Physics III**

2 units - semester 2

2 x 1 hour lectures per week, 1 hour tutorial per fortnight

Available for Non-Award Study

Prerequisite(s): PHYSICS 2100 and PHYSICS 2200 - other students may apply to Head of Physics for exemption

Assessment: Written exam, marked assignments

The course is an introduction to the physics of planetary atmospheres, with a focus on the earth's atmosphere including environmental and climate issues. Topics will include radiative transfer in the sun-earth system, thermodynamics of the atmosphere, cloud physics, atmospheric motions and circulation, the role of aerosols and minor constituents, such as water vapour, carbon dioxide and ozone, in determining climate, and the impact on the environment of anthropogenic actions.

PHYSICS 3016 **Education in Physics: Industrial Cooperation IIIA**

0 units - semester 2

4-5 months full-time work on a project in industry - sem 2, Year 3

Prerequisite: Credit or above in PHYSICS 2100 or PHYSICS 2200 and 12 units Level III courses

A program whereby students enrolled in third year B.Sc, B.Sc. (Optics & Photonics) or B.Sc. (Space Science & Astrophysics) who have achieved an average credit level in Levels I & II and at least credit in PHYSICS 2100 & 2200 Physics IIA/B, can apply to enrol in a cooperative program with industry.

The student receives financial support provided by the industry. The EPIC A and EPIC B projects must be different, and are jointly agreed by the Course Coordinator and the industrial partner. A written report must be prepared on each project and approved by both the industrial partner and the Course Coordinator. The performance of each student will be monitored by the Course Coordinator. Unsatisfactory work reports or course grades may result in the student being required to leave the EPIC program.

PHYSICS 3017 **Education in Physics: Industrial Cooperation IIIB**

0 units - semester 1

4-5 months full-time work on a project in industry - sem 1, Year 4

Prerequisite: Credit or above in PHYSICS 2100 or PHYSICS 2200 and 12 units Level III courses

A program whereby students enrolled in third year B.Sc, B.Sc. (Optics & Photonics) or B.Sc. (Space Science & Astrophysics) who have achieved an average credit level in Levels I & II and at least credit in PHYSICS 2100 & 2200 Physics IIA/B, can apply to enrol in a cooperative program with industry.

The student receives financial support provided by the industry. The EPIC A and EPIC B projects must be different, and are jointly agreed by the Course Coordinator and the industrial partner. A written report must be prepared on each project and approved by both the industrial partner and the Course Coordinator. The performance of each

student will be monitored by the Course Coordinator. Unsatisfactory work reports or course grades may result in the student being required to leave the EPIC program.

PHYSICS 3230 **Photonics IIIP**

3 units - semester 2

2 x 1 hour lectures, 3 hours practical per week, 1 hour tutorial per fortnight

Restriction: BSc (Optics and Photonics)

Prerequisite: PHYSICS 2100, PHYSICS 2200 and PHYSICS 2009 or PHYSICS 2510, PHYSICS 2520 and PHYSICS 2525

Assumed Knowledge: PHYSICS 3018

Incompatible: PHYSICS 3020

Assessment: Exam, marked assignments, laboratory work & formal report

Interaction of light with matter, time dependent perturbation theory, stimulated and spontaneous emission and absorption, stability of resonators, mode matching, advanced laser resonators, macroscopic description of the gain medium, rate equations, gain saturation and broadening, hole burning, MOPA's, CW lasers, frequency stabilisation, pulsed lasers, gain switching, Q-switching, injection-seeding, mode-locked lasers. Review of common lasers, optical fibres, microstructured optical fibres, fibre Bragg gratings, fibre sensors, optical materials, photonic crystals. Practical work in laser modulation, laser stabilisation, optical fibres, characteristics of semi conductors.

PHYSICS 3532 **Atmospheric and Astrophysics III**

3 units - semester 1

3 x 1 hour Lectures, 1 x 1 hour Tutorial per week

Available for Non-Award Study

Prerequisite(s): PHYSICS 2510, PHYSICS 2534, MATHS 2101 or MATHS 2201, MATHS 2102 or MATHS 2202 - other students may apply to the Head of Physics for exemption

Incompatible: PHYSICS 3013, PHYSICS 3014

Assessment: Examination, assignments, tutorials

This course will provide students with a knowledge of modern techniques, theory, and observational results relating to energetic processes in astrophysics and cosmology, and introduce the physics of planetary atmospheres with special emphasis on the atmosphere of the Earth. It will also provide students with knowledge of the physical processes that govern weather and climate.

Content will include: Introduction to planetary atmospheres and the solar system. Radiative transfer in the sun-earth system. Thermodynamics of the atmosphere, including cloud physics, atmospheric motions and circulation. Introduction to the roles of aerosols and minor atmospheric constituents such as water vapour, carbon dioxide and ozone. The impact of anthropogenic processes. An introduction to relevant astrophysics terminology. Binary stars and accretion processes. The structure and evolution of the Milky Way and other galaxies. Active galaxies and unified models. Aspects of special and general relativity relevant to astrophysics. Cosmology, observations and theory.

PHYSICS 3534 Computational Physics III

3 units - semester 2

3 x 1 hour Lectures, 1 x 1 hour Tutorial per week

Available for Non-Award Study

Prerequisite(s): PHYSICS 2532, PHYSICS 2534, MATHS 2101 or MATHS 2201, MATHS 2102 or MATHS 2202 - other students may apply to the Head of Physics for exemption

Incompatible: PHYSICS 3000

Assessment: Written exam, project, tests

This is a hands-on course which provides an introduction to computational methods in solving problems in physics. It teaches programming tactics, numerical methods and their implementation, together with methods of linear algebra. These computational methods are applied to problems in physics, including the modelling of classical physical systems to quantum systems, as well as to data analysis such as linear and nonlinear fits to data sets. Applications of high performance computing are included where possible, such as an introduction to parallel computing and also to visualisation techniques.

PHYSICS 3537 Experimental Physics III (Optics & Photonics)

3 units - semester 2

2 x 4 hours practical per week

Restriction: B.Sc (Optics & Photonics)

Prerequisite(s): PHYSICS 2510, PHYSICS 2520, PHYSICS 2534, Maths 2101 or MATHS 2201, MATHS 2102 or MATHS 2202 - other students may apply to the Head of Physics for exemption

Incompatible: PHYSICS 3002

Assessment: Practical work, assignment, exam

Laboratory experiments in selected areas with an emphasis on atomic spectroscopy, modern optics and electromagnetism, and a practical analogue electronics course.

PHYSICS 3540 Optics and Photonics III

3 units - semester 2

3 x 1 hour Lectures, 1 x 1 hour Tutorial per week

Available for Non-Award Study

Prerequisite(s): PHYSICS 2520, PHYSICS 3542, MATHS 2101 or MATHS 2201, MATHS 2102 or MATHS 2202 - other students may apply to the Head of Physics for exemption

Incompatible: PHYSICS 3020, PHYSICS 3230, PHYSICS 3001

Assessment: Tests, practical work, written exam

This course provides students with a working knowledge of optical physics, including diffraction and physical optics, atomic physics and optical spectroscopy, laser physics and photonics.

Content will include: Fresnel equations and multi-layer dielectric coatings, polarisation and birefringence. Fresnel-Kirchhoff integral and diffraction, Fourier optics, Abbe's theory of imaging, image processing. Optical fibres, microstructured optical fibres, fibre Bragg gratings, fibre sensors, optical materials, photonic crystals. Lorentz electron oscillator and dispersion.

Lasers - Einstein equations, stimulated and spontaneous emission and absorption, optical amplification, resonators and modes, rate equations, pulsed and continuous lasers, mode-locked lasers.

PHYSICS 3542 Physics III

6 units - semester 1

6 x 1 hour Lectures per week, 3 x 1 hour Tutorial per fortnight

Available for Non-Award Study

Prerequisite(s): PHYSICS 2510, PHYSICS 2534, MATHS 2101 or MATHS 2201, MATHS 2102 or MATHS 2202 - other students may apply to the Head of Physics for exemption

Assumed Knowledge: PHYSICS 2532

Incompatible: PHYSICS 3001, PHYSICS 3018, PHYSICS 3004, PHYSICS 3009

Assessment: Tests, assignments, written exam

This course develops concepts in electromagnetism, quantum mechanics and statistical mechanics such that the behaviour of the physical universe can be understood from a fundamental point of view.

Electromagnetism - electric field and scalar potential, magnetic field and vector potential, Maxwell's equations, electromagnetic boundary conditions, electromagnetic wave equation, waveguides, energy in electromagnetism. Electromagnetic wave propagation in vacuum, conducting and dielectric media, and at interfaces.

Quantum mechanics - review of the Schrödinger equation, operators, eigenfunctions, compatible observables, infinite well in one and three dimensions, degeneracy; Fourier methods and momentum space; Hermiticity; scalar products of wave functions, completeness relations, matrix mechanics; harmonic oscillator in one and three dimensions; sudden approximation; central potentials, quantisation of angular momentum, separation of radial and angular variables, spherical harmonics, hydrogen atom, spin.

Statistical mechanics - classical laws of thermodynamics and their application, postulates of statistical mechanics, statistical interpretation of thermodynamics, microcanonical, canonical and grand canonical ensembles; the methods of statistical mechanics are used to develop the statistics for Bose-Einstein, Fermi-Dirac and photon gases; selected topics from low temperature physics and electrical and thermal properties of matter are discussed.

PHYSICS 3544 Quantum Mechanics III

3 units - semester 2

3 x 1 hour Lectures, 1 x 1 hour Tutorial per week

Available for Non-Award Study

Prerequisite(s): PHYSICS 3542, MATHS 2101 or MATHS 2201, MATHS 2102 or MATHS 2202 - other students may apply to the Head of Physics for exemption.

Assumed Knowledge: PHYSICS 2532

Incompatible: PHYSICS 3022

Assessment: Written exam, tests

This course will introduce Dirac's bra-ket formulation of quantum mechanics and make students familiar with various approximation methods applied to atomic, nuclear and solid-state physics, and to scattering.

Content will include: Dirac's formulation of quantum mechanics - kets and bras, quantum oscillator, angular momentum, measurement, Bell's inequality, generalised Uncertainty Principle, connection with wave and matrix mechanics. Time-independent and time-dependent perturbation theory, Schrödinger, Heisenberg and Interaction pictures, radiative transitions. Identical particles, atoms, exchange forces, periodic systems, energy bands in solids. Symmetries, translations in space and time, parity and time reversal, rotations and angular momentum, addition of angular momenta, fine structure of Hydrogen, L-S and j-j coupling in atoms and nuclei. Hartree-Fock and Thomas-Fermi approximations, variational and WKB methods. Scattering - Born approximation, S-matrix, partial waves.

HONOURS

PHYSICS 4000A/B Honours Physics

24 units - full year

Prerequisite: PHYSICS 3004, PHYSICS 3006, PHYSICS 3009, PHYSICS 3022 and other Level III Science or Math. Sc courses, PHYSICS 4000A

Assessment: Project report, written exams, assignments

Potential participants are advised to see Head of Physics as soon as possible, preferably before enrolling for Level III courses. In exceptional circumstances it is possible to take honours over two years - see B.Sc. Academic Program Rule 5.7.4

It is possible to take Honours in either experimental or theoretical physics. The Honours program may include lecture programs on astrophysics, atmospheric physics, atomic and molecular physics, cosmology, differential geometry and general relativity, electrodynamics, experimental methods, gauge field theories, lasers and nonlinear optics, many-body theory, nuclear radiation physics, nuclear theory and particle physics, relativistic quantum mechanics, quantum field theory, statistical mechanics/many-body theory.

Each student also undertakes a substantial experimental or theoretical research project on which a report is prepared. Full details may be obtained by application to the Head of Physics.

PHYSICS 4001A/B Honours Mathematical Physics

24 units - full year

Prerequisite: PHYSICS 3004, PHYSICS 3006, PHYSICS 3009, PHYSICS 3022 and other Level III Science or Math.Sc. courses, PHYSICS 4001A

Assessment: Exams, project

Students considering this course should see the Head of Physics as soon as possible, preferably before enrolling in third year.

The lecture program is determined from year to year.

Students will be required to make a selection from courses offered by the Discipline of Physics and Pure and Applied Mathematics. Honours topics from other departments in the School of Mathematical and Computer Sciences, and from the Schools of Information Science and Technology at Flinders University of South Australia may be considered appropriate. Lectures may include the following courses: general theory of relativity, relativistic quantum mechanics, quantum field theory, many-body theory, statistical mechanics, theoretical nuclear and particle physics.

Each student will be assigned a supervisor who will advise on the choice of lecture program and give guidance in the writing of a project on some topic in mathematical physics, to be approved in advance by the Head of the Discipline of Physics.

Physiology

LEVEL II

PHYSIOL 2510 Human Physiology IIA: Heart, Lung & Neuromuscular

3 units - semester 1

4 x 1 hour lectures, 1 x 1 hour tutorial, 1 x 4 hour practical per fortnight

Available for Non-Award Study

Prerequisite(s): (CHEM 1100 & CHEM 1200 or CHEM 1101 & CHEM 1201) or (BIOLOGY 1101 & BIOLOGY 1201 or ANAT SC 1102 & ANAT SC 1103) or 6 units of other Level 1 quantitative sciences with approval of Head of Discipline of Physiology or Head of School (MBS)

Assumed Knowledge: Level 1 Chemistry or Biology

Incompatible: PHYSIOL 2511 or PHYSIOL 2101 or equiv

Assessment: End of semester written exam, practical assessments

Physiology is the study of the function of the human body. This course is designed to develop critical skills and provide a foundation in human physiology with an emphasis on homeostasis and human performance. The major lecture topics covered are cellular physiology, neuromuscular physiology, and the cardiovascular and respiratory systems. Topics include how the cardiovascular and respiratory systems adapt in normal conditions and during challenges such as exercise and stress. In the practical laboratory sessions, students undertake a human-based research project that includes the testing of a hypothesis, review of the relevant research literature, collection and analysis of data, and presentation of results and conclusions. The practical component is supported by workshops that lead to a deeper understanding of research methods, ethical considerations, experimental techniques, and data processing in scientific research.

PHYSIOL 2511 Human Physiology IIA: (Biomedical Science)

3 units - semester 1

4 x 1 hour lectures, 1 x 1 hour tutorial, 1 x 4 hour practical per fortnight

Restriction: BSc (Biomedical Science)

Prerequisite(s): (CHEM 1100 & CHEM 1200 or CHEM 1101 & CHEM 1201) or (BIOLOGY 1101 & BIOLOGY 1201 or ANAT SC 1102 & ANAT SC 1103) or 6 units of other Level 1 quantitative sciences with approval of Head of Discipline of Physiology or Head of School (MBS)

Assumed Knowledge: Level 1 Chemistry or Biology

Incompatible: PHYSIOL 2510 or PHYSIOL 2003 or equiv

Assessment: End of semester written exam, practical assessments

Physiology is the study of the function of the human body. The components of this course are designed to develop the skills and attributes of a research scientist in the biomedical sciences. The major lecture topics covered are cellular physiology, neuromuscular physiology, and the cardiovascular and respiratory systems. Topics include how the cardiovascular and respiratory systems adapt in normal conditions and during challenges such as exercise and stress. In the practical laboratory sessions, students undertake a human-based research project that includes the testing of a hypothesis, review of the relevant research literature, collection and analysis of data, and presentation of results and conclusions. The practical component is supported by workshops that lead to a deeper understanding of research methods, ethical considerations, experimental techniques, and data processing in scientific research.

PHYSIOL 2520 **Human Physiology IIB: Systems & Homeostasis**

3 units - semester 2

4 x 1 hour lectures; 1 x 1 hour tutorial and 1 x 4 hour practical per fortnight

Available for Non-Award Study

Prerequisite(s): (CHEM 1100 & CHEM 1200 or CHEM 1101 & CHEM 1201) or (BIOLOGY 1101 & BIOLOGY 1201 or ANAT SC 1102 & ANAT SC 1103) or 6 units of other Level 1 quantitative sciences with approval of Head of Discipline of Physiology or Head of School (MBS)

Assumed Knowledge: Level 1 Chemistry or Biology

Incompatible: PHYSIOL 2521 or PHYSIOL 2201 or Equiv

Assessment: End of semester written exam, tutorial assessments, practical assessments

Physiological interactions between the nervous system and endocrine system maintain homeostasis and health. Themes in this course are the functions of the central and peripheral nervous system; the renal system (kidney) in regulation of fluid and ion levels; the gastrointestinal tract (gut) in providing nutrition to the body; and the endocrine (hormone) system; and integration of the two interacting control systems involving hormonal and neural signaling. In the practical laboratory sessions, students undertake a human-based research project that includes the testing of a hypothesis, review of the relevant research literature, collection and analysis of data, and presentation of results and conclusions. The practical component is supported by workshops that lead to a deeper understanding of research methods, ethical considerations, experimental techniques, and data processing in scientific research.

PHYSIOL 2521 **Human Physiology IIB: (Biomedical Science)**

3 units - semester 2

4 x 1 hour lectures; 1 x 1 hour tutorial and 1 x 4 hour practical per fortnight

Restriction: BSc (Biomedical Science)

Prerequisite(s): (CHEM 1100 & CHEM 1200 or CHEM 1101 & CHEM 1201) or (BIOLOGY 1101 & BIOLOGY 1201 or ANAT SC 1102 & ANAT SC 1103) or 6 units of other Level 1 quantitative sciences with approval of Head of Discipline of Physiology or Head of School (MBS)

Assumed Knowledge: 6 units of Level 1 Physics, PHYSIOL 2101 or PHYSIOL 2511

Incompatible: PHYSIOL 2520 or PHYSIOL 2004 or equiv

Assessment: End of semester written exam, practical assessments

Physiological interactions between the nervous system and endocrine system maintain homeostasis and health. Themes in this course are the functions of the central and peripheral nervous system; the renal system (kidney) in regulation of fluid and ion levels; the gastrointestinal tract (gut) in providing nutrition to the body; and the endocrine (hormone) system; and integration of the two interacting control systems involving hormonal and neural signaling. The components of this course are designed to develop the skills and attributes of a research scientist in the biomedical sciences. In the practical laboratory sessions, students undertake a human-based research project that includes the testing of a hypothesis, review of the relevant research literature, collection and analysis of data, and presentation of results and conclusions. The practical component is supported by workshops that lead to a deeper understanding of research methods, ethical considerations, experimental techniques, and data processing in scientific research.

LEVEL III

PHYSIOL 3000 **Advanced Systems Physiology III**

6 units - semester 2

3 x 1 hour lectures, 1 x 4 hour practical per week, 4 x 1 hour workshop per semester

Available for Non-Award Study

Prerequisite(s): PHYSIOL 2510 and PHYSIOL 2520 or equivalents

Incompatible: PHYSIOL 3102 or equiv

Assessment: Written exams, research project - components include laboratory performance and research report

Advanced Systems Physiology consists of lecture and practical streams. This course is designed to challenge and to stimulate your interest in the integration of multiple organ systems that are necessary for whole body function. We will use examples focusing on voluntary and involuntary human movement and the complex integration of the cardiovascular system to enable human function. The research-focused lecture stream offers a series of interrelated modules covering the following main topics: neural control of movement, cardiovascular health and disease and integrative physiology. An added dimension to many topics is the physiological basis of

the development of common diseases and changes that occur throughout the lifespan. The research practical stream, Physiology in Action, involves a research project supported by a series of workshops and tutorials which are designed to develop your research skill base, including analysis and interpretation of results and to improve skills related to communicating results. Students will be given the opportunity to read widely in chosen areas of the course and to review some research areas. Small-group discussion of specific research papers and research topics will be an important part of Physiology in Action.

PHYSIOL 3001 Neurobiology III

6 units - semester 1

3 x 1 hour lectures, 1 x 4 hour practical per week, 4 x 1 hour workshops per semester

Available for Non-Award Study

Prerequisite(s): PHYSIOL 2510 and PHYSIOL 2520 or equivalents

Incompatible: PHYSIOL 3102, PHYSIOL 3003 or equiv

Assessment: Written exams on lecture material, Research project assessed via supervisors assessment of laboratory performance, group methodology poster, opinion/editorial research article, individual literature review

This course consists of 2 parallel streams, namely: Advanced Neurobiology and Physiology in Action. The Advanced Neurobiology stream of this course broadly encompasses the study of central nervous system function with emphasis on the physiological basis for sensation and neural processing by the brain. Issues that will be covered in depth include the special senses and advanced cellular neurophysiology with emphasis on both peripheral coding and central processing, the enteric nervous system and the role of ion channels in cellular neurobiology. The Physiology in Action practical stream aims to provide students with an introduction to 'hands on' research and the research projects are supervised by trained researchers and supported by a series of workshops. Students work in small groups and have access to equipment appropriate for investigations into a current research question in a professional research environment. The workshops cover topics related to developing a research project and composing a formal proposal. Practical groups participate as a team in preparation of a presentation of their research methodology and findings in poster form.

PHYSIOL 3003 Neurobiology III (Med Surg)

6 units - semester 1

3 x 1 hour lectures, 1 x 4 hour practical, 1 x 2 hour CREATE workshops per week, 4 x 1 hour tutorials per semester

Restriction: Bachelor of Medicine and Surgery

Minimum 18 enrolments required to offer this course, maximum 36

Prerequisite(s): Pass at 2nd year final exam of MBBS

Incompatible: PHYSIOL 3001 and PHYSIOL 3102 or equiv

Assessment: Written exams on lecture material, Research project assessed via supervisors assessment of laboratory performance, group proposal presentation (via web or Powerpoint), individual literature review

This course is designed to challenge students with

advanced subject material in neurophysiology and experience in cutting edge research. The former is achieved in a research-focused lecture stream, which is identical to that of PHYSIOL 3001 Neurobiology III and broadly encompasses the study of central nervous system function with emphasis on the physiological basis for sensation and neural processing by the brain. Issues that will be covered in depth include the special senses and cellular neurophysiology with emphasis on both peripheral coding and central processing, the enteric nervous system and the role of ion channels in cellular neurobiology. The Biomedical Research Unit consists of a practical project based in a working research laboratory and a research-based tutorial component. In the tutorial component students work with an experimental research expert/mentor to consider complex scientific issues, generate hypotheses and a research proposal for a cutting edge project.

PHYSIOL 3004 Advanced Systems Physiology III (Med Surg)

6 units - semester 2

3 x 1 hour lectures, 1 x 2 hour CREATE workshops, 1 x 4 hour practical per week, 4 x 1 hour tutorial per semester

Restriction: Bachelor of Medicine and Surgery

Minimum 18 enrolments required to offer this course, maximum 36

Prerequisite(s): Pass at 2nd year final exam of MBBS

Incompatible: PHYSIOL 3000 and PHYSIOL 3202 or equiv

Assessment: Written exams, research project - components include laboratory performance and research report

This course is designed to challenge students with advanced subject material in physiology and experience in cutting edge research. The former is achieved in a research focused lecture stream, which is identical to that of advanced systems physiology. The latter is derived in the Biomedical Research Unit, which consists of a practical project based in a working research laboratory and a research-based tutorial component. In the tutorials students consider complex scientific issues, generate hypotheses, identify and prioritise related learning issues, gather relevant material and apply the new knowledge back to the problem.

PHYSIOL 3005 Human Movement Physiology III (Sports Eng)

6 units - semester 2

3 x 1 hour lectures, 1 x 4 hour practical per week, 4 x 1 hour workshops per semester

Restriction: B.Engineering (Sports Eng)

Prerequisite(s): PHYSIOL 2510 or Equiv

Incompatible: PHYSIOL 3202 and 3004 or equivalent

Assessment: 2 written exams, research project - components include laboratory performance and research report.

Human Movement Physiology consists of lecture and practical streams. This course is designed to challenge and to stimulate your interest in the integration of multiple organ systems that are necessary for whole body function. We will use examples focusing on voluntary and involuntary human movement and the complex integration of the cardiovascular system to enable human

function. The research-focused lecture stream offers a series of interrelated modules covering the following main topics: neural control of movement, cardiovascular health and disease and integrative physiology. An added dimension to many topics is the physiological basis of the development of common diseases and changes that occur throughout the lifespan. The research practical stream, *Physiology in Action*, involves a research project supported by a series of workshops and tutorials which are designed to develop your research skill base, including analysis and interpretation of results and to improve skills related to communicating results. Students will be given the opportunity to read widely in chosen areas of the course and to review some research areas with a sports engineering emphasis. Small-group discussion of specific research papers and research topics will be an important part of *Physiology in Action*.

PHYSIOL 3102 **Human Physiology IIIA (Biomedical Science)**

6 units - semester 1

3 x 1 hour lectures, 1 x 4 hour practical, 1 x 2 hour CREATE workshops per week, 4 x 1 hour tutorials per semester

Restriction: BSc (Biomedical Science)

Prerequisite(s): PHYSIOL 2511 and PHYSIOL 2521 or equiv

Incompatible: PHYSIOL 3001 and PHYSIOL 3003

Assessment: Written exams, research project - components include laboratory performance and research report

This course is designed to challenge students with advanced subject material in physiology and experience in cutting edge research. The former is achieved in a research-focused lecture stream, which is identical to that of *Neurobiology III*. The latter is derived in the *Biomedical Research Unit*, which consists of a practical project based in a working research laboratory and a research-based tutorial component. In the tutorials students consider complex scientific issues, generate hypotheses, identify and prioritise related learning issues, gather relevant material and apply the new knowledge back to the problem.

PHYSIOL 3202 **Human Physiology IIIB (Biomedical Science)**

6 units - semester 2

3 x 1 hour lectures, 1 x 4 hour practical, 1 x 2 hour CREATE workshops per week, 4 x 1 hour tutorials per semester

Restriction: BSc (Biomedical Science)

Prerequisite(s): PHYSIOL 2511 and PHYSIOL 2521 or equiv

Incompatible: PHYSIOL 3000 and PHYSIOL 3004

Assessment: Written exams, research project - components include laboratory performance and research report

This course is designed to challenge students with advanced subject material in physiology and experience in cutting edge research. The former is achieved in a research-focused lecture stream, which is identical to that of *Advanced Systems Physiology*. The latter is derived in the *Biomedical Research Unit*, which consists of a practical project based in a working research laboratory and a research-based tutorial component. In the tutorials students consider complex scientific issues, generate

hypotheses, identify and prioritise related learning issues, gather relevant material and apply the new knowledge back to the problem.

HONOURS

PHYSIOL 4000A/B **Honours Physiology**

24 units - full year

Restriction: Approved honours students only

Prerequisite: Performance in Level III courses offered by School of Molecular and Biomedical Science at standard satisfactory to Head of Discipline. Students from other schools/institutions who have passed suitable Level III courses may be considered

Assessment: Presentation of research seminar & research poster; laboratory performance; critique of scientific manuscript, written project synopsis, thesis & oral defence of thesis

Candidates are required to demonstrate an original and critical approach in the assimilation of current knowledge in an area of physiological research and engage in experimental work in this research field for a full academic year in the Discipline of Physiology or in an affiliated area under the general direction of the Head of the Discipline of Physiology. A handbook describing the range of research projects to be offered during the Honours year is available from The School of Molecular and Biomedical Science from October of the preceding year. Each project will be supervised by one or more members of the academic or affiliate staff who will provide the student with a series of key references for each particular research project. Students will also be expected to attend a series of Research Skills and Professional Development workshops held throughout the year.

Plant Science

LEVEL I

PLANT SC 1001RW **Chemistry and Introductory Biochemistry I**

3 units - semester 1

1 x 2 hour lecture, 1 hour tutorial, 3 hour practical per week

Assumed Knowledge: SACE Stage I Chemistry

Assessment: Exam, practicals

A study of the chemistry and biochemistry relevant to agricultural production and environmental management including: chemical calculations, pH and buffers; oxidation and reduction reactions; electrochemical series and metal activity; battery operation; corrosion; introduction to the chemistry of fertilisers and pesticides; atmospheric and ozone chemistry; chemical composition and chemical properties of plant and animal products - sugars, fats and proteins; chemistry of hydrocarbon fuels.

LEVEL II

PLANT SC 2500WT **Microbiology and Invertebrate Biology II**

3 units - semester 1

1 x 2 hour lecture, 1 hour tutorial, 4 hour practical per week

Available for Non-Award Study

Assumed Knowledge: BIOLOGY 1101, BIOLOGY 1103RW and BIOLOGY 1203RW

Incompatible: OENOLOGY 2501WT

Assessment: Exam, practical reports, presentation

An introduction to the biology of microorganisms and invertebrates of importance in agriculture, food, wine and natural ecosystems. Topics to be considered include: microbial growth, energy sources and nutritional categories; form and function of major groups of microorganisms; classification and identification; features of saprophytic, pathogenic, symbiotic and commensal lifestyles; interactions of microorganisms with their environment, including plants and animals; case studies of natural and managed microbial ecosystems; basic concepts of invertebrate taxonomy, physiology and function; external and internal anatomy; reproduction, life cycles, feeding relationships; practical skills for manipulating microorganisms and invertebrates and studying their activities.

LEVEL III

PLANT SC 3004WT **Mineral Nutrition of Plants III**

3 units - semester 2

2 hour lecture, 4 hour practical per week

Prerequisite: PLANT SC 2001WT, ENV BIOL 2006, VITICUL 2002WT or BIOLOGY 1203RW or equiv

Assessment: Exam, practical reports, reviews, essays

An advanced course which takes its brief from the acute deficiency in minerals of most South Australian soils, and the pre-eminent role of nutrition in successful agricultural production in this State. Topics are discussed in a context of both agricultural and horticultural industries, and include factors affecting nutrient acquisition by roots, diagnosis and correction of macro and micronutrient problems, fertiliser strategies, nutritional effects on produce quality, including nutritional quality, nutrition and disease resistance and genetic control of adaptation to nutrient limitations in soils.

PLANT SC 3009WT **Plant Molecular Biology III**

6 units - semester 2

3 hour Lecture, 1 hour tutorial, 4 hour practical per week

Assumed Knowledge: BIOCHEM 2106, ANIML SC 2029WT or BIOCHEM 2000A/B or equiv at credit level

Assessment: Practicals, tutorial projects, research planning & review, final exam

This course provides a current review of our knowledge in plant development, environmental responses and plant-microbe interactions. There is an emphasis on the molecular mechanisms directing plant gene expression under diverse environmental and developmental stimuli. This knowledge is central to our ability to modify plant responses and properties for commercial gains in biotechnology and agriculture. Areas covered in the course include: plant genes and genomes; mechanisms that control plant gene expression; molecular-genetic analysis of important characteristics; signal transduction; molecular biology of plant development, reproduction, and responses to disease and other environmental factors. In the laboratory classes, students will perform some of the techniques currently used to generate plant molecular biology information and undertake a research project related to current research in plant molecular biology and biotechnology.

PLANT SC 3022WT **Research Project Plant and Pest Science**

3 units - semester 1 or 2

Average 10 hours workload per week of supervised project work

Prerequisite: Relevant Level II course offered by Plant & Food Science

The course comprises a small research project to be undertaken during the fourth year of the program under the supervision of a staff member in the Discipline of Plant and Food Science. Students wishing to undertake a research project should consult the Head of Discipline before beginning of the fourth year. Courses presented as prerequisites should be relevant to the area of the research project.

PLANT SC 3030AEX/BEX **Integrated Weed Management III**

3 units - full year

Presented Online

Prerequisite: PLANT SC 3030AEX

Assessment: As for PLANT SC 3030AEX

The impact of weeds on agricultural and natural ecosystems. Important characteristics of weed biology. Ecology of weeds. Methods of sampling and monitoring weed infestations. Biological, cultural and chemical methods for weed management. Integrating management techniques for weeds in a range of ecosystems, including: cropping enterprises, perennial pastures, national parks and recreation areas and horticultural systems.

PLANT SC 3130WT **Plant Pathology III**

3 units - semester 1

2 hour Lecture, 4 hour Practical per week

Assumed Knowledge: PLANT SC 2004WT, OENOLOGY 2025WT, PLANT SC 2003RW, MICRO 2004 and ENV BIOL 2006

Incompatible: APP ECOL 3011WT and APP ECOL 3005WT

Assessment: Written exam, practical exercises, critical review, mini-internship

A senior level course designed to provide sufficient background in plant pathology for graduates to take

employment in plant disease control or to progress into postgraduate study in plant pathology or related disciplines. The course will consider the recognition of biotic plant diseases and how they are defined; evaluate economic factors; describe loss assessment; and describe the use of disease forecasting for decision making in management. The components of plant disease systems will be considered separately (pathogen, host and environment). Specifically, the course will examine the biology, taxonomy and disease cycle of plant pathogens; host resistance strategies; the physiology of the diseased plant; both inherent and introduced genetic factors; environmental factors; and the role of vectors in the spread of disease. This information will be integrated to illustrate the complex interactions required for the onset and progress of disease epidemics. Descriptors of epidemics and the strategy of using epidemiology as a basis for the management of disease by manipulating the components of epidemics will lead into an evaluation of the methods available for control of plant diseases. Case studies will be used where appropriate. Practical skills in working with fungi, bacteria, nematodes and viruses will be acquired both in the field and the laboratory. Experience in evaluation of research and report writing will be an outcome of the course.

PLANT SC 3131WT Integrated Pest Management III

3 units - semester 1

2 hour lecture, 4 hour practical per week

Assessment: Exam, practical exercises, assignments

This course provides an introduction to the theory and practice of pest management. Topics considered are: the development, regulation and use of pesticides; strategies and tactics for managing pests (biological, cultural, genetic and chemical control); integrated pest management; economics of pest management; the diagnosis of disease; strategies and tactics for managing disease outbreaks; integrated weed management.

PLANT SC 3200WT Plant Breeding III

3 units - semester 1

2 hour lecture, 4 hour practical per week

Assumed Knowledge: ANIML SC 2029WT or APP ECOL 1004RW/ BIOLOGY 1103RW or GENETICS 2100 or equiv

Incompatible: PLANT SC 3007WT and PLANT SC 3018WT

Assessment: Final exam, practical reports, essay

Generic manipulation in plants has underpinned improvements in productivity and has enhanced sustainability of farming systems worldwide. As well, plant generic diversity is fundamental to understand adaptation in natural systems. This course introduces the fundamental concepts of plant breeding and plant adaptation that are applicable to agricultural and natural systems. The topics covered include: genetic diversity in relation to adaptation, productivity, pest and disease resistance and end-use quality; strategies for setting breeding objectives and maximising selection and improvement of key traits; breeding methodologies for self or cross pollinated plants.

PLANT SC 3230WT Communication in the Agri-Food Industry III

3 units - semester 2

2 hour lecture, 4 hour practical per week

Assumed Knowledge: Level I/II of B.Ag.Sc, B.Sc.(Ag.Sc) or B.Food Sc.

Assessment: Written & oral presentations, poster preparation, class participation

The course provides an opportunity for students to integrate and extend their knowledge of the workplace, to incorporate scientific information effectively into practice and policy, and to develop communication skills allowing participants to enter and to play a role in local, national and international Agri-food developments.

It aims to provide instruction in information transfer techniques and principles involved in oral, written, and electronic communication of scientific knowledge; to give an opportunity to develop ability in public speaking, by interacting in a group and presenting views in public debate; to develop skills in researching, critically assessing, preparing and presenting information on selected topics relevant to the Agri-food industry; to introduce students to the use of electronic communication technologies; to expand understanding of problems and constraints to be faced in future employment; to identify career opportunities open to graduates, and to assist students in applying for positions and presentations to potential employers; to provide an insight into the approaches of decision makers in a variety of areas through appropriate guest lectures; to acknowledge the maturity of and to enhance the self-confidence of graduates.

PLANT SC 3500WT Biotechnology in the Food and Wine Industries III

3 units - semester 1

1 x 2 hour Lecture, 1 x 1 hour Tutorial, 1 x 4 hour Practical (Weeks 7-12 Only)

Assumed Knowledge: AGRIC 2500WT/RW or equivalent

Assessment: Practical reports, assignment, written exam

Application of biotechnology approaches to increase the nutritional composition and safety of food and beverages, for developed and developing nations. Emphasis is given to approaches that increase the sustainability of food production covering all aspects of the value chain from paddock to plate. Examples include DNA marker-assisted selection to fast track classical breeding methods for improved plants, animals and microorganisms, genetic modification (GM) approaches and enzyme engineering for efficient food processing and production, non-alcoholic and alcoholic fermentations, food additives. The role of the community, media and government in delivering safe, ethical and sustainable biotechnology solutions is investigated through current examples.

HONOURS

PLANT SC 4003AWT/BWT Honours Plant Science (BAgSc)

12 units - full year

Prerequisite: Credit or higher in at least 2 Level III courses approved by Head of Discipline

Corequisite: 2 additional Level III courses offered and approved by Discipline relevant to proposed research project (at discretion of Head, a relevant course taught by another discipline may be accepted)

Assessment: Average of four Level III courses, research project - research proposal, seminar, thesis and viva voce

Candidates will be required to undertake a research project under the supervision of one or more members of academic staff and present seminars and a thesis on their research work. Intending candidates should consult the Head of the Discipline of Plant and Food Science and potential supervisors during the third year and be prepared to begin studies in the discipline at the beginning of February or July.

PLANT SC 4012AWT/BWT Honours Plant Science

24 units - full year

Prerequisite: Credit or higher in at least 2 appropriate Level III courses offered by a Science Discipline

Assessment: Research proposal, seminar, thesis, viva voce - minor component, e.g. 10-20% may comprise coursework, essays or other assignments not part of research project as deemed appropriate to each student's program

This course is available under the provisions of Specific Academic Program Rule 5.6.2

Candidates will be required to undertake a research project under the supervision of one or more members of academic staff and present seminars and a thesis on the research work undertaken. A candidate may also be required to attend lectures and pass exams in related courses.

Intending candidates should consult the Head of the Discipline of Plant and Food Science and potential supervisors during the final year of the degree and be prepared to begin studies in the discipline at the beginning of February or July (for mid-year intake).

PLANT SC 4013AWT/BWT Honours Plant Science (BSc) Two Year

24 units - full year

Assessment: To be advised

Syllabus details to be advised.

Politics

LEVEL I

POLI 1101 Introduction to Australian Politics

3 units - semester 2

3 contact hours per week

Available for Non-Award Study

Assessment: tutorial participation 10%, 1000-1500 word short essay 30%, 2500-3000 word essay/optional 3 hour exam 60%

Politics affect you everyday, the conditions you live and work under, your identity, your security, the values and fears you possess, and ultimately your expectations as a citizen and your place in the world. This course will provide an introduction to the Australian political system in its social, cultural and economic context. Students will also be introduced to relevant theoretical debates in a range of areas. Topics covered include: national identity, political culture, governmentality, political parties, pressure groups, environmental issues, the media, class, gender, race, ethnicity, technology, the impact of economic globalisation, political institutions, democracy, elections, and Australia's position in the world. The course will address the major forces that are influencing and shaping the Australian political environment.

POLI 1102 Introduction to International Politics

3 units - semester 2

3 contact hours per week

Available for Non-Award Study

Assessment: tutorial participation 15%, minor essay 25%, major essay 40%, multiple choice test 20%

This course provides a comprehensive introduction to International Politics and International Relations, focusing in particular on its origins and historical evolution, its key concepts, major theoretical frameworks, main actors, institutions, architecture of power, and its dynamic nature in the process of globalisation. It introduces concepts of power, political economy, statecraft, diplomacy, foreign policy, and international security, and examines the evolution of international politics in the twentieth century.

POLI 1103 Justice, Liberty, Democracy: Debates & Directions

3 units - semester 2

3 contact hours per week

Available for Non-Award Study

Assessment: Participation 20% (tutorial participation 10%; tutorial workbook 10%), 1200-1500 word essay 30%, 2500-3000 word essay 60%

Do you want to better understand what is at stake when people debate the question of what is a good society? Do you want to have a deeper knowledge of why people disagree about how society should be organised?

A number of key concepts within socio-political thinking are very widely employed not only in the work of a range of scholars and other analysts but by media commentators, politicians and public policymakers. Such concepts are crucial to understanding what is going on in public debates on notions as varied as human nature, power, individual freedom, national identity, censorship, human rights, equality, social justice and group marginalisation, community, citizenship, work/life dilemmas, colonialism, civil liberties and social protest, amongst many others. However, even though these concepts underlie important public debates, they are often poorly understood.

This course will analyse the theoretical underpinnings of a liberal-democratic society such as Australia, seeking to develop an understanding of key concepts, both in themselves and in their relation to each other. The aim of this course is to enable students to better understand the basis of public debates, and hence be able to reflect upon their own views, by gaining a grounding in the major terms employed in socio-political thought today.

POLI 1104 **Introduction to Comparative Politics**

3 units - semester 1

3 contact hours per week

Available for Non-Award Study

Assessment: Final paper 40% (1400-1800 words), mid-term paper 20% (700-900 words), tutorial presentation & participation 20%, multiple-choice test 20%

The news each day brings questions about political and socio-economic events in different countries around the world. Why did Britain support - and France and Germany oppose - the war in Iraq? Why does religion play such a strong role in United States politics and Iran? Will rapid economic development trigger democratisation in China? Are multi-ethnic states threatened by the centrifugal forces of ethno-nationalism? Are democracies well equipped to fight against terrorism? All such questions are the intellectual terrain of Comparative Politics. Answering them requires an understanding of the history, political institutions and processes in these countries. In this course, we will look at the political systems of a wide range of economically developed and developing countries, democracies and non-democracies: Brazil, Britain, China, France, Germany, India, Indonesia, Iran, Japan, Pakistan, Russia and the United State. While analysing particular political institutions and arrangements in various countries and comparing them with those of others, we will also reflect upon the policy-making across diverse political systems.

ADVANCED LEVEL

POLI 2095 **Critical Security Studies**

3 units - semester 2

3 hours per week

Available for Non-Award Study

Assessment: 1500 word theoretical essay (30%), 3000 word major essay (50%), presentation (10%), participation (10%)

This course is concerned with the development of critical approaches to the study and practice of security in International Relations. It seeks to encourage students to reflect on the analytical and ethical assumptions that shape the ways in which security is thought about and practiced in contemporary global politics. It aims to provide an advanced level discussion of key contemporary theoretical debates about the meaning of security in international relations; to allow students to identify and explore 'new' issues on the global security agenda; to encourage critical thinking about the meaning and

practice of security in international relations; to facilitate an examination of new issues and dynamics in particular contexts; to develop student abilities to present a well-made, coherent and logically consistent argument supported by a coherent theoretical framework; and to enhance student research skills through the collection and analysis of information from a wide range of sources.

POLI 2096 **Human Rights & Postcolonial Issues**

3 units - summer semester

36 hours

Available for Non-Award Study

Prerequisite(s): 12 units Level 1 courses in any Faculty

Assessment: 2250 word equivalent conference presentation and participation (50%); 2250 word essay (50%)

The United Nations Universal Declaration of Human Rights embodies an ideal based on a recognition of the 'inalienable rights of all members of the human family'. That ideal is one which emerges from the profoundly important mission of imagining and realising a global human dignity. It's an ideal which is couched in a language and an imagination of global goals and aspirations and a universal human family. But that language does not exist in a political vacuum. It does not exist above or outside of ideology. There are many contentious issues related to the issue of universal human rights, and many ideological battlegrounds. This course will engage with some of these issues, primarily through a postcolonial theoretical lens. The course will explore some postcolonial critiques of dominant human rights discourses, and other related critiques too. Broadly, questions of whether absolutist frameworks are adequate to ethical and rights based issues will be addressed with the aim of critically examining what constitutes an appropriate imagination for the aspirations of the human family.

POLI 2100 **Intelligence and Security after the Cold War**

3 units - semester 1

3 contact hours per week

Available for Non-Award Study

Prerequisite: 12 units Level I Humanities/Social Sciences

Assessment: Exercises 20%, multiple-choice test 10%, participation 10%, 1,500 word Short Paper 20%, 2,500 word Major Essay 40%

This course will allow students to explore the rapidly evolving relationship between intelligence and security, concentrating especially on the intelligence gathering and interpretation after the collapse of the Soviet Union and the end of the Cold War. In order to provide a full background for such study, the subject will introduce students to concepts and theory in intelligence studies, and provide them with an understanding of how these fit into the broader context of the International Relations discipline. Of particular interest here, and particularly in the context of rapid scientific advances and the technologically-conditioned process of globalisation, will be a discussion of whether intelligence studies are an art or a science, and how well have intelligence agencies

coped with their work being more and more visible in the public domain, and their techniques increasingly open to public scrutiny? Leading on from this line of enquiry is an examination of how these aspects of intelligence studies have been influenced by the imperatives of creating Security States in the post-9/11 world order, and how local communities are managed in such an environment. Such critical perspectives will be informed by attention to specific case studies in our own region and farther abroad.

POLI 2104
Incredible India: Dynamics of a Rising World Power

3 units - winter semester
 3 contact hours per week
 Available for Non-Award Study
 Prerequisite(s): 12 units Level I Humanities/Social Sciences
 Incompatible: POLI 2094/3094
 Assessment: 1,500 word minor essay 30%, 3,500 word major essay 50%, tutorial participation 20%

This course will briefly examine India's emergence as a potential superpower in the 21st century. After a brief survey of the geography, anthropology and history of south Asia, the course will trace major changes in India since 1947. The major focus in this part of the course will be on contemporary issues arising from rapid economic transformation. Topics will include the decline of the Congress Party and the emergence of the Hindu-nationalist BJP, the impact of economic reforms, social and environmental consequences of the Green Revolution in agriculture, the growing political power of India's Backward Castes and ex-Untouchables, the emergence of India's middle class, the changing role of women, and the growth and international influence of Indian films and music.

The course will compare developments in India with those occurring in its south Asian neighbours Pakistan, Bangladesh, Sri Lanka and Nepal. It will also look briefly at the south Asian diaspora. The course will also examine India's relations with its neighbours, focusing especially on relations with Pakistan and the global significance of both nations as nuclear weapons states.

POLI 2105
Issues in Australian Politics

3 units - semester 1
 3 contact hours per week
 Available for Non-Award Study
 Prerequisite(s): 12 units Level I Humanities/Social Sciences
 Incompatible: POLI 2071/3071
 Assessment: 1,500-2,000 word tutorial paper 30%, major essay initial research source/bibliography exercise 5%, 3,500-4,000 word major essay 55%, tutorial participation 10%

This course covers key issues for the 21st century such as globalisation and the role of the nation state; the impact of international issues on Australian Politics e.g. the 'War on Terror' and Australian relations with the U.S. and Asia; cyberpolitics; the new information economy; genetic engineering; the politics of emotion; the politics of identity e.g. gender, race, ethnicity, religion

and the politics of sexuality; the politics of the media; environmental politics and climate change; new forms of inequality and the politics of fear and uncertainty. Particular emphasis is placed on analysing issues in the context of party political discourse and Australian political culture (including debates over Australian values and identity). The course draws on a wide range of analytical and theoretical frameworks from cybertheory to Foucaultian theories of governmentality.

POLI 2106
Justice, Virtue and the Good

3 units - semester 2
 3 contact hours per week
 Available for Non-Award Study
 Prerequisite: 12 units Level I Humanities/Social Sciences
 Incompatible: POLI 2009/3009
 Assessment: 3,000 word essay 50%, essay research exercise (abstract & annotated bibliography) (20%), multiple choice & short answer test 20%, tutorial participation 10%

This course traces the ideas of justice, virtue and the good - concepts of moral action and normative judgment which lie at the foundations of Western political institutions and moral systems. This course provides students with a familiarity with and understanding of important theoretical concepts embedded in selected classical texts and intellectual traditions of Western political philosophy.

POLI 2108
Post-Cold War International Relations

3 units - semester 1
 3 contact hours per week
 Available for Non-Award Study
 Prerequisite: 12 units Level I Humanities/Social Sciences
 Incompatible: POLI 2081/3081
 Assessment: Essay plan and annotated bibliography (1,000 words) 10%, 4,000 word major essay 60%, tutorial presentation 10%, multiple choice test 20%

This course explores some of the most important developments in international relations in the post-Cold war period, from the fall of the Soviet Union to the 'war on terror' at the opening of the twenty-first century. It aims to introduce students both to the major events of that period and to the debates, public and academic, over their causes, significance and meaning. It therefore examines issues and events such as the Yugoslav Wars of the 1990s or the 9/11 attack on the United States, exploring too the interpretations and understandings of those events of politicians, scholars and other commentators.

POLI 2110
Politics, Power and Popular Culture

3 units - semester 1
 3 contact hours per week
 Available for Non-Award Study
 Prerequisite(s): 12 units Level I Humanities/Social Sciences
 Incompatible: POLI 2079/3079
 Assessment: 1500-1800 word minor essay 30%, 2500-3000 word major essay 50%, film analysis 10%, participation 10%

The course will introduce students to the theory of politics and then show how this is represented in popular culture (notably film). The course seeks to investigate the modes of political power (micro-power and sovereignty) and the manner by which these are represented within the media and popular culture (using filmic examples from Hollywood, Britain and Australia). The course will examine, from a uniquely political perspective, issues of gender, sexuality, race, class and ethnicity in several different genres; drawing its examples from film and other text (e.g. television).

POLI 2111
Understanding Modern Europe

3 units - semester 1
 3 contact hours per week
 Available for Non-Award Study
 Prerequisite: 12 units Level I Humanities/Social Sciences
 Incompatible: POLI 2005/3005
 Assessment: 3,000 word major essay 50%, essay research exercise (abstract & annotated bibliography) 20%, multiple choice & short answer test 20%, tutorial participation 10%

This course explores the origins and circumstances of modern Europe. It concentrates on the principal political, social and economic forces that have shaped modern Europe and traces the patterns of post-World War II recovery and development through to the emergence of the European Union as the dominant political force. The course covers a range of national and European-wide topics and locates them in the broader historical and political context. To do this the course examines and explains the social patterns of modern Europe together with the roles of the key institutions of Europe, the European nations and the European Union.

POLI 2112
South Australian Parliamentary Internship

6 units - semester 2
 3 contact hours per week
 Quota will apply
 Prerequisite: 36 units from any Faculty including 12 units at Advanced level
 Incompatible: POLI 3083
 Assessment: 2,000 word essay 20%, 7,000 word major research paper 80%

As a central part of this course students will have the opportunity to spend a semester as 'interns' working with a Member of the State Parliament while completing an agreed research task. Final placement will depend upon availability and the application of an internal quota. In order to complete the process of placement allocation, students should finalise their enrolment by the completion of the normal enrolment period and cannot be considered if not enrolled before 30 April.

POLI 2118
Comparative Politics of Leadership

3 units - semester 1
 3 contact hours a week
 Available for Non-Award Study

Prerequisite: 12 units at Level I in Humanities/Social Sciences
 Incompatible: POLI 2002
 Assessment: 40% exercises, closed-book test & participation (20% exercises, 10% multiple-choice test, 10% participation), 1,500 word short paper 20%, 2,500 word major essay 40%

The decade of the 1980s was the last dominated by larger-than-life political leaders such as Thatcher, Reagan and Gorbachev, while the 1990s and beyond have revealed a persistent disquiet about the lack of quality, ethics and 'vision' in the running of countries and, with the growth of huge global manufacturing/financial operations, businesses too. This course employs a broad, inter-disciplinary approach, exploring the main dimensions of leadership in politics and international business/finance. Starting with classical political approaches, the course then moves on to the economic and historical factors normally associated with the rise of great leaders. In doing so, it acquaints students with a wide range of thinking and debate about the subject. Are great leaders shaped by culture, or does culture shape leadership? Were Stalin and Mao born with the necessary characteristics of supreme leadership? Did U.S. Presidents Kennedy and Clinton have natural appeal, or were they the products of 'spin-doctoring'? Did Malaysia's Mahathir emerge through carefully plotted political strategies, historical circumstance or force of personality? Is George Soros a leader in big business, or in the international political realm too? To what extent have populist leaders such as Gandhi and Mandela based their leadership on charismatic appeal?

POLI 2120
Conflict and Crisis in the Middle East

3 units - winter semester
 36 hours (1x3 hour seminar x 12)
 Available for Non-Award Study
 Prerequisite(s): 12 units at Level I in Humanities/Social Sciences, or equivalent
 Assessment: one 1,800-2,400 word research project 40%, annotated bibliography and abstract for research essay 20%; minor essay of 900-1200 words 20%, class test 10%, tutorial participation 10%

Since the creation of the modern Middle East in the early 20th Century the region has been consumed with both conflict and crisis. Many of these problems stem from the legacies of Ottoman and European colonialism. This course will examine the impact of colonialism, the creation of new nation-states, the division of ethnic and tribal groups, and the experimentation with new and foreign political ideologies. The search for national political identity in a post-colonial world has been influenced and shaped by key regional developments such as the establishment of Israel, the Palestinian refugees, intra-country conflict, the Cold War, and the influence (and at times occupation by) regional and Western powers. In the post-Cold War period a political vacuum emerged which was quickly filled by political Islamists and led to the era known as the 'war on terror'; resulting in the wars in Afghanistan and Iraq. Currently the region remains an area of stark contrasts of under-development and modernity, poverty and wealth, and autocracy, theocracy and democratic systems of governance. The majority of

the region's population is under 25 years of age and the political, social and economic implications this is going to have on the region and internationally in the next couple of decades is critical. This course will examine past conflicts and crises in the Middle East ranging from the 1948 Arab-Israeli war, the 1956 Suez crisis, the 1967 war, the Iranian revolution and rise of political Islam, to the post-September 11 environment.

POLI 2121
The Practice of Australian Politics

3 units - winter semester

36 hours of lectures and seminars

Available for Non-Award Study

Prerequisite(s): 12 units level 1 Humanities and Social Sciences courses

Incompatible: POLI 1101 Introduction to Australian Politics

Assessment: 1100-1500 word short essay (30%), 2250-3000 word major essay (60%), participation (10%)

This course will enable students to work on a selected number of policy case studies under the guidance of two former federal members of parliament. The focus will be on the factors that shape policy initiatives in Australia: how and why governments develop policy in the way that they do as well as on the ways that oppositions and minor parties react to these. Students will study the national and institutional context within which Australian governments operate. The course will enable students to work closely with former MPs and to utilise their unique insights into the practice of contemporary Australian politics.

POLI 2122
Global Environmental Politics

3 units - semester 1

3 hours per week

Available for Non-Award Study

Prerequisite(s): 12 units level 1 Humanities/Social Sciences

Assessment: 2250-3000 word major essay (50%), 1100-1500 word short essay (25%), test (15%), participation (10%)

Whether it is water security, the global food crisis, climate change, environmental refugees, nuclear energy, human survival or the rights of non-humans, environmental or green politics has established itself as one of the most exciting sites of political contestation around the globe today. This subject is divided into three parts. Part 1 establishes the theoretical underpinnings, including addressing traditional political theory and the environment, from conservatism to liberalism and neo-liberalism on the right, to Marxist and anarchist responses on the left. Part 2 concentrates on environmental politics in Australia, reviewing specific developments over the past thirty years. Part 3 moves to the international and transnational realms. Case studies are taken from numerous countries and cultures where people are pursuing green political goals through a myriad of political processes. These range from the informal dynamics of networks, groups and social movements through to the more institutionalised responses of organisations, corporations, mass media, legal systems, political parties, governments and administrative systems. Cases are selected from across the globe: from the more affluent worlds of Europe and

North America; to the majority worlds of Africa, South America and Asia.

HONOURS

POLI 4401A/B
Honours Politics

24 units - full year

Prerequisite: UG degree, credit average of at least 70% in courses contributing to major in Politics or equivalent, approved by Honours Coordinator

Assessment: 2 x 5,000-6,000 word coursework seminars 25% each, 15000-18,000 word thesis 50%

Students wishing to take Honours Politics should consult the Honours Coordinator prior to commencing Advanced Level courses to ensure appropriate course choices are made in preparation for Honours.

There is a preliminary Honours meeting in November of each year where the Honours Handbook and applications will be available. Any questions regarding Honours are answered at this meeting. Please check Politics noticeboard for the date of this meeting, which will also be announced in lectures.

In some circumstances Honours Politics can be studied part-time over two years, or combined with Honours in another discipline.

Psychiatry

LEVEL II

PSYCHIAT 2200
Emotion Culture & Medicine II

3 units - semester 2

2 hour seminar and 1 hour tutorial per week

Restriction: B.Hlth.Sc, B.Psych.(Hons), B.Psych Sci, BSoc Sci students only

Assumed Knowledge: PSYCHIAT 1001

Incompatible: ECM in any previous year

Assessment: 2 x 2,000 word essays, a reflective portfolio and tutorial attendance

ECM II is an interdisciplinary course that combines theoretical perspectives from psychology, neurobiology and cultural anthropology and applies these to the complex human emotional states, including happiness, sadness, anger and fear.

HONOURS

PSYCHIAT 4000AHO/BHO
Honours Psychiatry

24 units - full year

Students requiring further information concerning syllabuses and work required for the Honours Degree of

Bachelor of Medical Science are advised to consult the Head of the appropriate department as early as possible.

Psychology

LEVEL I

PSYCHOL 1000 Psychology IA

3 units - semester 1

3 lectures/week, 1 tutorial/practical most weeks

Check with School for Non-Award Study

Incompatible: 5104, PSYCHOL 1000A/B

Assessment: Assignments, practical exercise 40%, research participation 10%, written exam 50%

This course, together with PSYCHOL 1001, provides an introduction to the basic concepts and core topics within contemporary psychology. The two courses may be taken singly or in combination. Core topics covered over the year will include the development of the individual over the lifespan; the study of the person in a social context; differences between people with respect to their intelligence and personality; issues related to individual adjustment and maladjustment; the biological bases of behaviour; the interpretation by the brain of sensory signals from the external environment; the mechanisms underlying learning; the encoding, storage and retrieval of information; the nature of motivation and emotion; culture and cross-cultural psychology. The courses will also provide an introduction to the methodological approaches employed by psychologists to study these topics. Major findings to emerge from psychological research will be presented, and the practical significance of such work will be discussed. Practical work will address the conventions of psychological report-writing and the ethical principles underlying psychological research and practice.

PSYCHOL 1001 Psychology IB

3 units - semester 2

2 lectures/week, 1 hour tutorial/practical most weeks

Check with School for Non-Award Study

Incompatible: 5104, PSYCHOL 1000A/B

Assessment: Assignment & practical exercise 40%, research participation 10%, written exam 50%

This course, together with PSYCHOL 1000, provides an introduction to the basic concepts and core topics within contemporary psychology. The two courses may be taken singly or in combination. Core topics covered over the year will include the development of the individual over the lifespan; the study of the person in a social context; differences between people with respect to their intelligence and personality; issues related to individual adjustment and maladjustment; the biological bases of behaviour; the interpretation by the brain of sensory signals from the external environment; the mechanisms underlying learning; the encoding, storage and retrieval of

information; the nature of motivation and emotion; culture and cross-cultural psychology. The courses will also provide an introduction to the methodological approaches employed by psychologists to study these topics. Major findings to emerge from psychological research will be presented, and the practical significance of such work will be discussed. Practical work will address the conventions of psychological report-writing and the ethical principles underlying psychological research and practice.

PSYCHOL 1002 Exploring Psychology A

3 units - semester 1

3 lectures per week

Restriction: PSYCHOL 1000A/B, PSYCHOL 1000

Available for Non-Award Study

Incompatible: B.Psych.Sc./ B.Psych.(Hons) students

This course does not lead to level II Psychology - It is available to students choosing Level I Psychology as an elective and who do not wish to continue with Psychology at Level II

This course, together with PSYCHOL 1003 Exploring Psychology B, provides an introduction to the basic concepts and core topics within contemporary psychology. The two courses may be taken singly or in combination. Core topics covered over the year will include the development of the individual over the lifespan; the study of the person in a social context; differences between people with respect to their intelligence and personality; issues related to individual adjustment and maladjustment; the biological bases of behaviour; the interpretation by the brain of sensory signals from the external environment; the mechanisms underlying learning; the encoding, storage and retrieval of information; the nature of motivation and emotion; cultural and cross-cultural psychology. The courses will also provide an introduction to the methodological approaches employed by psychologists to study these topics. Practical work will address the conventions of psychological report-writing and the ethical principles underlying psychological research and practice. This course does not lead on to Level II Psychology courses.

PSYCHOL 1003 Exploring Psychology B

3 units - semester 2

3 lectures per week

Restriction: PSYCHOL 1000A/B, PSYCHOL 1001

Available for Non-Award Study

Incompatible: B.Psych.Sc./ B.Psych.(Hons) students

This course does not lead to level II Psychology - It is available to students choosing Level I Psychology as an elective and who do not wish to continue with Psychology at Level II

This course, together with PSYCHOL 1002 Exploring Psychology A, provides an introduction to the basic concepts and core topics within contemporary psychology. The two courses may be taken singly or in combination. Core topics covered over the year will include the development of the individual over the lifespan; the study of the person in a social context; differences between people with respect to their

intelligence and personality; issues related to individual adjustment and maladjustment; the biological bases of behaviour; the interpretation by the brain of sensory signals from the external environment; the mechanisms underlying learning; the encoding, storage and retrieval of information; the nature of motivation and emotion; cultural and cross-cultural psychology. The courses will also provide an introduction to the methodological approaches employed by psychologists to study these topics. Practical work will address the conventions of psychological report-writing and the ethical principles underlying psychological research and practice. This course does not lead on to Level II Psychology courses.

LEVEL II

PSYCHOL 2004 Doing Research in Psychology

3 units - semester 1

2 lectures per week; 5 tutorials per semester; 7 SDL/practical work exercises per semester and research participation

Restriction: PSYCHOL 2001

Prerequisite(s): PSYCHOL 1000, PSYCHOL 1001 or equivalent

Assessment: Written exam 50%, online exercises and written practical report 45%, research participation 5%

The course presents an introduction to current approaches to enquiry in psychology. It considers the relative merits and shortcomings of these approaches and attempts to locate them within a broad framework of epistemological understanding. Consideration will be given to methods ranging from the interpretative to the experimental, and to appropriate procedures for analysing and drawing conclusions from the data such methods produce.

PSYCHOL 2005 Foundations Health & Lifespan Development

3 units - semester 2

2 lectures per week; 4 tutorials per semester and 8 self directed learning/practical work exercises per semester

Restriction: PSYCHOL 2000A/B, PSYCHOL 2002 or PSYCHOL 2003 IB

Prerequisite(s): PSYCHOL 1000, PSYCHOL 1001 or equivalent

Assessment: Written exam 50%, tutorial and online exercises and written assignments 50%

This course builds on the components of mental health and developmental psychology introduced in Psychology IA and IB. The course work covers two broad thematic areas. The first aims to build a solid foundation in understanding of development across the lifespan by considering select topics in development during childhood, adulthood and old age. The second provides an introduction to evidence-based psychological assessment, treatment and prevention for mental health behaviours as well as coverage of select topics in biological bases of health and behaviour. The course draws on the biopsychosocial (mind - body) perspective that recognises that health and other behaviours are determined by the interaction of biological mechanisms, psychological processes and social influences.

PSYCHOL 2006 Foundations of Perception & Cognition

3 units - semester 1

2 lectures per week, 4 tutorials per semester and 8 self directed learning exercises per semester

Restriction: PSYCHOL 2000A/B, PSYCHOL 2002 or PSYCHOL 2003

Prerequisite(s): PSYCHOL 1000, PSYCHOL 1001 or equivalent

Assessment: Written exam 50%, online exercises and written assignments 50%

This course builds on the course components of the biological bases of behaviour, perception, and cognition studied in Psychology IA and Psychology IB. The aim of this course is to build a solid foundation in both perception and cognition. Students will examine how the brain processes sensory information to create a coherent representation of the environment and to allow individuals to perform daily activities. There will be a focus on the visual system, from the simple detection of light to using visual information to control movements. Building upon this basis, students will examine topics in cognition such as attention, memory, concept learning, categorisation, judgement and decision making, and language. The focus will be upon understanding basic principles and theories as well as their potential application to real world problems such as eyewitness testimony, autobiographical memory, language development, reading and problem solving.

PSYCHOL 2007 Psychology in Society

3 units - semester 2

2 lectures per week, 4 tutorials per semester and 8 self directed learning exercises per semester

Restriction: PSYCHOL 2000A/B, PSYCHOL 2002 or PSYCHOL 2003

Prerequisite(s): PSYCHOL 1000, PSYCHOL 1001 or equivalent

Assessment: Written exam 50%, online exercises and written assignments 50%

This course seeks to build upon Level I Psychology, specifically areas relating to social, cross-cultural and organisational psychology. Social psychology lectures will include topics central to contemporary research in social cognition drawing specifically on experimental research on explicit and implicit processes in social perception. It will consider the social and psychological functions of stereotyping and the extent to which this psychological process can be brought under intentional control. Cultural psychology lectures will examine the ways in which the culture we are born into exerts a powerful influence on all aspects of our lives and how psychological knowledge itself can be shaped by cultural assumptions and values. Particular emphasis will be placed on indigenous issues in psychology and the importance of understanding these in the context of clinical and applied work with indigenous people. Organisational psychology will provide students with an understanding of how psychology can be used to enhance selection, recruitment and performance assessment in organisations, the impact on work performance of organisational culture, and the role of the organisational psychologist.

PSYCHOL 3020 Doing Research in Psychology: Advanced

3 units - semester 2

1 lecture per week; 5 tutorials per semester; 7 SDL/practical work per semester

Restriction: PSYCHOL 3000

Prerequisite(s): Psychological Research Methods II, Psychology IIA and Psychology IIB or Doing Research in Psychology, Foundations of Health & Lifespan, Foundations in Perception & Cognition, Psychology in Society

Assessment: Written Exam 50%, Online exercises and written practical report 50%

The course will introduce a range of methods and issues in psychological enquiry that are more complex than those taught at Level II. A wide range of issues relating to research design will be covered, including ethical considerations in psychological research. Consideration will also be given to the inferences that have been made by researchers using particular research designs in specific areas of psychological interest.

PSYCHOL 3021 Health & Lifespan Development Psychology

3 units - semester 2

1 lecture per week; 4 tutorials per semester; 8 SDL exercises/practical work

Restriction: PSYCHOL 3003, PSYCHOL 3017

Prerequisite(s): Psychological Research Methods II, Psychology IIA and Psychology IIB or Doing Research in Psychology, Foundations of Health & Lifespan, Foundations in Perception & Cognition, Psychology in Society

Assessment: Written Exam 50%, tutorial and online exercises and written report 50%

This course builds on the material of the foundation course. The underpinning theme is: the psychological, behavioural and social origins of development, illness, well-being and health enhancing behaviours. Lectures will focus on advanced topics in child development, mental health and physical health, and will include developing skills in critical evaluation and knowledge applications.

PSYCHOL 3022 Individual Differences, Personality & Assessment

3 units - semester 1

1 lecture per week; 4 tutorials per semester; 8 SDL exercises/practical work per semester

Restriction: PSYCHOL 3014

Prerequisite(s): Psychological Research Methods II, Psychology IIA and Psychology IIB or Doing Research in Psychology, Foundations of Health & Lifespan, Foundations in Perception & Cognition, Psychology in Society

Assessment: Written Exam 50%, Online exercises and written practical report 50%

This course addresses the field of Differential Psychology, which is concerned with understanding how and why people differ, despite broad similarities shared by all human kind. It reviews major theories, research methods and findings and how these translate into practices in the fields of intelligence and personality, including

assessment. The curriculum builds on knowledge introduced in first and second years.

PSYCHOL 3023 Perception & Cognition

3 units - semester 2

1 lecture per week; 4 tutorials per semester; 8 self-directed learning sessions per semester

Restriction: PSYCHOL 3018, Psychol 3019

Prerequisite(s): Psychological Research Methods II, Psychology IIA and Psychology IIB or Doing Research in Psychology, Foundations of Health & Lifespan, Foundations in Perception & Cognition, Psychology in Society

Assessment: Written Exam 50%, Online exercises and written report 50%

Perception and Cognition builds upon PSYCHOL 2006 Foundations of Perception and Cognition. Lectures will focus on advanced topics in visual perception, such as depth perception, object recognition, face perception, and the relationship between vision and action, as well as on theories of cognition covering metacognition, learning, categorisation, and language. Tutorials and self-directed learning sessions will introduce students to methods and skills in each of these areas, and will encourage students to evaluate and engage with primary sources.

PSYCHOL 3024 Psychology in Society: Advanced

3 units - semester 1

1 lecture per week; 4 tutorials per semester; 8 self-directed learning sessions per semester

Restriction: PSYCHOL 3010I, PSYCHOL 3013

Prerequisite(s): Psychological Research Methods II, Psychology IIA and Psychology IIB or Doing Research in Psychology, Foundations of Health & Lifespan, Foundations in Perception & Cognition, Psychology in Society

Assessment: Written Exam 50%, Online exercises and written report 50%

This course is divided into two principal sections, both of which relate to the theoretical development and practical application of psychological principles to human behaviour. The first part of the course builds on material presented in earlier years on social psychology. Three specific theoretical approaches will be considered: social identity theory and its more recent theoretical derivative self-categorisation theory (Tajfel and Turner), social representations theory (Moscovici) and discursive psychology (Edwards, Potter and Wetherell). These approaches will be applied to understanding central topics in social psychology such as social categorisation, stereotyping, prejudice and identity. Implications for understanding social issues such as the nature of intergroup relations in society will be considered. The second part of the course builds upon material presented in the Psychology I course on the psychology of learning, and should be of considerable value to those considering further experimental or applied work. There will be a brief review of the fundamental principles and theories in the field of learning and behaviourism as exemplified in the work of Pavlov, Skinner, Rescorla, Seligman, Premack, Timberlake and others. The implications of these findings for clinical psychology, economics, health-

related interventions, and the treatment of addictions will be considered using numerous research examples. The course will also examine the role of cognitive factors in modern learning theory such as the theory of learned-helplessness, the illusion of control literature, consumer and economic behaviour, and research using measures of control motivation.

PSYCHOL 3025

Psychology, Ideas & Action

3 units - semester 1

1 lecture per week; 4 tutorials per semester; 8 self-directed learning sessions per semester

Restriction: Psychol 3009, PSYCHOL

Prerequisite(s): Psychological Research Methods II, Psychology IIA and Psychology IIB or Doing Research in Psychology, Foundations of Health & Lifespan, Foundations in Perception & Cognition, Psychology in Society

Assessment: Written Exam 50%, Online exercises and written report 50%

This course looks at Psychology as a complex human enterprise that is concerned with the production, dissemination and application of psychological knowledge claims. The broad aim of the course is to examine Psychology's relationship to science, in part by consideration of recent developments in related disciplines such as the history and philosophy of science, and the sociology of scientific knowledge. The course is also concerned with examining the ways in which Psychology functions in society - what psychologists do, who employs them, and how psychological theories are put to use in a variety of social institutions such as government, education, health and the law.

HONOURS

PSYCHOL 4000A/B

Honours Psychology

24 units - full year

Prerequisite: see School for entry requirements

Assessment: Exams in four elective topics 40%, exam in one compulsory topic 10%, empirical research thesis 50%

Intending applicants should obtain the Honours Introductory Booklet from the School or consult the School's website on how to apply for admission to Honours Psychology. Note that a quota will apply to the number of students who can be accepted into this program. Honours Psychology is a full year's program of lectures and discussions on advanced topics. It also involves a dissertation embodying the results of a research investigation carried out under supervision of a member of the staff of the School or other person nominated by the School for the purpose.

PSYCHOL 4100A/B

Honours Psychology Two-Year

24 units - full year

Syllabus to be advised.

Public Health

LEVEL I

PUB HLTH 1001

Public Health IA

3 units - semester 1

4 hours per week

Available for Non-Award Study

Assessment: Exam, assignments, tutorial & practical participation

How and why have the main causes of illness and death in Australia changed over time? How do we define and measure health and illness? How does where you live, the job you do or your level of income affect your health? How does public health affect the way we think about health and disease? Is health a private or a public responsibility? Why is public health controversial?

The course seeks answers to such questions by drawing on a number of disciplines, including history, politics, ethics, sociology, epidemiology and biostatistics. It takes a population view of health and invites students to develop a critical view about what constitutes a public health issue and about the responses offered to these issues.

PUB HLTH 1002

Public Health IB

3 units - semester 2

4 hours per week

Available for Non-Award Study

Assumed Knowledge: concepts of health & disease, principles of public health, health status of Australians, descriptive epidemiology & basic biostatistics, public health applied to infectious & chronic disease, role of government in public health in Australia

Assessment: Exam, assignments, including media journal, tutorial & practical participation

What strategies for reducing smoking and encouraging exercise are likely to be successful? How important are controls over food safety, water quality and waste disposal? How do ecological issues impact on public health? What political issues are involved in allocating resources for health or maintaining a healthy environment? How is population control a public health issue? What is Australia's approach to the health impact of an ageing population? What are the health needs of indigenous Australians? How does the organisation of health care affect our health?

With the underlying theme of health promotion, Public Health IB seeks answers to such questions by drawing on a number of disciplines, including environmental science, health economics, organisation of health care systems, sociology, social psychology; epidemiology; history, politics and ethics. It takes a population view of health and invites students to develop a critical view about what constitutes a public health issue and about the responses offered to these issues.

LEVEL II

PUB HLTH 2100 Public Health Sciences II

3 units - semester 1

4 hours

Restriction: B.Hlth.Sc, B. Develop St. & B.Psych.(Hons) students

Prerequisite: PUB HLTH 1001, PUB HLTH 1002 Public Health IB

Assumed Knowledge: Public Health IA & IB - under some circumstances, students who have not taken Public Health IA/IB may be able to enrol, but must discuss with course coordinator prior to enrolment

Assessment: Exam, assignments, tutorial practical & site visit participation

The overall aim of this course is to equip students with an appreciation of three scientific disciplines that underpin a substantial part of the practice of public health: Biostatistics, Epidemiology, and Occupational and Environmental health science.

PUB HLTH 2200 Public Hlth Inquiry II

3 units - semester 2

4 hours

Restriction: B.Hlth.Sc, B. Develop St. & B.Psych.(Hons) students

Prerequisite(s): PUB HLTH 1001 , PUB HLTH 1002

Assumed Knowledge: Public Health IA & IB - under some circumstances, students who have not taken Public Health IA/IB may be able to enrol but must discuss with course coordinator prior to enrolment

Assessment: 3 written assignments worth a total of 70%, 20% group presentation, 10% participation

This course will provide a detailed background to the major streams of inquiry in public health - in particular, epidemiology and social and political analysis - and their application to the resolution of contemporary problems in public health.

LEVEL III

PUB HLTH 3119 Public Health Internship III

6 units - semester 2

3 hour seminar and workplace experience

Restriction: B.Hlth.Sc, & B.Psych.(Hons) students only

Following provisional enrolment, 10 students will be selected, based on marks in PUB HLTH 1001, PUB HLTH 1002, PUB HLTH 2000, PUB HLTH 2001

Prerequisite: PUB HLTH 2000, PUB HLTH 2001, at least six units Level III Public Health courses

Assessment: Research, tutorial papers

This course provides students with the opportunity to combine workplace experience in Public Health settings with academic study. During the course students complete a substantial research task that involves the application of public health research skills and knowledge to a work environment.

Students are allocated placements from a range of

offerings which include the State Office of the Australian Government Department of Health and Ageing, the South Australian Department of Health, Divisions of General Practice, and health promotion and other non-government organisations in the health sector. Final placement will depend upon availability and the application of an internal quota of 10 students.

PUB HLTH 3122 International Health III

3 units - semester 1

35 hours, intensive mode

Restriction: Open to all B.Hlth.Sc, MBBS & B.Dev.St students in yr 3

Assessment: Combination of essay, group presentation, written exam

This course introduces students to the basic principles of international health, in order to give them a better understanding of the wider context of health systems in developing and transition countries. The course is designed to provide learning for working with communities and organisations that are responsible for funding and/or providing health care and health promotion in developing and transition countries. The course provides an overview of health systems and public policy issues in low and middle-income countries, and covers concepts such as health transition during development, globalisation and health, financing and organisation, as well as the role of the private sector, Non-Government Organisations and international organisations.

Issues such as inequities in health financing and delivery are discussed as well. With the help of case studies, the course provides an understanding about the delivery of health care, public health and health promotion in disadvantaged communities. The lectures and case studies discussion highlights the role of communities, clients, community based organisations, public and private sector providers, and funding agencies. Factors facilitating access, quality, cost and fairness of services and programs will be discussed.

PUB HLTH 3500EX Rural Public Health III

3 units - winter semester

1 week intensive, seminars, workshops and site visits, based in Whyalla

Available for Non-Award Study

Prerequisite: Previous/concurrent study of public health, clinical medicine or social and economical development

Assumed Knowledge: Basic concepts and principles of Public Health, including: determinants of health, health differentials and basic research skills

Assessment: Based in Whyalla & attendance required at all sessions - mixture of review paper, minor paper, group project & major paper

The Rural Public Health course aims to: develop understanding of the influence of rurality and remoteness on the health of rural Australia; increase knowledge and understanding of policy directions in rural health and models of rural and remote health service delivery; increase skills and knowledge in developing public health strategies to reduce the severity of health risks for rural and remote Australians; gain skills that are relevant to employment in the health system.

PUB HLTH 3501

Epidemiology in Action III

3 units - semester 2

Restriction: Open to all students with appropriate prerequisites

Prerequisite: Successful completion of PUB HLTH 2000 and PUB HLTH 2001

Assessment: Written assignments, group project and exam

This course focuses on mastery of the epidemiological concepts and measures that are routinely used in public health practice. It demonstrates the essential role of epidemiology in monitoring the health of populations and responding pro-actively to public health problems. The strengths and limitations of epidemiology in this context will also be considered. The course will extend students' ability to access and interpret the epidemiological information contained in reports regularly produced by organisations such as the World Health Organisation, NHMRC and the Australian Institute of Health and Welfare. In addition, skills in reading and understanding systematic literature reviews will be introduced, as these reviews are an increasingly important source of evidence for health-related initiatives, and such skills are highly valued in public health workplaces. This learning will occur through considering a series of topics, such as population management of infectious diseases, health inequalities, population screening, reproductive health, and the assessment of health interventions.

PUB HLTH 3503

Public Health Theory and Practice III

3 units - semester 1

Restriction: Open to all students with appropriate prerequisites

Prerequisite: Successful completion of PUB HLTH 2000 and PUB HLTH 2001

Assessment: Combination of review paper, minor essay, group project and major essay

This course aims to help students to analyse health policies and health systems and to transmit their findings in preparation for a career in public health or a related field. The course invites students to reflect more deeply on current assumptions and practices in public health, while also providing an opportunity for them to further develop practical skills in asking relevant questions, interpreting information, writing reports and transmitting knowledge. There is a focus on the broad context in which health policy is formed and implemented and the value assumptions implicit. The course is delivered in modules built around selected public health priorities which may vary from year to year, but may include the structure and function of the Australian health system, the improvement of Indigenous health and/or the promotion of health weight.

PUB HLTH 3504

Protecting and Promoting Health III

3 units - semester 1

Restriction: Open to all students with appropriate prerequisites

Prerequisite: Successful completion of PUB HLTH 2000 and PUB HLTH 2001

Assessment: Combination of review paper, summary, group project and major essay

This course is designed to provide students with an in-depth understanding of the concepts of protecting and promoting health at individual, group, community and national levels. It begins with a critical review of the determinants of health and health inequalities in Australian and international contexts.

The principles of health promotion and protection, and practical methodologies such as health impact assessment, are then introduced.

Examples of the application of these principles and methods are considered in various contexts, such as workplace health promotion, environmental health protection and community development. The concepts will be illustrated across a range of government sectors, including transportation, housing, agriculture, water supply and waste management.

HONOURS

PUB HLTH 4000AHO/BHO

Honours Public Health

24 units - full year

Restriction: B.Med.Sc. students, appropriately qualified B.Hlth.Sc. students, or permission of Head Department

Assessment: Course work, seminar attendance, honours thesis

Students requiring further information concerning syllabuses and work required for the Honours degree of Bachelor of Medical Science or Bachelor of Health Sciences (Honours) in Public Health are advised to consult the Honours Coordinator as early as possible.

PUB HLTH 4001AHO/BHO

Combined Honours Public Health/Politics

24 units - full year

Syllabus details to be advised.

PUB HLTH 4002AHO/BHO

Combined Honours Public Health/Geography

24 units - full year

Syllabus details to be advised.

PUB HLTH 4005AHO/BHO

Combined Honours Public Health/Philosophy

24 units - full year

Restriction: B.Med.Sc. students, appropriately qualified B.Hlth.Sc. students, or permission of Head of Department

Assessment: to be advised at start of year

Honours subject Public Health combined with Philosophy.

PUB HLTH 4007AHO/BHO

Combined Honours Public Health/Anthropology

24 units - full year

Syllabus details to be advised.

PUB HLTH 4009AHO/BHO **Combined Honours Public Health/GSWI**

24 units - full year

Syllabus details to be advised.

PUB HLTH 4010A/B **Combined Honours Public Health/GSWI (Two Year)**

24 units - full year

Syllabus details to be advised.

PUB HLTH 4011A/B **Combined Honours Public Health/Media**

24 units - full year

Syllabus details to be advised.

PUB HLTH 4100AHO/BHO **Honours Public Health (Two Year)**

24 units - full year

Restriction: B.Med.Sc. students, appropriately qualified B.Hlth.Sc. students, or permission of Head of Discipline

Assessment: Course work, seminar attendance, honours thesis

Students requiring further information concerning syllabuses and work required for the Honours degree of Bachelor of Medical Science or Bachelor of Health Sciences (Honours) in Public Health/Politics are advised to consult the Honours Coordinator as early as possible.

PUB HLTH 4101AHO/BHO **Combined Honours Public Health/Politics (Two Year)**

24 units - full year

Restriction: B.Med.Sc. students, appropriately qualified B.Hlth.Sc. students, or permission of Head of Discipline

Assessment: Course work, seminar attendance, honours thesis

Students requiring further information concerning syllabuses and work required for the Honours degree of Bachelor of Medical Science or Bachelor of Health Sciences (Honours) in Public Health/Politics are advised to consult the Honours Coordinator as early as possible.

Rural Health

HONOURS

RUR HLTH 4000AEX/BEX **Honours Rural Health**

24 units - full year

Syllabus details to be advised.

Soil & Water

LEVEL I

SOIL&WAT 1000WT **Soils and Landscapes I**

3 units - semester 2

1 x 2 hour lecture, 1 x 1 hour tutorial, 1 x 3 hour practical per week - field trip of up to 4 days

Restriction: B.Agricultural Sciences, B.Viticulture & Oenology

Assumed Knowledge: SACE Science subjects

Incompatible: GEOLOGY 1103, GEOLOGY 1200

Assessment: Exam, tutorials, practical assignments, report, quizzes

This course describes how agricultural and ecological systems are linked to soils and the Australian environment, and provides a basis from which sustainability issues can be addressed. Agro-ecosystems face increasing pressure in Australia to become more productive, profitable and efficient, yet sustainable. You will learn about the importance of soils in the landscape in relation to management of fertility, water use efficiency, and land degradation. You will learn about important ecological processes that are based in soils, and consider a 'whole-system' approach to land management. This will include interpretation of soil maps in relation to land evaluation and suitability for different purposes.

This course will include a field camp up to 4 days duration and details will be provided at the start of the course.

LEVEL II

SOIL&WAT 2500/2500WT **Soil and Water Resources II**

3 units - semester 1

2 hour lecture, 4 hour practicals per week

Available for Non-Award Study

Assumed Knowledge: SOIL&WAT 1000RW or GEOLOGY 1200 or GEOLOGY 1103

Assessment: Practical, quizzes, essay, theory exam

Soil and water are fundamental resources in the environment. This course aims to provide an understanding of important soil physical, chemical and biological properties and of water quality. Topics include: soil water retention, storage and movement, salinity, chemical fertility, the role of biology in soil processes, soil conservation and management, water quality factors and the impact of land management on these factors.

SOIL&WAT 2501 **Spatial Information and Land Evaluation II**

3 units - semester 1

2 hour lecture, 3 hour practical per week, 1 day field excursion

Available for Non-Award Study

Assessment: Practical reports, theory exam

Spatial information is fundamental to decision making in all environmental disciplines. It is widely used in natural sciences areas from agriculture, environmental management to mining industries. The breadth of applications of spatial information is increasing rapidly due to a vastly improved availability of spatial data and the recently accelerated development of geographic information systems and remote sensing tools. The

subject introduces theory, history and current methods of spatial information presentation, generation, and analysis. It gives an overview of major Australian and South Australian mapping programs and spatial information in government agencies. Students are introduced to factors that shape the landscape and learn how to interpret land surface features. In field exercises students are introduced to surveying, the use of Global Positioning Systems, field navigation and safety.

LEVEL III

SOIL&WAT 3002WT **Soil Management and Conservation III**

3 units - semester 1

2 hour lecture, 4 hour practical per week

Prerequisite(s): SOIL&WAT 2500WT or SOIL&WAT 2005WT

Assessment: Exam, practical reports, other assignments

This course covers topics important to students of agriculture, horticulture, environmental science and natural resource management. Degradative processes which pose the greatest threats to the soil resources of Australia are examined and their avoidance, management and amelioration are discussed. These processes include: erosion of soil by water and wind, water repellence, irrigation and dryland salinity, induced soil acidity, soil structure decline and sodicity. Other issues addressed are soil conservation legislation and land capability. Practical work will consist of laboratory exercises, field excursions and other exercises related to the above topics.

SOIL&WAT 3004WT **Environmental Toxicology and Remediation III**

3 units - summer semester

24 hours lectures, 4 x 4 hour practical sessions, 2 x 1 day field trips during the summer vacation

Prerequisite(s): Credit or higher in PLANT SC 1001RW or a Pass in CHEM 1000A/B or CHEM 1001A/B or equiv.

Incompatible: SOIL&WAT 3004WT

Assessment: Theory, practicals/assignments

The goals of this course are to provide students with an understanding of the monitoring, fate and risk assessment of contaminants in environmental and biological systems. Classes of contaminants discussed include heavy metals, pesticides, and other water-, soil- and food-borne toxicants. The properties of contaminants which influence their environmental distribution and transformations and the characteristics of the environment which influence contaminant toxicity to organisms are discussed. Students are introduced to the principles of toxicology necessary for an understanding of the environmental consequences of contaminants.

SOIL&WAT 3005WT **Research Project: Soil and Land Systems III**

3 units - semester 1 or semester 2

10 hours practical work per week (or equiv.) on projects

Prerequisite(s): at least 55% in each of 2 level III courses offered by Discipline or equivalents acceptable to Head of Discipline

Corequisite(s): 2 level III courses offered by Discipline other than those serving as prerequisites, or equivalents acceptable to Head

Assessment: Oral exam, seminar, written project report

The course consists of a small research project of the student's choosing on a topic acceptable to the Discipline of Soil and Land Systems. It will be undertaken during the 3rd year of the program.

SOIL&WAT 3007WT **GIS for Environmental Management III**

3 units - summer semester

15 days during the summer vacation

Available for Non-Award Study

Incompatible: SOIL&WAT 3014WT

Assessment: Practical exercises, case study, written exam

This course involves teaching sessions that may be attended by both Undergraduate and Postgraduate students.

The course deals with concepts and theory of geographic information systems and their use for environmental mapping, spatial modelling and analysis. Topics covered include the relationship of GIS models to real world perception and map representation, vector and raster systems; spatial modelling; translation of problems into GIS procedures; attribute manipulation and recoding, operations including arithmetic and Boolean overlay, reclassification, proximity and neighbourhood analyses; input of data to GIS; database structures; interpolation of surfaces from point and vector data; applications and case studies. Practical work uses PC-based software to teach basic skills in GIS data entry, analysis and output, emphasising a problem-solving approach through environmental and agricultural GIS case studies.

SOIL&WAT 3010 **Remote Sensing III**

3 units - semester 2

2 hour lecture, 3 hour practical per week

Prerequisite: 16 units of Level II science courses or equiv

Incompatible: GEOLOGY 3008 and SOIL&WAT 3008

Assessment: Exam, practical exercises

Remote sensing interprets image-based information gathered by space and airborne platforms using various scanning systems. This course examines the principles and applications of remote sensing to a range of disciplines. Principles include the interaction of electromagnetic radiation with the Earth's atmosphere and surface, spectral characteristics of earth surface materials, and the nature of imagery collected by a variety of earth-observation sensors. We will discuss the use of spectral data to identify and characterise objects (rocks, soils, vegetation, water), produce thematic maps and monitor changes over time. The nature and application of specialised forms of remote sensing including radiometric data, hyperspectral, radar and thermal imagery are also considered. These data are relevant to a wide range of applications including geology, environmental

and agricultural science. Information is extracted using digital image processing: correction, enhancement and classification of the digital data and its integration with geographic information systems. Practicals are used to give 'hands-on' experience with the basics of digital image interpretation and processing and application to specific projects.

SOIL&WAT 3012WT **Soil Water Management III**

3 units - winter semester

10 days during the mid year break

Prerequisite(s): SOIL&WAT 2012WT or SOIL&WAT 2005WT

Assessment: Exam, tutorials, practical reports

This course covers the theory and practice of measuring and managing soil water using commercially available technology. Topics include soil water content and potential, water availability to plants, water movement in unsaturated and saturated soils, soil structure and salt-affected soils. Computers will be used to model infiltration, storage and movement of soil water, and to solve problems. Practical classes will demonstrate important techniques in soil survey for managing soil water in dryland and irrigated situations.

SOIL&WAT 3014WT **GIS for Agricultural Sciences III**

3 units - semester 2

24 hours lectures, 48 hours practical work during the mid semester break

Available for Non-Award Study

Incompatible: SOIL&WAT 3007WT and SOIL&WAT 7025WT

Assessment: Case study, practical assessments, written exam

Geographic information systems have become an important tool far beyond the geographic disciplines. Applications in the agricultural sciences range from simple cartographic tools to precision fertiliser applications and growth models. This course gives an overview of the history and the rapid recent development of this technology and gives examples of commercially available state-of-the-art equipment. Hands on computer exercises involve data capture, processing and presentation of results. Special emphasis is placed on precision agriculture and the optimal and timely treatment of spatial variability in agricultural production systems. Students will learn what can be seen from space and airborne remote sensing and how this information can be combined with other sources of information in order to minimise effort and optimise production.

SOIL&WAT 3016WT **Soil Ecology and Nutrient Cycling III**

3 units - semester 1

2 hour lecture, 4 hour practical per week

Prerequisite(s): SOIL&WAT 2005WT or SOIL&WAT 2012WT

Assessment: Exam, practical reports, research proposal

The course will provide students with a comprehensive view of ecological interactions in soils. It deals with the interactions between plants, soil and soil organisms, the roles played by soil organisms in decomposition of organic material, nutrient cycling (C, N, P) and stability of agricultural and natural ecosystems. Other topics include the importance of soil organisms for soil fertility, mycorrhizas and their effects on plant productivity and plant communities, soil microbial ecology, root growth, the biology of the rhizosphere and the impact of climate change on nutrient cycling.

HONOURS

SOIL&WAT 4001AWT/BWT **Honours Soil & Land Systems**

24 units - full year

Prerequisite(s): Credit or higher standard in at least 2 Level III courses approved by the Head of Discipline.

Assessment: Research proposal, final seminar, research paper, viva voce, weighted average of non-research component

Requirement: substantial research project of student's choosing (on topic acceptable to Discipline) under supervision of an examining committee (including academic staff members) approved by Head of Discipline, non-research component, including coursework, essays or other assignments relevant to student's Honours project and approved by Head of Discipline

Intending candidates should consult the Head of Discipline, Honours Coordinator and potential supervisors during third year and be prepared to begin studies at the beginning of February or July.

SOIL&WAT 4002AWT/BWT **Honours Soil & Land Systems (B.Ag.)**

24 units - full year

Prerequisite(s): Credit or higher standard in at least 2 Level III courses approved by Head of Discipline

Assessment: Research proposal, seminars, research paper, viva voce, weighted average of non-research component

Requirement: substantial research project of student's choosing (on topic acceptable to Discipline) under supervision of an examining committee (including academic staff members) approved by Head of Discipline, non-research component, including coursework, essays or other assignments relevant to student's Honours project and approved by Head of Discipline.

Intending candidates should consult the Head of Discipline, Honours Coordinator and potential supervisors during third year and be prepared to begin studies at the beginning of February or July.

SOIL&WAT 4005AWT/BWT Honours Soil Science (B.Sc.)

24 units - full year

Prerequisite: Credit or higher standard in a least 2 Level III courses approved by Head of Discipline

Assessment: Research proposal, seminars, research paper, viva voce, weighted average of non-research component

Intending candidates should consult the Head of Discipline, Honours Coordinator and potential supervisors during third year and be prepared to begin studies at the beginning of February or the end of July

A substantial research project of student's choosing (on topic acceptable to Discipline) under supervision of an examining committee (including academic staff members) approved by Head of Discipline, non-research component, including coursework, essays or other assignments relevant to student's Honours project and approved by Head of Discipline.

SOIL&WAT 4007AWT/BWT Honours Soil Science (B.Ag)

24 units - full year

Prerequisite: Credit or higher standard in a least 2 Level III courses approved by Head of Discipline

Assessment: Research proposal, seminars, research paper, viva voce, weighted average of non-research component

Intending candidates should consult the Head of Discipline, Honours Coordinator and potential supervisors during third year and be prepared to begin studies at the beginning of February or the end of July

A substantial research project of student's choosing (on topic acceptable to Discipline) under supervision of an examining committee (including academic staff members) approved by Head of Discipline, non-research component, including coursework, essays or other assignments relevant to student's Honours project and approved by Head of Discipline.

SOIL&WAT 4009AWT/BWT Honours Soil & Land Systems (B.Ag.Sc.)

12 units - full year

Prerequisite(s): Credit or higher standard in at least 2 level III courses approved by the Head of Discipline

Assessment: Research proposal, seminars, research paper, viva voce, average of four level III courses referred to above

Requirement: modest research project of student's choosing (on topic acceptable to Discipline) normally taken at same time as coursework (4 Level III courses relevant to student's Honours project and approved by Head of Discipline.

Intending candidates should consult the Head of Discipline, Honours Coordinator and potential supervisors during the third year and be prepared to begin studies at the beginning of February or July.

Spanish

LEVEL I

SPAN 1003 Spanish IA

3 units - semester 1

4 hours per week

Available for Non-Award Study

Assumed Knowledge: No previous language experience required

Incompatible: SPAN 1001, SPAN 1002

Assessment: Regular assignments, tests, exam

The aim of this course is to provide an introductory study in the vocabulary and structures of Spanish, and to develop a functional level of communicative proficiency in the language. The course seeks to develop all the basic language skills: listening, speaking, reading and writing. Students will also be introduced to various aspects of the society and culture of Spain and other Spanish speaking countries in Latin America through audio and video extracts and short texts. The emphasis throughout will be on communicative skills both oral and written.

SPAN 1004 Spanish IB

3 units - semester 2

4 hours per week

Available for Non-Award Study

Prerequisite(s): SPAN 1003

Assumed Knowledge: Basic knowledge of Spanish as taught in Spanish IA

Incompatible: SPAN 1001, SPAN 1002

Assessment: Regular assignments, tests, exam

The aim of this course is to continue with the introductory study in the vocabulary and structures of Spanish, and to develop a functional level of communicative proficiency in the language. The course seeks to develop all the basic language skills: listening, speaking, reading and writing. Students will also be introduced to various aspects of the society and culture of Spain and other Spanish speaking countries in Latin America through audio and video extracts and short texts. The emphasis throughout will be on communicative skills both oral and written.

SPAN 1011 Spanish ISA

3 units - semester 1

4 contact hours per week

Available for Non-Award Study

Prerequisite(s): Working knowledge of the Spanish language

Assumed Knowledge: Basic oral and written knowledge of the Spanish language

Incompatible: SPAN 1005

Assessment: Attendance/participation (10%), homework (10%), 3 x tests (30%), oral presentation (20%), final composition (30%)

This course builds on the language skills that students have already acquired at home (children of Spanish speaking immigrants) or in high school. The emphasis of this course will be the further development of oral and written skills. Students completing this course will acquire a more advanced level of fluency that will allow them to participate in longer conversations with native speakers and other students of the Spanish language. The emphasis in this course will be on extensive discussions of cultural ideas and written practice. Students completing this course will end up with a full awareness of the importance of the Spanish language and cultures in the global context. They will also learn how to put those ideas in written form with a good degree of sophistication.

SPAN 1012 **Spanish ISB**

3 units - semester 2

4 contact hours per week

Available for Non-Award Study

Prerequisite(s): SPAN 1011

Assumed Knowledge: Semi-fluency in Spanish

Incompatible: SPAN 1006

Assessment: Attendance/participation (10%), homework (10%), 3 x tests (30%), oral presentation (20%), final composition (30%)

This course builds on the language skills that students acquired at home in Spanish ISA. The emphasis of this course will be the further development of oral and written skills. Students completing this course will acquire a complete higher-level of fluency that will allow them to participate in any conversation in Spanish at the native speaker. The emphasis in this course will be on oral presentations and extensive written practice. Students completing this course will be able to engage in the examination and discussion of complicated ideas on Spanish history, politics and cultural events. They will also learn how to put those ideas in written form with a high degree of sophistication.

LEVEL II

SPAN 2011 **Spanish IISA**

3 units - semester 1

4 contact hours per week

Available for Non-Award Study

Prerequisite(s): SPAN 1012

Assumed Knowledge: Fluency in Spanish

Incompatible: SPAN 2001

Assessment: weekly writing exercises (20%), 2 x tests (20%), 2 x oral presentations (20%), 4000 word final essay (40%)

This course builds on the skills that students acquired in Spanish ISA and Spanish ISB. The emphasis of this course will continue to be on the further development of oral and written skills at an academic level. Similar to

Spanish ISB, the teaching staff will continue to emphasise the writing of more complex paragraphs, compositions, and documents, and work on the students' ability to report back in oral form on the documents they write. Lectures and tutorials will be conducted 100% in Spanish and students will be expected to actively contribute to discussions and exercises in the Spanish language.

SPAN 2012 **Spanish IISB**

3 units - semester 2

4 contact hours per week

Available for Non-Award Study

Prerequisite(s): SPAN 2011

Incompatible: SPAN 2002

Assessment: Weekly writing exercises (20%), 2 x tests (40%), 4000 word final essay (40%)

This course builds on the skills that students acquired in Spanish IISA. The emphasis of this course will continue to be on the further development of oral and written skills at an academic level. The teaching staff of this course will emphasise reading comprehension of complicated books and documents, as well as the students' ability to report back in oral and written form on the documents they read and analyse. Lectures and tutorials will be conducted 100% in Spanish and students will be expected to actively contribute to discussions and exercises in the Spanish language.

SPAN 2101 **Spanish IIA**

3 units - semester 1

4 contact hours per week

Prerequisite(s): SPAN 1004

Assumed Knowledge: Basic knowledge of the Spanish language (speaking, reading, writing)

Incompatible: SPAN 2001. Students who have taken and passed an Intermediate level Spanish course at other universities are not permitted to enrol.

Assessment: Weekly homework 20%, 2 x mid-term tests 20% each, final composition 40%

This course builds on the skills that students mastered in the introductory Spanish courses (SPAN 1003 and SPAN 1004). The emphasis of this course will be on the further development of the four basic language skills: speaking, listening, reading and writing. Different from early courses, in this course the teaching staff will tackle some of the finer points of the Spanish grammar and will emphasise writing practices at academic level. Lectures and tutorials will be conducted in Spanish and students will be expected to actively contribute to discussions and exercises in the Spanish language.

Approximately 20% of teaching time will be dedicated to the introduction and discussion of specific aspects of the cultures of the Hispanic World, through different types of media including music recordings, video clips, movies and short stories produced both in Spain and Latin America.

SPAN 2102 **Spanish IIB**

3 units - semester 2

4 contact hours per week

Prerequisite(s): SPAN 2101

Assumed Knowledge: Basic knowledge of the Spanish language (emphasis on writing skills)

Incompatible: SPAN 2002

Assessment: Weekly homework 20%, 2 x mid-term tests 20% each, final essay 40%

This course builds on the skills that students mastered in the Intermediate Spanish I course. The main emphasis of this course will continue to be on the development of the four basic language skills: speaking, listening, reading and writing. The most complicated aspects of the Spanish language will be emphasised, including the use of the subjunctive mood, and direct and indirect object pronouns. Reading cultural and literary material and writing reports on those readings will be the main activity in this course. Lectures and tutorials will be conducted in Spanish and students will be expected to actively contribute to discussions and oral exercises in the Spanish language.

Approximately 20% of teaching time will be dedicated to the introduction and discussion of specific aspects of the cultures of the Hispanic World, through different types of media including music recordings, video clips, movies and short stories produced both in Spain and Latin America.

SPAN 2111 **Introduction to Latin American Culture**

3 units - semester 1

3 contact hours per week

Prerequisite(s): SPAN 1004

Assumed Knowledge: Basic knowledge of the Spanish language

Assessment: Mid-term examination (30%), research presentation (30%), final examination (40%)

This course is a general introduction to the cultures of Latin America. It is aimed at students with little or no knowledge of the region. Starting with a review of the major aboriginal cultures that existed in Latin America previous to the arrival of the Spaniards, we will proceed to explore the conquest of the American continent and the effects these events had in the shaping of Latin American culture and society.

Enough time will be dedicated to the discussion of the process of nation building in the continent, including the struggle for independence and early revolutionary movements. The second half of the course will be dedicated completely to the study and discussion of 20th and 21st Century Latin America. Main topics to be introduced include the Mexican Revolution, the Cuban Revolution, the Central American Revolutions of the 1970s and 1980s, US-Latin American relations, and great Spanish American artists (writers, film directors and actors, painters, etc.).

Lectures for this course will be conducted in English and tutorials in Spanish. Reading material will be mostly in Spanish.

LEVEL III

SPAN 3006 **Latin American Literature and Society**

3 units - semester 2

3 contact hours per week

Prerequisite(s): SPAN 2102

Assumed Knowledge: Basic knowledge of the Spanish language

Assessment: Bibliography (10%), tests (40%), essay plan (10%), final essay (40%)

This course builds on the knowledge and skills students have acquired in the culture courses taught at second-year level. The main emphasis of this course will be on the reading and analysis of representative works of literature produced in Latin America in the 20th Century. Some of the authors to be included for study and analysis are Gabriel Garcia Marquez, Jorge Luis Borges, Alejo Carpentier and Gioconda Belli. Reading literary material and reporting back to the class in oral form will be the key activity for students in this course. Students will be also introduced in full to the specific and most effective ways of conducting research on Hispanic literatures. Lectures and seminars will be conducted in Spanish and students will be expected to actively contribute to discussions in the Spanish language.

SPAN 3101 **Spanish IIIA**

3 units - semester 1

4 contact hours per week

Prerequisite(s): SPAN 2102

Assumed Knowledge: Basic knowledge of the Spanish language

Incompatible: SPAN 3001

Assessment: Weekly writing exercises (10%), mid-term exam (30%), oral presentations (30%), final essay (30%)

This course builds on the skills that students mastered in the intermediate language courses (SPAN 2101 and SPAN 2102). The emphasis of this course will be on the further development of oral and written skills. Students completing this course will acquire a basic level of fluency that will allow them to participate in conversations with native speakers and other students of the Spanish language. Different from early courses, in this one the teaching staff will emphasise the writing of more complex paragraphs, compositions, and documents, and work on the students' ability to report back in oral form on the documents they write. Lectures and tutorials will be conducted in 100% in Spanish and students will be expected to actively contribute to discussions and exercises in the Spanish language.

SPAN 3102 **Spanish IIIB**

3 units - semester 2

4 contact hours per week

Prerequisite(s): SPAN 3101

Assumed Knowledge: Basic knowledge of the Spanish language

Incompatible: SPAN 3002

Assessment: Weekly writing exercises (10%), mid-term exam (20%), oral presentations (40%), final essay (30%)

This course builds on the skills that students will acquire in the previous course (SPAN 3101). The emphasis of this course will continue to be on the further development of oral and written skills. Students completing this course will acquire a more advanced level of fluency that will allow them to participate in longer conversations with native speakers and other students of the Spanish language. Different from the previous course, in this one we will introduce the principles of business Spanish and students will learn to write basic business documents. Students will continue to refine their knowledge of the Spanish grammar and their oral and written skills in general. Similarly to SPAN 3101, the teaching staff will continue to emphasise the writing of more complex paragraphs, compositions, and documents, and work on the students' ability to report back in oral form on the documents they write. Lectures and tutorials will be conducted in 100% in Spanish and students will be expected to actively contribute to discussions and exercises in the Spanish language.

Veterinary Science

LEVEL II

VET SC 2500RW **Veterinary Skills II**

3 units - semester 1

3 hour lecture, 1 hour tutorial, 3 hour practical per week

Restriction: BSc (Pre-Veterinary)

Prerequisite(s): ANIML SC 1017RW and ANIML SC 1018RW

Assessment: Written exam, practical exam, oral presentation, group work, formative tests

The course will discuss the history of the veterinary profession in Australia and around the world, and the responsibilities of the veterinarian in society. It will also include the graduate attributes needed for veterinary students; legislation relating to veterinary science; data management and professional ethics. Students will learn communication skills relevant to their future work, including taking case histories and dealing with difficult client relationships.

In practical classes students will practice how to perform a clinical examination, participate in role plays relating to animal euthanasia, and take part in group work presenting various veterinary case scenarios highlighting specific areas covered in lectures e.g. professional ethics.

VET SC 2510ARW/BRW **Animal Form & Function IIa**

12 units - full year

4 x 1 hour lectures, 2 x 4 hour practicals per week, 3 x 1 hour tutorials per fortnight

Restriction: BSc (Pre-Veterinary)

Prerequisite(s): BIOLOGY 1510, BIOLOGY 1520, PHYSICS 1501 or PHYSICS 1508

Assessment: Written exam, summative tests, practical reports

The course will introduce anatomic and physiological terminology, principles and comparative aspects amongst species. The course will provide concepts of structure and function of the various body systems and highlight species variations. In practical classes students will develop practical skills in dissection and learn to appreciate variations in structure due to age, sex, species and physiological status.

LEVEL II

VET SC 3510ARW/BRW **Animal Form and Function III**

12 units - full year

4 x 1hr lectures, 2 x 4hr practicals per week, 3 x 1hr tutorials per fortnight

Restriction: BSc (Pre-Veterinary)

Prerequisite(s): ANIML SC 2508RW

Assessment: Written examinations, Summative tests, Major Project, Case study participation

The course will introduce anatomical and physiological terminology, principles and comparative aspects amongst species, building on the concepts and areas covered at level II. The course will provide concepts of structure and function of the various body systems and highlight species variations. In practical classes students will develop practical skills in dissection and learn to appreciate variations in structure due to age, sex, species and physiological status. The course content will include the following body systems: urogenital, endocrine, nervous and special sensory organs (eyes, ears, nose), and will revisit integrating themes from level II (e.g. homeostasis) in the context of these systems. Students will also be presented with case studies that will highlight aspects of these systems from a veterinary practice perspective.

VET SC 3511ARW/BRW **Veterinary Pathobiology and Skills III**

12 units - full year

3 x 2-hour lectures, 2 x 3-hour practicals and 3 x 1-hour tutorials per week

Restriction: BSc (Pre-Veterinary)

Prerequisite(s): VET SC 2510RW and VET SC 2520RW

Assessment: Written examinations, practical examinations, group work, Written assignments

Course will incorporate the pre-clinical scientific disciplines, including parasitology, microbiology, virology, immunology, pharmacology, toxicology and pathobiology, and highlight the relationship between pathogens and disease at the tissue and animal level in various body systems. The course will introduce the concepts of zoonoses and infectious disease implications for veterinary public health and population medicine. The technical and professional competencies required for veterinary practice will also be addressed.

Viticulture

LEVEL II

VITICULT 2500WT Viticultural Science II

3 units - semester 2

5 full days in Orientation week, 2 hour lecture, 4 hour practical per week

Restriction: BSc (Viticulture), B Oenology

Assumed Knowledge: OENOLOGY 1018NW, BIOLOGY 11011 & 202

Assessment: Exams and assignments

Viticultural Science covers the entire life cycle of the cultivated grapevine with an emphasis from bud burst through to the onset of veraison. The practical component of the course takes advantage of the vine growth phases that occur from bud burst, flowering and fruit-set leading up to harvest. Topics covered include: The growth cycle of the grapevine and the biology that underpins the different phenological stages. Grapevine physiology as it is relevant to growth and vine form, flowering, water use, mineral nutrition, and berry development. Grapevine anatomy of the vegetative and reproductive parts. Taxonomy of grapevines and vegetative variety identification. Practical sessions will focus in more depth on the following topics: pruning techniques, vine and bud anatomy, shoot based variety identification, shoot morphology and development, yield estimation, and mineral nutrition.

LEVEL III

VITICULT 3021WT Viticultural Production III

3 units - semester 1

1 x 2 hour Lecture, 1 x 4 hour Practical per week

Restriction: BSc (Viticulture), B.Oenology, B.Vit&Oenology

Prerequisite(s): VITICULT 2500WT

Assessment: Midterm and Final exam, Practical reports, Essays

Viticultural Science III follows on from concepts acquired in Viticultural Science II covering the entire life cycle of the cultivated grapevine. Topics covered in this course include climate change and its impact on viticulture. Berry development and harvesting post veraison. Principles behind the establishment of a viticultural enterprise comprising site selection, choice of planting material and the design and establishment of the vineyard. Trellising design. The relationship between production aspects and the physiology of the vine including phenology and shoot development, effect of node position on fruitfulness, interaction with climate response to pruning, trellising and canopy management. Vineyard management practices including: pests and diseases of grapevines, their recognition and control; soil management comprising weed control by chemical and non-chemical methods; harvesting and handling methods used for wine grapes;

cultural practices employed to produce wine grapes of particular end-use specification.

VITICULT 3043WT Industry Experience (Viticulture) III

3 units - semester 1 or semester 2

10 weeks - students must return to campus for at least 1 week in Feb/Mar for compulsory tour if enrolled in VITICULT 3020WT

Prerequisite(s): VITICULT 2500WT or VITICULT 2002WT

Assessment: Logbook, research & other projects, employers report

This course provides an opportunity for students majoring in Viticulture to experience, observe and acquire an understanding of the major activities undertaken in a typical vineyard operation. Further, this course will enable students to gain a working understanding of a vineyard, its management systems and structures. Students undertake 10 weeks work experience in approved viticultural enterprises gaining experience in a range of operations, e.g. pest and disease management, irrigation system management, yield estimation, and harvest activities, the emphasis and expectation being on gaining hands-on experience. A detailed logbook of work activities, networking exercise, vineyard benchmarking and a significant research project provide a broad perspective of the viticultural industry.

VITICULT 3044WT Viticultural Methods and Procedures III

3 units - semester 2

1 hour lecture, 1 hour tutorial, 4 hour practical per week

Restriction: BSc (Viticulture)

Prerequisite(s): VITICULT 2500WT or VITICULT 2002WT

Incompatible: VITICULT 3004 and VITICULT 3018

Assessment: Assignments, practical reports, exam

The practices associated with the development and operation of a viticultural enterprise. This includes training in the monitoring of pests and diseases, soil and plant water and nutritional status; yield estimation; experimentation. Lecture topics include: biotechnology in viticulture, organic viticulture, advanced propagation techniques, use of growth regulators in viticulture, control of bird pests. Tutorial/practical sessions include: climatic assessment for vineyard site selection; principles and practices of vineyard operations including spray equipment calibration and spray application; pruning, training, trellis erection and repair, propagation, canopy management and other activities, vineyard monitoring - phenological stages, bud fruitfulness, physiological pruning, yield estimation, pests and diseases, soil and plant water status; computer-aided decision-making systems such as VineLogic and precision viticulture. This course includes visits to commercial vineyards and equipment suppliers.

VITICULT 3500WT Grape Industry Prac, Policy and Communication III

3 units - semester 1

1 x 3 hour Lecture, 1 x 4 hour workshop per week for 6 weeks (2nd half semester)

Restriction: Bachelor of Oenology, Bachelor of Science (Viticulture), Bachelor of Viticulture and Oenology

Assumed Knowledge: OENOLOGY 2502WT, OENOLOGY 3033WT or VITICULT 3043WT

Assessment: Written assessment, oral presentation & literature review

This course examines through selected industry experts and student seminars, some of the current policies and issues confronting the Australian wine industry. The numerous industry organisations are examined from both a national and international perspective and how these critical industry organisations comprise the infrastructure of the Australian wine industry. How this operating environment affects both grapegrowers and wine producers will also be explored.

HONOURS

VITICULT 4006AWT/BWT Honours Viticulture

24 units - full year

40 hours a week

Prerequisite: Credit or higher in two relevant Level III courses as approved by Head of Discipline

Assessment: Thesis, seminars, remainder as deemed appropriate to the student's program

This course comprises a substantial research project of the student's choosing on a topic acceptable to the Discipline of Wine and Horticulture, two seminars on that topic, and coursework, essays or other assignments deemed appropriate to the individual student's honours program.

VITICULT 4007AWT/BWT Honours Viticulture (Two Year)

24 units - full year

Prerequisite(s): Credit or higher in relevant Level III courses as approved by the Head of Discipline

Assessment: Thesis, seminars, remainder as deemed appropriate to the student's program

This course comprises a substantial research project of the student's choosing in a topic acceptable to the head of School of Agriculture, Food and Wine, two seminars on that topic, and coursework, essays or other assignments deemed appropriate to the individual student's honours program.

Wine Marketing

LEVEL I

WINEMKTG 1003EX Legal Issues in Wine Marketing I

3 units - semester 2

External

Assessment: Exam, assignments

This course provides a general introduction to the Australian legal system and institutions, and to Australian commercial law. Emphasis will be placed on those parts of the law that have particular relevance to marketing, such as contract, sale of goods, consumer protection, trace practices and intellectual property law. The legal principles discussed have general commercial applicability, but where possible will be illustrated by topical examples drawn from wine and food marketing.

WINEMKTG 1008EX Introduction to Managerial Financial Accounting I

3 units - semester 1 or 2

External

Assessment: Written exams (open book), assignments

This course provides an introduction to the principles of accounting appropriate to the wine industry. The course deals with those accounting principles from the perspective of a winery business manager. The course does not seek to teach the detailed techniques of accounting, but rather to equip students with sufficient knowledge and skills of accounting to be better managers in the wine industry. The first half of the course deals with financial accounting matters, with a special emphasis on equipping students to be able to analyse financial statements, and to understand the techniques of managing cash flows in wine businesses. In the second half of the course, management accounting techniques such as product costing, budgeting, cost-volume-profit analysis and project evaluation are covered. At the end of the course, students will be able to deal with financial statements, management reports, and be able to make more effective decisions where financial implications are involved.

WINEMKTG 1013EX/WT Wine and Food Marketing Principles I

3 units - semester 1

Internal: 2 hour lecture, 1 hour tutorial per week; also external

The aim of this course is to give students an understanding of the role of the marketing manager through an introduction to the basic concepts and practices in marketing with particular emphasis on wine and food products. The topics covered include the marketing environment and marketing strategy formulation. There will be particular examination of product, price, place and promotion strategies.

WINEMKTG 1015EX Data Analysis for Wine and Food Business I

3 units - semester 1

External

Assessment: Exams, assignments

This course introduces a body of principles and methods concerned with extracting useful information from data for business decision making in the face of uncertainty, with emphasis on applications in the wine and food business

area. Topics covered include visual presentation of data; summarising data numerically by measures of central tendency and dispersion; reasoning with probabilities; representing uncertainty by random variables and probability distributions; drawing and using samples to make estimates; assessing connections between variables by correlation and simple regression; tracking economic changes with index numbers; forecasting with time series and trend analysis; and drawing conclusion for data with statistical hypothesis testing.

WINEMKTG 1026EX **Microeconomic Principles I**

3 units - semester 1

External

Assessment: Assessment: assignments, final exam

The course provides an introduction to the essential elements of microeconomics, with emphasis on demonstrating how the understanding of microeconomic principles can lead to better analysis of management and marketing of wine and food products, and government microeconomic policies. Broadly, the course covers how production and consumption decisions of individual economic units are made and coordinated. Specific topics include fundamentals of supply and demand analysis, production economics, analysis of short and long-run costs of production, market structure, pricing policies and methods, market failure, welfare and public policy issues and the markets for factors of production.

WINEMKTG 1063EX **Macroeconomic Essentials: Wine & Food Business I**

3 units - semester 2

External

Assessment: Assignments, final exam

This course develops understanding of the macroeconomic environment in which wine and food businesses operate; and the ability to analyse the implications of specific macroeconomic events (eg, change in the interest rate, tax cut, or increasing unemployment) to success and profitability, and marketing strategies of wine and food businesses. Emphasis is on applications and policies, not formal economic theory. Coverage include: measurements of national income, cost of living, and unemployment; productivity and economic growth; the monetary system; the causes and effects of inflation and unemployment; impacts of monetary and fiscal policies; factors influencing the international flows of goods and capital; and current debates over macroeconomic policies.

LEVEL II

WINEMKTG 2500WT **Applied Management Science II**

3 units - semester 1

2 hour lecture, 2 hour practical per week

Assumed Knowledge: WINEMKTG 1013WT or WINEMKTG 1013EX and ECON 1008 or WINEMKTG 1015EX

Assessment: Exam, practical, case studies, assignments

The aim of this course is to introduce a collection of management science techniques that helps business managers make better decisions and to foster a logical, consistent and systematic approach to problem formulation, problem solving and decision making. Emphasis is placed on model formulation and interpretation rather than algorithms. Topics to be covered include mathematical programming, network modelling, Monte Carlo simulation, decision analysis under risk, and time series forecasting.

WINEMKTG 2501EX/WT **Applied Marketing Research II**

3 units - semester 2

Internal: 2 hour lecture, 1 hour tutorial per week; also external

Prerequisite: WINEMKTG 1013WT or WINEMKTG 1013EX

Assumed Knowledge: ECON 1008 or WINEMKTG 1015EX

Assessment: Assignments, exam

The aim of this course is to study quantitative and qualitative marketing research for pro-active and reactive marketing intelligence systems as it applies to food and agricultural marketers. Topics included are problem analysis, types of data collection systems, steps in research projects, controls of a research project, questionnaire design, statistical methodology for data reduction, sampling theory and the industry and operative organisations. Dealing with a market research organisation will be a significant aspect of the course which is not aimed at producing researchers but clients who understand the intricacies of the process - and the limitations.

The focus will be the application of the theory for use in the new wine/food product evaluation, advertising measurement, corporate/product/range analysis, attitudinal research, as primary sources. Secondary sources such as trade, governmental or syndicated data will be explored and assessed.

WINEMKTG 2502EX **Consumer Behavioural Analysis II**

3 units - semester 1

External

Assumed Knowledge: WINEMKTG 1013WT or WINEMKTG 1013EX

Assessment: Assignments, exam

The aim of this course is to alert students to the many variables that impact upon the purchase and consumption of goods and services, especially wine. Within this multi-disciplinary course are the studies of perception, attitudes, human motivation, consumer information processing and decision making, the sociology of people, cultural and sub-cultural variables, group influences and the segmentation of consumers into manageable communicable target groups for wine markets. Knowledge of consumer behaviour provides direction and the basis for wine marketing efforts such as advertising, promotion, public relations, wine packaging, pricing, distribution and the nature of the wine product.

WINEMKTG 2503EX/WT **International Marketing of Wine & Agri Products II**

3 units - semester 2

Internal: 2 hour lecture, 1 hour tutorial per week; also external

Assumed Knowledge: WINEMKTG 1013WT or WINEMKTG 1013EX

Assessment: Assignments, exam

This course aims to provide a comprehensive review of the theory and practice of international marketing in relation to wine and agricultural products. Topics include: environmental factors affecting global wine marketing, especially the socio-cultural implications of international trade and wine export, strategic planning and organising for international marketing, market research for wine and agricultural products, decisions on segmentation, wine product policy, pricing, channels of distribution, international wine advertising, and coordinating and controlling global wine marketing operations.

WINEMKTG 2504EX/WT **International Wine Law II**

3 units - semester 1

Internal: 2 hour lectures, 1 hour tutorial per week; also external

Assumed Knowledge: WINEMKTG 1003EX or COMMLAW 1004

Assessment: Assignments, Research Essay

The course will cover import and export licensing, labelling and standards requirements, appellation and place names requirements and restrictions, contracts for international sale and financing of sale and for transport, conflict of laws, the role of the OIV and other international agencies, treaties and trade agreements, and tax laws as related to the international wine trade.

WINEMKTG 2505EX **Strategic Marketing Management II**

3 units - semester 2

Internal: 3 Hours per week; also external

Prerequisite: WINEMKTG 1013WT or WINEMKTG 1013EX

Assessment: Assignments, Exam

The critical role of strategic marketing in meeting the challenges facing organisations in complex markets will be the primary focus of this course, and will seek to explore how formulating and implementing unique strategic marketing moves serve not only to ensure survival, but also to yield significant and sustainable competitive advantage. Drawing on current and emerging perspectives on strategic marketing, the material covered will be structured in terms of a basic strategic marketing model, which deals with company, competition, customer, environment, strengths and weaknesses, objectives and goals, strategy formulations and implementation.

In order to contextualise this material students will be encouraged to develop an understanding of the practical necessity for interdependency and synergy between an organisation's corporate, business, and functional levels of strategy.

WINEMKTG 2506EX/WT **Wine and Society II**

3 units - semester 1

Internal: 2 hour lecture, 1 hour tutorial per week; also external

Assumed Knowledge: WINEMKTG 1013WT or WINEMKTG 1013EX

Assessment: Assignments, Exam

The student will be exposed to studies that cover the history and future of the Australian wine industry, presented in the wider context of European and other New World wine industries. Topics covered include: the origins of grape and wine production, the religious and cultural symbolism of wine, the development of an international wine trade in the 20th Century, the role of fashion in wine markets, and examination of wine and other forms of alcohol and health issues. Also covered are: alcohol and wine consumption habits and attitudes, education and awareness programs, communication of wine information, food and wine complementarity, labelling and product laws.

LEVEL III

WINEMKTG 3068NW **The Australian Wine Industry: Rise of an Icon III**

3 units - winter semester

8 x 3 hour lectures, 4 x 2 hour Practicals 1 x 8 hour Field Trip over a 4 week Winter School

Restriction: Open to All students - excluding Wine Marketing/ Business, Oenology or Viticulture students

Available for Non-Award Study

Incompatible: Incompatible with all other WINEMKTG and OENOLOGY and VITICULT courses

Assessment: Exam, sensory tests, group oral presentation, field work report.

The Australian wine industry is internationally renowned for the innovative approaches that have made it a leading instigator of many 'best-practices' across the entire wine value chain, from grape growing, wine making to consumer satisfaction. This course will provide a broad understanding of the Australian wine industry by embracing a 'whole-of-wine-chain' approach that reflects the industry's core strengths. Students will be introduced to the industry's fascinating history, especially how it grew to become a formidable force in international wine markets and made Australia the leading New World wine-producing country. It will provide knowledge of the principles and practices that underpin successful Australian wine production by covering topics such as grape growing, vineyard management and operation, making of table, sparkling, fortified and dessert wines, sensory evaluation of wines, regional wine styles, and basic flavour chemistry of grapes and wine; emphasising aspects distinctive to the Australian wine industry. The course will comprise lectures and practical sessions, including a full day visit to one of Australia's famous wine regions. The course is aimed at students with an interest in wine but does not require in-depth scientific knowledge.

This course involves teaching sessions that may be attended by both Undergraduate and Postgraduate students.

WINEMKTG 3500EX/WT Global Wine Market III

3 units - semester 1

1 x 2 hour Lecture per week, 1 x 1 hour Tutorial per week

Restriction: B Wine Marketing

Prerequisite(s): WINEMKTG 1013WT or WINEMKTG 1013EX

Assessment: Assignments, Exam

This capstone course provides students with insights into the nature, structure, functional mechanisms, and the complexities of the world's wine market. A typology of open, government-regulated and emerging wine markets is used as a framework within which to present this. In the process, the focus is across-the-board on specific countries' wine markets: large, medium, and small including markets that are of strategic importance. In addition, it examines key drivers in the world wine market and their impact on wine export dynamics and characteristics. There is an emphasis throughout on wine consumer behavioural aspects and successful marketing strategies employed in the wine consuming markets. The key factor of wine industry competitiveness is examined throughout as it manifests itself through the export performance of specific wine-producing country.

WINEMKTG 3501EX/WT Winery Business Management III

6 units - semester 2

1 x 2 hour Lecture per week, 1 x 1 hour Tutorial per week

Restriction: B Wine Marketing

Prerequisite(s): ACCTING 1002 or WINEMKTG 1008EX and WINEMKTG 1013WT or WINEMKTG 1013EX

Assessment: Assignments, major project

This capstone course integrates all of the interfacing elements between wine, business and marketing management as these relate to the 'real-world' side of the wine industry of today. In the process wine marketing (with a strong emphasis on brand building to differentiate the wine(ry) business), winery cost and management accounting and financial management, strategic winery business management, and organisation development are all examined as these relate to an actual winery. Key focus areas are wine(ry) brand building and management, understanding costs of production, strategic management issues, and financing growth strategies for a wine(ry) business.

Students are required to conduct extensive research of both the winery organisation's internal and external environments, including all its operational and financial issues.

The key activity performed in this course is the analysis and application of decision-making to winery operations and their application to an actual (operating) winery. The primary course outcome is a major project in the form of a realistic and fully-integrated 5-year strategic business plan for this operating winery including profit and cash budgets

and supporting materials.

WINEMKTG 3502EX/WT Advertising and Promotion III

3 units - semester 1

1 x 2 hour Lecture per week, 1 x 1 hour Tutorial per week

Restriction: B Wine Marketing, Dip Wine Marketing

Assumed Knowledge: WINEMKTG 1013WT or WINEMKTG 1013EX

Assessment: Assignments, Exam

This course will provide the student with an overview of the Integrated Marketing Communications process. Students will learn to manage the formal communications process in the context of wine and agricultural businesses. Attention will be paid to developing communication plans and understanding strategic applications of advertising, sales promotion and public relations tools. Students should expect to gain knowledge of communications theory as well as practical application through study of texts and real world cases.

WINEMKTG 3503EX/WT Food Marketing III

3 units - semester 1

1 x 2 hour Lecture per week, 1 x 1 hour Tutorial per week

Assumed Knowledge: WINEMKTG 1013WT or WINEMKTG 1013EX

Assessment: Assignments, Exam

This course examines key issues in the development and marketing of primary and processed food and beverages products. Emphasis is placed on such areas as supply chain management, managing product development, exporting Australian food and beverage products, market research, packaging and labelling, consumer food consumption trends, food marketing strategies, and value-adding in Australian food and beverage industries.

WINEMKTG 3504EX Internet Marketing and E-Commerce III

3 units - semester 1

None: External

Restriction: B Wine Marketing, Dip Wine Marketing

Prerequisite(s): WINEMKTG 1013WT or WINEMKTG 1013EX

Assessment: Assignments, Exam

The course examines issues concerning the process, development and impact of e-commerce, and the use of Internet marketing in wine and food business from a managerial viewpoint, and within the context of creating consumer value. Topics include the underlying technology of e-commerce, conceptual foundations of marketing in an electronic environment; e-commerce business models; consumer attitudes and behaviour on the Internet; Internet marketing research; e-commerce and supply chain management, and advertising and promotional strategies in e-commerce. Coverage also includes issues associated with developing strategy, planning, designing, implementing, out-sourcing, securing and managing e-commerce systems and technologies. Emphasis will be on establishing a framework to keep abreast of the technology in a relatively new but fast moving field.

WINEMKTG 3505EX/WT **Wine and Food Tourism and Festivals III**

3 units - semester 1

1 x 2 hour Lecture per week, 1 x 1 hour Tutorial per week

Restriction: B Wine Marketing, Dip Wine Marketing

Assumed Knowledge: WINEMKTG 1013WT or WINEMKTG 1013EX

Assessment: Assignments, Exam

This course explores the basics of tourism and the structure of the tourism industry as it relates to both wine and food. It addresses the basics concepts of wine tourism and hospitality, wine and food festivals in the broad context of tourism and hospitality, and wine tourism as a vehicle to build a brand image for the wine(ry) business and/or wine region. Specific focus areas include wine tourism visitor (consumer) behaviour, the role of the winery cellar-door in wine marketing/distribution, the functions of wine routes/roads, wine region brand building, and wine and/or food festival event fundamentals and management.

WINEMKTG 3506EX/WT **Database Marketing for Food and Wine Business III**

3 units - semester 2

1 x 2 hour Lecture per week, 1 x 2 hour Practical per week

Restriction: B Wine Marketing, Dip Wine Marketing

Prerequisite(s): WINEMKTG 1013WT or WINEMKTG 1013EX

Assessment: Assignments, Exam

This course presents the evolving field of database marketing, broadly defined as the use of customer databases and information technology to promote one-to-one relationships with customers and to create precisely targeted marketing strategies; and its uses in food and wine businesses, especially for small to medium sized firms. Coverage includes the theories and practices of customer database design, implementation and maintenance; customer relationship management, and acquisition, retention and win-back strategies; applying customer lifetime value techniques; customer segmentation; and database marketing communication. More complex database marketing concepts including geodemographic applications, automatic cluster detection, and market basket analysis will be introduced.

WINEMKTG 3507EX/WT **Wine Retail and Distribution Management III**

3 units - semester 2

1 x 2 hour Lecture per week, 1 x 1 hour Tutorial per week

Restriction: B Wine Marketing, Dip Wine Marketing

Prerequisite(s): WINEMKTG 1013WT or WINEMKTG 1013EX

Assessment: Assignments, Exam

This course focuses on the principles of establishing and managing a retail concern. It will expose the student to the theoretical and practical aspects of selling and retail practices. Some of the areas this course will cover include: distribution and information systems, selling and marketing technology and trends, retail and wholesale operations, negotiation skills. The course can involve some fieldwork and practical case studies.

HONOURS

WINEMKTG 4007AWT/BWT **Honours Wine Marketing**

24 units - full year

Prerequisite: B.Wine Marketing, at least credit average in appropriate Level III courses or equiv acceptable to program coordinator

Assessment: Research project/thesis

Candidates are expected to acquire a more detailed knowledge in a selected area of wine marketing or wine business than is required for the degree.

Candidates are required to carry out research in the field, to present seminar/s, and to present the results of the research in a written thesis. The student and the Honours Coordinator may decide to substitute some coursework for part of the research, however, a single mark based on 24 units will be assessed.

WINEMKTG 4008AWT/BWT **Honours Wine Marketing (Two Year)**

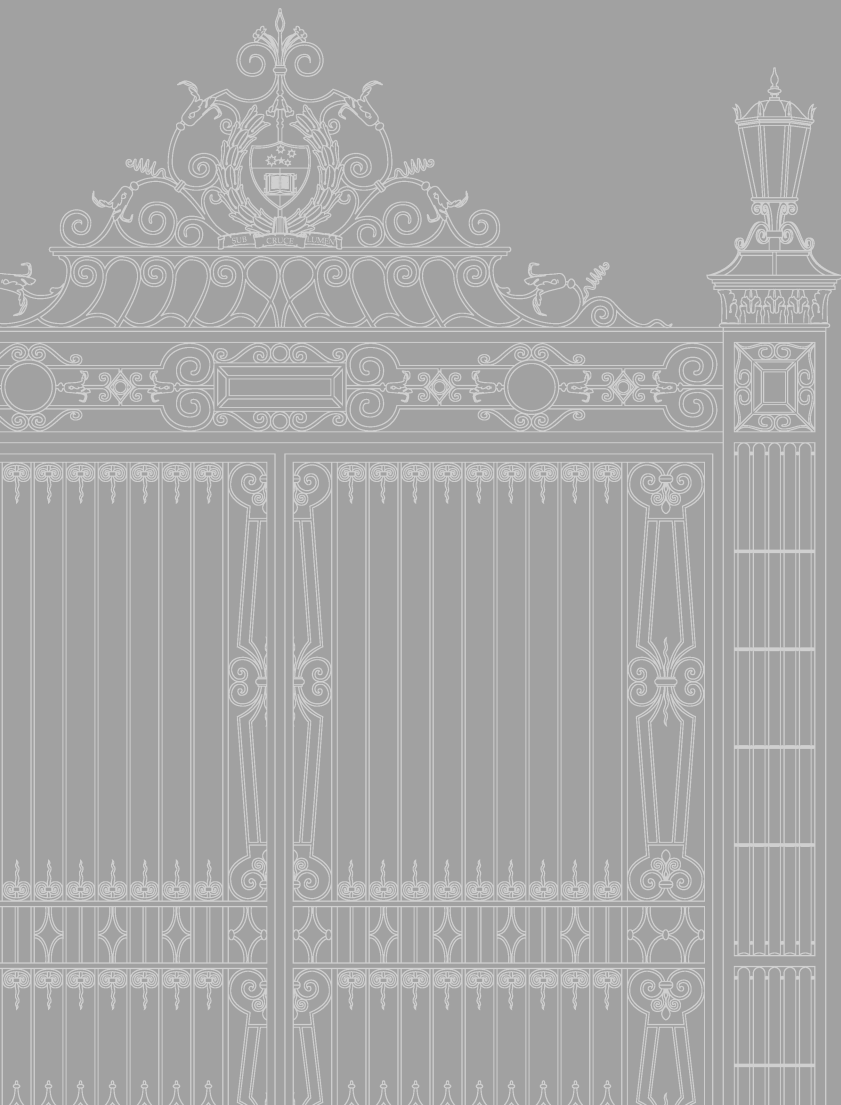
24 units - full year

Prerequisite(s): B.Wine Marketing, at least credit average in appropriate Level III courses or equivalents acceptable to program coordinator

Assessment: Research project/thesis

Candidates are expected to acquire a more detailed knowledge in a selected area of wine marketing or wine business than is required for the degree.

Candidates are required to carry out research in the field, present seminar/s, and present the results of the research in a written thesis. The student and the Honours Coordinator may decided to substitute some coursework for part of the research, however, a single mark based on 24 units will be assessed.



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