

FACULTY OF SCIENCE

Courses

■ Master of Applied Science (SC80).....	451
■ Master of Applied Science (Medical Physics,; Master of Applied Science (Medical Ultrasound) (PH80)	456
■ Master of Applied Science (Medical Laboratory Science) (LS85).....	458
■ Graduate Diploma in Applied Science (SC71)	460
■ Graduate Diploma in Applied Science (Medical Physics), Graduate Diploma in Applied Science (Medical Ultrasound) (PH71).....	460
■ Graduate Diploma in Biotechnology (LS70)	460
■ Policy on Credit Transfer, relating to Bachelor-level courses in the Faculty of Science	461
■ Bachelor of Applied Science (Honours) (SC60)	461
■ Bachelor of Applied Science (Honours) with Major in Life Science (LS65).....	464
■ Bachelor of Applied Science with Majors in Biology, Chemistry, Microbiology/Biochemistry, Geology, Mathematics, Physics (SC30)	464
■ Bachelor of Applied Science (Applied Chemistry) (CH32)	470
■ Bachelor of Applied Science (Mathematics) (MA34)	473
■ Bachelor of Applied Science (Medical Laboratory Science) (LS36)	475
■ Bachelor of Applied Science (Medical Radiation Technology) with Majors in Medical Imaging Technology and Radiotherapy Technology (PH38)	477
■ Associate Diploma in Applied Science (Biology), Associate Diploma in Applied Science (Chemistry) (SC10)	479
■ Associate Diploma in Clinical Techniques with Electives in Laboratory Techniques and Anaesthetics Techniques (LS15).....	483
■ Policy on Submission of Project Reports for Assessment.....	486

FACULTY OF SCIENCE

Course Structures

■ Master of Applied Science (SC80)

Location: Gardens Point campus

The objectives of this course are:

- to provide postgraduate educational opportunities in specialised fields of applied science by means of a program which involves either an original contribution to knowledge or an original application of existing knowledge
- to provide further education in research methods
- to enable graduates employed in industry to undertake further education by research and thesis
- to enable industrial organisations and other external agencies to sponsor a student research program under the control and supervision of the faculty, and thus to further relationships between the University and industry or other external agencies engaged in applied science, to their mutual advantage.

1. General Conditions

1.1 The Council of the Queensland University of Technology was established in 1989 under the Queensland University of Technology Act 1988.

1.2 The Council's power to approve recommendations from faculty academic boards regarding the registration, supervision and examination of research degree candidates and to develop policy and procedure relating to research degrees is exercised through a Research Management Committee which shall be a subcommittee of Academic Committee.

1.3 Research Management Committee has delegated responsibility for day-to-day administration of research master degree courses to faculty academic boards. Academic boards shall report biannually to the Research Management Committee on progress made by research master degree candidates.

1.4 Unless the context otherwise indicates or requires, the words 'academic board' and 'faculty' shall refer to the faculty in which the candidate registers.

1.5 In order to qualify for the award of the degree of Master of Applied Science, a candidate must:

- have completed the approved course of study under the supervision prescribed by the Academic Board
- have submitted, and the Academic Board have accepted, a thesis prepared under the supervision of the supervisor
- have completed any other work prescribed by the Academic Board, and
- submit to the Academic Board a declaration signed by the candidate that he/she has not been a candidate for another tertiary award without permission of the Academic Board during the term of enrolment.

2. Registration

2.1 Applications shall be accepted subject to the availability of facilities and supervision.

2.2 Applications may be lodged with the Registrar at any time.

2.3 The minimum academic qualifications for admission to a program leading to a Master of Applied Science, shall be:

- possession of a bachelor degree in applied science from the Queensland University of Technology, or
- possession of an equivalent qualification, or
- submission of such other evidence of qualifications as will satisfy the Academic Board that the applicant possesses the capacity to pursue the course of study.

2.4 Additional requirements for admission to a particular program may be laid down by the Academic Board.

2.5 In considering an applicant for registration the Academic Board shall, in addition to assessing the applicant's suitability, assess the proposed program and its relevance to the aims and objectives of the University.

2.6 A candidate may register either as a full-time or as a part-time student.

2.6.1 To be registered as a full-time student, a candidate must be able to commit to the course not less than three-quarters of a normal working week, averaged over each year of candidacy. Such a student may not devote more than 300 hours annually to teaching activities, including preparation and marking.

2.6.2 A candidate who is unable to devote to the course the proportion of time specified in Section 2.6.1 may register as a part-time student.

2.7 A candidate may be internal or external. An external candidate is one whose program of research and investigation is based at a place of employment or sponsoring institution. Normally, support of the sponsoring institution for the candidate's application is required for registration.

2.8 A candidate shall be registered initially in Stage 1 of the course unless exemption has been obtained (see 3.7 below).

2.9 The Academic Board may cancel a candidate's registration if, after consulting a candidate's supervisors and having taken account of all relevant circumstances, the Academic Board is of the opinion that the candidate either has effectively discontinued his/her studies or has no reasonable expectation of completing the course of study within the maximum time allowed (see Section 4).

2.10 A candidate whose registration has lapsed or has been cancelled and who wishes subsequently to re-enter the course to undertake a research program which is the same or essentially the same as the previous program may be re-admitted under such conditions as the Academic Board may prescribe.

3. Course of Study

3.1 A candidate for the degree of Master of Applied Science shall undertake a program of research and investigation on a topic approved by the Academic Board. All projects should be sponsored either by outside agencies such as industry, government authorities, or professional organisations, or by the University itself.

3.2 The program must be such as to enable the candidate to develop and demonstrate a level of scientific competence significantly higher than that expected of a first degree graduate. The required competence normally would include mastery of relevant

techniques, investigatory skills, critical thinking, and a high level of knowledge in the specialist area.

3.3 The program consists of two parts, Stage 1 and Stage 2. Progression to Stage 2 is dependent on satisfactory completion of Stage 1 or special permission from the Academic Board. Stage 1 comprises a program of assessed coursework as defined in 3.4 and 3.5 as appropriate for each candidate. Stage 2 comprises a program of supervised research and investigation as indicated in 3.1 and 3.2.

3.4 Coursework at master level may be conducted in a number of ways such as:

- advanced lecture courses
- seminars in which faculty and students present critical studies of selected problems within the subject field
- independent study or reading courses, or
- research projects conducted under faculty supervision.

In all cases, coursework is based upon a formal syllabus setting out the educational outcomes expected from the course, a list of topics to be covered, the prescribed reading material and the method of assessment of progress through and at the end of the course.

3.5 A candidate shall be required to participate in and present seminars as considered appropriate by the Principal Supervisor. The candidate shall be notified of minimum attendance requirements at the time of acceptance of enrolment.

3.6 Stage 1 will normally occupy not more than half of the total period of registration and not more than 96 credit points.

3.7 Students entering the course with an honours degree or its equivalent or candidates with substantial relevant work experience normally gain exemption from most or all of Stage 1 at the discretion of the Academic Board on the recommendation of the Head of School.

3.8 An application for registration should set out systematically and fully the candidate's intended course of study. The description should include the area of study within which the candidate's course lies, the coursework to be undertaken, the proposed title of the thesis to be written, the aim of the proposed program of research and investigation, its background, the significance and possible application of the research program, and the research plan.

4. Period of Time for Completion of Course of Study

4.1 A full-time candidate who does not hold an honours degree appropriate to the course of study will normally be required to complete both Stage 1 and Stage 2, including submission of the thesis for examination as required in Stage 2, during a period of registration of 24 months. The corresponding period in the case of a part-time candidate shall be 48 months. In special cases the Academic Board may approve a shorter period.

4.2 On successful completion of Stage 1 (96 credit points):

- (i) students with GPA <5 will normally graduate with a GradDipAppSc while
- (ii) students with GPA >5 will be permitted to:
 - (a) graduate as above, or
 - (b) continue with Stage 2 (which is a further one year full-time or equivalent) involving a project leading to the award MAppSc.

4.3 A holder of an honours degree appropriate to the course of study may submit the thesis for examination after not less than 12 months of registration in Stage 2 if a full-time

student, or 24 months if a part-time student. Exemption from all or part of Stage 1 may be granted as indicated in 3.7 above. In special cases the Academic Board may approve a shorter period.

4.4 Where application is made for permission to extend the period within which the candidate may submit a thesis for examination, details of the candidate's progress shall be presented to the Academic Board together with the reasons for the delay in completing the work and the expected date of completion. Where the Academic Board agrees to an extension, it may set a limit to the maximum period of registration in the program.

5. Transfer of Registration

5.1 Where a candidate has undertaken part of a proposed course of study as a registered student in another institution, this period of registration may, on application in writing to the Academic Board at the time of application for registration, be counted towards the candidate's period of registration in the QUT course. The application must include details of the work already undertaken, the reasons for the transfer and the expected date of completion.

5.2 Applications for transfer normally should be submitted at least 12 months in advance of the probable date of submission of the thesis.

6. Supervision

6.1 For each candidate the Academic Board shall appoint one or more supervisors with appropriate experience provided that, where more than one supervisor is appointed, one shall be nominated as the Principal Supervisor and the others as Associate Supervisors.

6.2 In the case of an internal student, the Principal Supervisor normally shall be from the academic staff of the school where the student carries out the work.

6.3 In the case of an external student, the Principal Supervisor normally shall be from the academic staff of the school supporting the work and at least one Associate Supervisor shall be from the sponsoring organisation.

6.4 At the end of each six-month period a student shall submit a report on the work undertaken to the Principal Supervisor and the Principal Supervisor shall submit a report to the Academic Board on the student's work. This report shall be seen by the candidate before submission to the Academic Board.

7. Place and Conditions of Work

7.1 The research program must normally be carried out under supervision in a suitable environment in Australia.

7.2 The Academic Board shall not admit a candidate to undertake a program of research based at the University unless it has received a statement from the Head of School and/or the Director of the Centre in which the study is proposed that, in his/her opinion, the applicant is a fit person to undertake a research program leading to the master degree, that the program is supported, and that the School/Centre is willing to undertake the responsibility of supervising the applicant's work.

7.3 The Academic Board shall not admit a candidate to undertake a research program based at a sponsoring establishment unless it has received:

- a statement from the employer or director of the sponsoring institution that the applicant will be provided with facilities to undertake the research project and that he/she is willing to accept responsibility for supervising the applicant's work, and

- a statement from the Head of School or the Director of the Centre in which the study is proposed that, in his/her opinion, the applicant is a fit person to undertake a research program leading to the master degree, that the program is supported, and that after examination of the proposed external facilities and supervision, the school is willing to accept the responsibility of supervising the work.

8. Thesis

8.1 In the form of presentation, availability and copyright, the thesis shall comply with the provisions of the document *Requirements for Presenting Theses*.

8.2 Not later than six months after commencement of Stage 2 the candidate shall submit the title of the thesis for approval by the Academic Board. After approval has been granted, no change shall be made except with the permission of the Academic Board.

8.3 The candidate shall give two months' notice of intention to submit the thesis. Such notice shall be accompanied by the appropriate fee, if any.

8.4 The thesis shall comply with the following requirements:

- a significant portion of the work described must have been carried out subsequent to initial registration for the degree
- it must describe a program of work carried out by the candidate, and must involve either an original contribution to knowledge or an original application of existing knowledge
- it must reach a satisfactory standard of literary presentation
- it shall be the candidate's own account of the work. Where work is carried out jointly with other persons, the academic board shall be advised of the extent of the candidate's contribution to the joint work
- the thesis shall not contain as its main content any work or material which the student has previously submitted for another degree or similar award
- supporting documents, such as published papers, may be submitted with the thesis if they have a bearing on the subject of the thesis, and
- the thesis shall contain an abstract of not more than 300 words.

8.5 Except with the specific permission of the Academic Board the thesis must be presented in the English language. Such permission must be sought at the time of application for registration, and will not be granted solely on the grounds that the candidate's ability to satisfy the examiners will be affected adversely by the requirement to present the thesis in English.

8.6 Subject to QUT's Intellectual Property policy, the copyright of the thesis is vested in the candidate.

8.7 Where a candidate or the sponsoring establishment wishes the thesis to remain confidential for a period of time after completion of the work, application for approval must be made to the Academic Board when the thesis is submitted. The period of confidentiality normally shall not exceed two years from the date on which the examiners recommend acceptance of the thesis, during which time the thesis will be held on restricted access in the QUT Library.

9. Examination of Thesis

9.1 The Academic Board shall appoint at least two examiners, of whom at least one shall be from outside the University. Normally examiners will be required to agree to read and report upon the thesis within two months of its receipt.

9.2 A candidate may be required to make an oral defence of the thesis.

9.3 On receipt of satisfactory reports from the examiners, and when the provisions of 7.1 have been fulfilled, the Academic Board shall recommend to Academic Committee that the candidate be awarded the degree.

9.4 If the examiners reports are conflicting, the Academic Board may, after appropriate consultation with the Principal Supervisor, seek advice from a further external examiner.

9.5 If, on the basis of the examiners' reports, the Academic Board does not recommend that the degree be awarded then it shall:

- permit the student to resubmit the thesis within one year for re-examination, or
- cancel the student's registration.

■ **Master of Applied Science (Medical Physics), Master of Applied Science (Medical Ultrasound) (PH80)**

Location: Gardens Point campus

Course Duration: 2 years full-time, 4 years part-time (plus Summer School)

Total Credit Points: Medical Physics (192) Medical Ultrasound (204)

Standard Credit Points/Full-Time Semester: 48

Course Coordinators:

Medical Physics Major – Dr Timothy van Doorn

Medical Ultrasound Major – Associate Professor Brian Thomas

Assistant Coordinator: Medical Ultrasound Major – Ms Margo Harkness

Entry Requirements

MEDICAL PHYSICS MAJOR

To be eligible to enrol for the Medical Physics Major, an applicant must have completed an acceptable tertiary course with a major in Physics.

Applicants with other qualifications (eg. Engineering) may be enrolled subject to the approval of the Head, School of Physics. In some instances, a bridging program may be necessary.

MEDICAL ULTRASOUND MAJOR

To be eligible to enrol in the Medical Ultrasound Major, an applicant will normally be qualified as a diagnostic radiographer (or medical imaging technologist) at degree or diploma level and have had a minimum of two years' experience as a practising radiographer.

Applicants with other qualifications (eg, in paramedical or physical sciences), or with other appropriate experience, may be permitted to enrol subject to the approval of the Head of Department, School of Physics. In some instances, a bridging program may be necessary.

Course Requirements

MEDICAL PHYSICS MAJOR

To complete Stage 1, students must complete subjects selected from the list below, totalling 96 credit points. Subjects MSN158, PHN157, PHN257, PHN357, PHN352,

PHN354, PHN155, PHN156 are not available to students in the Medical Physics Major. PHN154 and PHN353 are not recommended to students in the Medical Physics Major.

MEDICAL ULTRASOUND MAJOR

To complete Stage 1, students must complete subjects selected from the list below, totalling 108 credit points. Subjects PHN157, PHN257 and PHN357 are compulsory for students in the Medical Ultrasound Major. Subject PHN402 is not available to students in the Medical Ultrasound Major.

On successful completion of Stage 1 of either major:

- (i) students with GPA <5 will normally graduate with a GradDipAppSc (Medical Physics or Medical Ultrasound); (however, the Head of School may grant permission for such students to continue to Stage 2); while
- (ii) students with GPA >5 will be permitted to:
 - (a) graduate as above, or
 - (b) continue with Stage 2 (which is a further one-year full-time or equivalent) involving a project leading to the award MAppSc.

Stage 1		Credit Points	Contact Hrs/Wk
First Semester			
LSN161	Anatomy & Physiology 1	6	2
PHN101	Analogue Electronics	6	2
PHN102	Introduction to Medical Statistics & Computing	6	2
PHN103	Radiation Physics 1	6	2
PHN104	Radiation Physics 2	8	3
PHN202	Biomechanics	8	3
PHN204	Health & Occupational Physics	8	3
PHN206	Medical Imaging	8	3
PHN351	Ultrasound Equipment 2	6	2
PHN352	Ultrasonic Examination in Cardiology	6	2
PHN353	Ultrasound in Medical Diagnosis	6	2
PHN354	Ultrasonic Examination of Head, Neck & Peripheral Organs	6	2
PHN357	Clinical Ultrasound 3*	12	-
PHN407	Case Studies*	6	-
Second Semester			
LSN158	Ultrasonic Pathology	6	2
LSN165	Anatomy & Physiology 2	8	3
PHN152	Cross-sectional Anatomy	6	2
PHN153	Ultrasound Equipment 1	6	2
PHN154	Principles of Ultrasound Imaging	6	2
PHN155	Ultrasonic Examination in Obstetrics/Gynaecology	6	2
PHN156	Ultrasonic Examination of the Abdomen	6	2
PHN157	Clinical Ultrasound 1*	12	-
PHN301	Microprocessors	8	3
PHN302	Instrumentation	8	3
PHN304	Medical Imaging Science	6	2
PHN402	Radiotherapy	6	2
PHN405	Physiological Measurement	6	2
PHN407	Case Studies*	6	2
Summer School (10 weeks)			
PHN257	Clinical Ultrasound 2*	12	-

* No formal class attendance required.

The three subjects PHN157, PHN257 and PHN357 are compulsory for students in the Medical Ultrasound Major. Each subject involves 240 hours of clinical experience and students must successfully complete these subjects in the order PHN157, PHN257 and PHN357, unless special permission is granted.

Stage 2

PHN520 Project*
PHN540 Project+

Credit Points

48 per semester
24 per semester

Note: A student may request an extension of time in which to submit the project report for assessment. A request for an extension of time up to a maximum of six months shall be made in writing through the Head of School to the Dean. Any request for a further extension, or any request for an extension to a date later than six months after the original due date, shall be made in writing to the Academic Board. The Academic Board may grant the extension under such conditions as it may consider appropriate, or may award the student a 'Fail' result in the project subject.

A student who has received a 'Fail' result in the project subject may re-enrol in the subject only in exceptional circumstances and with the express permission of the Academic Board.

The program in Medical Physics commences in February each year. The program in Medical Ultrasound commences in July each year. Applications for both programs are to be made prior to 8 November in the preceding year.

Medical Ultrasound students undertake Stage 1 second semester subjects in their first semester of enrolment, and Stage 1 first semester subjects in their second semester of enrolment.

■ Master of Applied Science (Medical Laboratory Science) (LS85)

Location: Gardens Point campus

Course Duration: 3 years part-time

Total Credit Points: 144

Standard Credit Points/Full-Time Semester: 48

Course Coordinator: Dr David J. Allan

Entry Requirements

NORMAL ENTRY

Applicants shall hold a Bachelor of Applied Science (or equivalent) in the appropriate discipline for which they are seeking admission and shall normally have had at least one year of appropriate work experience in the discipline for which they are seeking admission.

Applicants may be required to attend an interview with the Head of School and/or Course Coordinator to establish suitability for entrance into the course.

* Subject extends over two semesters.

+ Subject extends over four semesters.

SPECIAL ENTRY

Applicants who do not hold the specific tertiary qualification required of normal entrants may be admitted upon successful completion of a qualifying program prescribed by the Head of School.

Special Course Requirement

There is a student intake into the Medical Laboratory Science Major every second year.

It is expected that there will be an intake into the part-time course in 1993.

Students should consult the Course Coordinator regarding their programs.

Students must select two disciplinary specialisation electives in Year 3, Semesters 1 and 2.

The project (dissertation) is carried out in the laboratory. The employer's written permission is required.

Part-Time Course Structure		Credit Points	Contact Hrs/Wk
Year 1, Semester 1			
LWS001	Medicine & the Law	12	3
PUN601	Contemporary Health Care Issues	12	3
Year 1, Semester 2			
LSN102	Cellular Basis of Disease	12	3
LSN110	Molecular Basis of Disease	12	3
Year 2, Semester 1			
LSB538	Molecular Biology	12	5
PUN602	Health Planning, Management & Evaluation	12	3
LSN150	Epidemiology & Research Strategies	12	3
Year 2, Semester 2			
LSN306	Pathophysiology	12	3
LSN401	Advances in Medical Laboratory Science	12	3
LSB638	Genetic Engineering	12	5
Year 3, Semester 1			
LSN530	Dissertation 1	12	3
LSB538	Molecular Biology	12	5
LSN510	Clinical Biochemistry 1	12	3
LSN511	Haematology 1	12	3
LSN512	Histopathology 1	12	3
LSN515	Microbiology 1	12	3
LSN517	Immunology 1	12	3
LSN518	Diagnostic Cytology	12	3
LSP120	Advanced Genetic Engineering	12	5
Year 3, Semester 2			
LSN531	Dissertation 2	12	3
LSB638	Genetic Engineering	12	5
LSN610	Clinical Biochemistry 2	12	3
LSN611	Haematology 2	12	3
LSN612	Histopathology 2	12	3
LSN615	Microbiology 2	12	3
LSN617	Immunology 2	12	3
LSN618	Diagnostic Cytology 2	12	3
LSP105	Molecular Diagnosis of Disease	12	5

■ Graduate Diploma in Applied Science (SC71)

No enrolments are accepted directly into this course. For details see Course Rules for Master of Applied Science (SC80) (paragraph 4.2).

■ Graduate Diploma in Applied Science (Medical Physics), Graduate Diploma in Applied Science (Medical Ultrasound) (PH71)

No enrolments are accepted directly into this course. For details see Course Rules for Master of Applied Science (Medical Physics); Master of Applied Science (Medical Ultrasound) (PH80).

■ Graduate Diploma in Biotechnology (LS70)

Location: Gardens Point campus

Course Duration: 1 year full-time, 2 years part-time

Total Credit Points: 96

Standard Credit Points/Full-Time Semester: 48

Course Coordinator: Dr Peter Timms

Entry Requirements

NORMAL ENTRY

To be eligible for entry to the Graduate Diploma in Biotechnology an applicant must have completed an appropriate degree or diploma in a relevant science area.

SPECIAL ENTRY

Applicants who do not hold the tertiary qualifications required for normal entry may be eligible for admission if they have completed a diploma or degree in another appropriate non-science area as determined by the Head of School, and are employed in the biotechnology area.

The full-time course is the part-time course (over two years) condensed into one year.

Part-Time Course Structure		Credit Points	Contact Hrs/Wk
Year 1, Semester 1			
LSB538	Molecular Biology	12	5
LSB548	Biochemical Separations	12	5
Year 1, Semester 2			
LSB638	Genetic Engineering	12	5
CHP120	Biochemical Engineering	12	5
Year 2, Semester 1			
LSP127	Topics in Biotechnology	12	5
LSP120	Advanced Genetic Engineering	12	5
	OR		
CHP320	Downstream Processing	12	5

Year 2, Semester 2

LSP145	Project	12	3
LSB608	Biochemistry 6	12	5
	OR		
LSP105	Molecular Diagnosis of Disease	12	5

■ Policy on Credit Transfer, relating to Bachelor-level courses in the Faculty of Science

FROM INCOMPLETE BACHELOR - LEVEL SCIENCE COURSES

Students transferring to a bachelor's degree course offered by the Faculty of Science at QUT from a comparable, partially completed course in a recognised institution may be granted credit towards the QUT award. In general, credit will be granted pro rata; for example, 96 credit points of credit normally will be granted for each year of full-time study (or its equivalent) completed successfully at the other institution. The maximum credit which may be granted is 192 credit points.

Each application for credit towards a Faculty of Science award will be considered individually, on its merits. Students who have completed successfully a year or more of full-time study (or its equivalent) at another institution nevertheless may be required to undertake specific first-level subjects at QUT. Also, to satisfy the relevant QUT degree rules, some students may have to gain credit totalling more than 288 credit points.

FROM COMPLETED ASSOCIATE DIPLOMA COURSES

Students entering a bachelor's degree course offered by the Faculty of Science at QUT following successful completion of a relevant Associate Diploma course from a recognised institution may be granted credit towards the QUT award. The maximum credit which may be granted is 96 credit points.

Unless the Dean determines otherwise, the credit will be granted as provisional credit. To have the credit confirmed, the student undertakes in the QUT course a program of study of at least 48 credit points and attains a grade point average of not less than 4.0. If, at the conclusion of such a course of study, the student's grade point average is less than 4.0, the Dean shall determine both the extent to which credit granted conditionally may be retained and the student's subsequent program of study in the course.

■ Bachelor of Applied Science (Honours) (SC60)

One year honours programs in Biology, Chemistry, Geology, Mathematics and Medical Physics.

Location: Gardens Point campus

Course Duration: 1 year full-time, 2 years part-time

Total Credit Points: 96

Standard Credit Points/Full-Time Semester: 48

Course Coordinators:

Biology Major – Dr Alan Bailey

Chemistry Major – Dr John Bastley

Geology Major – Associate Professor David Gust

Mathematics Major – Associate Professor Helen MacGillivray

Medical Physics Major – Mr Ross Dunlop

Entry Requirements

To be eligible for admission, students should have completed the University's Bachelor of Applied Science (SC30 or MA34) or equivalent and should have attained a grade point average (GPA) of at least 5.0 over that degree, including grades of at least credit in all subjects directly relevant to the proposed honours program. Application for admission should normally be made at the end of the final year of the pass degree, or within 18 months of completing that degree.

Applicants who do not satisfy the above conditions but who have demonstrated outstanding performance in only the final year of a degree, or whose application is based on other factors including work experience or involvement in research, may be admitted at the discretion of the Dean.

Please note that for the Mathematics major, other degrees with major studies in Mathematics (including Statistics) may provide suitable entry to the program.

Course Structure

The honours program is comprised of 96 credit points. The course structure may vary slightly from one student to another, depending on the program and particular subjects chosen.

Part-time candidates undertake annually approximately half of the full-time program. Classes are held at the same times as for full-time students and thus may involve some day release.

Students should consult the Coordinator concerning the availability of subjects and selection of subjects for their major.

Course Structure

The general course structure is:

Information Retrieval Skills	4 credit points
Advanced Topics	28 credit points (min)
Complementary Studies	16 credit points (max)
Project	48 credit points (max)

		Credit Points	Contact Hrs/Wk
IFN001	Advanced Information Retrieval Skills	4	1
SCB702	Complementary Studies*	16	6
LSB700	Project* (Biology major)	40	
CHB700	Project* (Chemistry major)	40	
ESB700	Project* (Geology major)	48	
MAB989	Project* (Mathematics major)	36	
PHB705	Project* (Medical Physics major)	48	

* Subject extends over two semesters.

Advanced Topics selected from:

BIOLOGY MAJOR

LSB801	Advanced Plant Physiology & Biochemistry	9	4
LSB803	Data Handling, Interpretation & Biometrics	9	4
LSB804	Advanced Studies in Population Management	9	4
SCB703	Studies in Global Systems A	9	3
SCB704	Studies in Global Systems B	6	2
SCB705	Advanced Microscopy Techniques	9	4

CHEMISTRY MAJOR

Mandatory subjects:

CHB780	Advanced Topics in Chemistry 1	12	6
CHB880	Advanced Topics in Chemistry 2	12	6

GEOLOGY MAJOR

ESB701	Geology Case Studies*	10	3
ESB710	Hydrology & Environmental Geology	6	2
ESB711	Advanced Resource Geology	6	2
ESB712	Advanced Engineering Geology	6	2
ESB713	Petrochemistry	6	2
ESB714	Global Plate Tectonics	6	2

Electives

Students choose two subjects from a selection of Chemistry and other relevant disciplines.

MATHEMATICS MAJOR

Students select five subjects each of 12 credit-points, plus completing a project of 36 credit points.

ITN502	Computer Security	12	4
MAB906	Topics in Analysis	12	4
MAB920	Coding & Encryption Techniques	12	3
MAB929	Time Series & Statistical Forecasting	12	4
MAB970	Probability Theory & Stochastic Processes	12	4
MAB971	Advanced Mathematics of Finance	12	4
MAB972	Error Correction & Data Compression	12	4
MAB973	Partial Differential Equations	12	4
MAB974	Sampling & Survey Techniques	12	4
MAB975	Ordinary Differential Equations & Chaos	12	4
MAB976	Reliability & Survival Analysis	12	4
MAB977	Scheduling & Networks	12	4
MAB978	Statistical Signal Processing & Image Analysis	12	4
MAB979	Statistical Modelling & Data Analysis	12	4
MAB980	Stochastic Processes & Applications	12	4
MAB981	Applied Statistical Inference & Experimentation	12	4
MAB982	Advanced Topics in Cryptology	12	4
MAB983	Finite Mathematics (electives from UQ Honours Program in Finite Mathematics)	24	8
MAB984	Actuarial Statistics	12	4
MAB985	Numerical Analysis	12	4
MAB986	Mathematical Modelling of Industrial Processes	12	4
MAB987	Optimisation of Controlled Processes	12	4

MEDICAL PHYSICS MAJOR

PHB701	Topics in Medical Physics 1	12	4
PHB702	Topics in Medical Physics 2	12	4
PHB703	Topics in Medical Physics 3	12	4
PHB704	Topics in Medical Physics 4	12	4

* Subject extends over two semesters.

■ Bachelor of Applied Science (Honours) with Major in Life Science (LS65)

Location: Gardens Point campus

Course Duration: 1 year full-time

Total Credit Points: 96

Standard Credit Points/Full-Time Semester: 48

Course Coordinator: Associate Professor James Dale

Full-Time Course Structure		Credit Points	Contact Hrs/Wk
Semester 1			
LSB722	Research Strategies 1	8	3
LSB723	Readings in Life Science 1	25	1
LSB725	Project*	10	
and 10 credit points from one of the following:			
LSB732	Biochemical Separations	10	5
LSB734	Analytical Electron Microscopy	10	5
LSB736	Advanced Genetic Engineering	10	5
LSB738	Molecular Biology	10	5
LSB750	Advanced Aquaculture	10	5
OR			
Another subject approved by the Head of School			
Semester 2			
LSB725	Project*	10	
LSB822	Research Strategies 2	8	3
LSB823	Readings in Life Science 2	25	1
and 10 credit points from one of the following:			
CHP120	Biochemical Engineering	12	6
LSB801	Advanced Plant Physiology & Biochemistry	9	4
LSB803	Data Handling Interpretation & Biometrics	9	4
LSB804	Advanced Studies in Population Management	9	4
LSB805	Molecular Diagnosis of Disease	9	5
LSB835	Genetic Engineering	10	5
LSB845	Analytical Biochemistry	10	5
OR			
Another subject approved by the Head of School			

■ Bachelor of Applied Science with Majors in Biology, Chemistry, Microbiology/Biochemistry, Geology, Mathematics, Physics (SC30)

Location: Gardens Point campus

Course Duration: 3 years full-time, 6 years part-time

Total Credit Points: 288

Standard Credit Points/Full-Time Semester: 48

* *Subject extends over two semesters.*

Course Coordinator: Dr Don Field

Course Rules

1. A student may enrol as either a full-time or a part-time student. A full-time student is one who is enrolled in 36 or more credit points per semester. A part-time student is one who is enrolled in less than 36 credit points in the semester.
2. All commencing students and certain continuing students are required to attend scheduled academic advising sessions to plan their progression through the course, and to obtain the approval of an academic adviser prior to effecting any change of enrolment.
3. Students are normally expected to complete the course in minimum time. A full-time student enrolls in an average of 48 credit points per semester for six semesters and a part-time student enrolls in an average of 24 credit points per semester for 12 semesters.
4. To fulfil the requirements for the award of the degree, a student must complete subjects totalling at least 288 credit points, comprising major and minor studies, and supporting subjects.

Major and minor studies are defined in terms of the discipline and the academic level at which subjects are offered:

- (i) A major must be completed in one of the following discipline areas - biology, chemistry, microbiology/biochemistry, geology, mathematics, physics. Completion of a major consists of passing subjects totalling at least 120 credit points from the second and third schedules, including a minimum of 48 credit points at third level. The general requirements for each major are set out in Table 1.
- (ii) A minor may be completed in any approved discipline within the University. Completion of a minor consists of passing subjects totalling at least 48 credit points from the second and third levels, and including at least 24 credit points at third level.

Major and minor studies may be undertaken in the same or in closely related discipline areas.

5. A registered student who has successfully completed the equivalent of the first and second years of the standard full-time course, normally with a GPA of not less than 4.5 overall, may, at the discretion of the Cooperative Education Program Coordinator, undertake the Cooperative Education Program.

This involves 10-12 months of paid full-time employment in an approved industrial/commercial environment during which time the student is enrolled in the subject SCB100 Cooperative Education. On completion of the approved cooperative education placement the student resumes formal studies.

Notes on the Rules

- (i) First, second and third level subjects are defined, respectively, to be those listed in the first, second and third schedules to the course rules. In general, it is expected that a second level subject will have one or more first level prerequisite subjects. Similarly, a third level subject is likely to have one or more second level prerequisite subjects. The subject schedules are shown in Table 2.
- (ii) Instead of the major and minor requirement described in Rule 3, students may, in special circumstances and with the written approval of the Dean, undertake two majors or a major and two minors.

Table 1 – General requirements for majors

The subjects and specifications listed are the minimum requirements for completion of a major in each discipline.

Major	First Level	Second & Third Level
Biology	Biology 1 Biology 2 OR Cell Biology Chemistry 1 and 2 Maths 1 Statistics	120 credit points of Biology subjects including 48 from the third level
Chemistry	Chemistry 1 and 2 At least 36 credit points from other first level Science subjects OR Computing	120 credit points of Chemistry subjects including 48 from the third level
Geology	Earth Science 1 and 2 At least 48 credit points from other first level Science subjects OR Computing OR Introduction to Computing	120 credit points of Geology subjects including 48 from the third level
Mathematics	Mathematics 1 and 2 Discrete Mathematics Statistics Introduction to Computing	120 credit points of Mathematics subjects including 48 from the third level
Microbiology/ Biochemistry	Cell Biology Chemistry 1 and 2 Statistics At least 12 credit points from other first level science subjects OR Computing OR Introduction to Computing	120 credit points of Microbiology/Biochemistry subjects including 48 from the third level
Physics	Physics 1 and 2 Maths 1 and 2 Statistics* Computing*	120 credit points of Physics subjects including 48 from the third level Mathematics 3 Mathematics 4

* These subjects need not be taken in First Year.

Table 2 - Schedule of Subjects		Semester Offered	Credit Points	Contact Hrs/Wk
First Schedule - First Level Subjects				
CHB182	Chemistry 1	1,2	12	6
CHB282	Chemistry 2	1,2	12	6
CSB155	Introduction to Computing	1,2	12	3
CSB263	Computing	1,2	12	3
ESB122	Earth Science 1	1	12	5
ESB222	Earth Science 2	2	12	5
LSB122	Biology 1	1	12	5
LSB222	Biology 2	2	12	5
LSB232	Cell Biology	2	12	5
MAB212	Mathematics 1	1,2	12	4
MAB222	Mathematics 2	1,2	12	4
MAB232	Discrete Mathematics	1,2	12	4
MAB237	Statistics	1,2	12	4
PHB122	Physics 1	1	12	5
PHB222	Physics 2	2	12	5
SCB001	Learning at University*	1	2	1

INTRODUCTORY SUBJECTS

CHB001	Introductory Chemistry	1,2	6	3
LSB001	Introductory Biology	1	6	3
PHB001	Introductory Physics	1,2	6	3

OTHER SUBJECTS

Students may take subjects from any discipline within the University. Some other subjects offered at first level are listed below:

COB136	Professional Communication	1,2	6	3
LSB242	Human Anatomy & Physiology	1,2	12	5
MAB102	Basic Mathematics	1	12	4
MAB213	Mathematics 1A	1	12	4
MAB447	Statistics 1A	1	12	4
PHB150	Physics 1H	1	12	6
PHB250	Physics 2H	2	10	4
SCB222	Exploration of the Universe	2	12	5

Second Schedule - Second Level Subjects

		Semester Offered	Credit Points	Contact Hrs/Wk
CHB313	Analytical Chemistry 3	1	12	5
CHB333	Inorganic Chemistry 3	1	12	5
CHB423	Chemical Technology 4	2	12	5
CHB352	Organic Chemistry 3	1	12	5
CHB453	Organic Chemistry 4	2	12	5
CHB372	Chemistry 3	1	12	5
CHB473	Physical Chemistry 4	2	12	5
ESB302	Geology of the SW Pacific	1	12	2.5
ESB312	Mineralogy & Optical Mineralogy	1	12	5
ESB342	Structural Geology	1	12	5
ESB362	Economic Mineral Deposits	1	12	5
ESB392	Field Techniques and Studies	1	12	5
ESB422	Sedimentology & Sedimentary Petrology	2	12	5
ESB442	Geomorphology	2	12	5
ESB452	Geochemistry	2	12	5
ESB462	Lithology	2	12	5
LSB302	Animal Biology 1	1	12	5
LSB312	Marine Studies	1	12	5
LSB322	Plant Biology	1	12	5
LSB332	Plant Physiology 1	1	12	5
LSB352	Population Ecology	1	12	5
LSB362	Quantitative Methods in Life Science	1	12	5
LSB402	Animal Biology 2	2	12	5
LSB412	Applied Ecology A	2	12	5
LSB422	Applied Ecology B	2	12	5
LSB432	Genetics	2	12	5
LSB442	Plant Tissue Culture 1	2	12	5
LSB308	Biochemistry 3	1,2	12	5
LSB318	Biochemical Methodology 3	1	12	5
LSB328	Microbiology 3	1	12	5
LSB358	Physiology 2S	1	12	5
LSB408	Biochemistry 4	1,2	12	5
LSB418	Biochemical Methodology 4	2	12	5
LSB428	Microbiology 4	2	12	5
LSB438	Immunology 4	2	12	5
LSB458	Physiology 3S	2	12	5
MAB342	Mathematics of Finance	1,2	12	4
MAB420	Finite Mathematics	1	12	4
MAB421	Computational Mathematics	1,2	12	4
MAB422	Topics in Mathematics	1	12	4
MAB430	Linear Algebra & its Applications	2	12	4
MAB432	Mathematics 3	1	12	4

MAB447	Statistics 1A	1,2	12	4
MAB448	Statistics 1B	1,2	12	4
MAB452	Mathematics 4	2	12	4
MAB462	Vector Analysis	1,2	12	4
PHB322	Physics 3A	1	12	5
PHB332	Physics 3B	1	12	5
PHB342	Physics 3C	1	12	5
PHB352	Electronics 1	1	12	5
PHB422	Physics 4A	2	12	5
PHB432	Physics 4B	2	12	5
PHB442	Astronomy & Astrophysics	2	12	5
PHB452	Electronics 2	2	12	5
PHB462	Experimental Physics 4	2	12	5

OTHER SUBJECTS

Students may take subjects from any discipline within the University. Some other subjects offered at second level are listed below.

PUB353	Consumer Food	1	12	4
PUB405	Human Nutrition	2	12	5

Cooperative Education Program

A registered student who has completed the equivalent of the first and second years of the standard full-time course, normally with a GPA of not less than 4.5 overall, may, at the discretion of the Cooperative Education Program Coordinator, undertake the Cooperative Education option. This involves 10-12 months of paid full-time employment in an approved industrial/commercial environment during which time the student is enrolled in the subject SCB100 Cooperative Education. On completion of the approved cooperative education placement the student resumes formal studies.

Third Schedule - Third Level Subjects

		Semester Offered	Credit Points	Contact Hrs/Wk
CHB510	Instrumental Analysis	1	8	4
CHB527	Chemical Technology 5	1	8	4
CHB530	Inorganic Chemistry 5	1	8	3
CHB551	Organic Chemistry 5C	1	8	3
CHB571	Physical Chemistry 5C	1	8	3
CHB590	Materials Science	1	8	3
CHB600	Project	2	20	10
CHB610	Advanced Analysis	2	4	2
CHB627	Chemical Technology 6	2	4	2
CHB628	Energy Technology	2	6	3
CHB631	Advanced Inorganic Chemistry	2	8	3
CHB641	Advanced Spectroscopy	2	8	3
CHB651	Biological Chemistry	2	8	3
CHB660	Industrial Visits	2	2	1
CHB671	Solids & Surfaces	2	8	3
CHB690	Advanced Materials Science	2	8	3
CHB691	Environmental Chemistry	2	8	3
ESB517	Mineral Exploration	1	8	3
ESB520	Applied Geochemistry	1	8	3
ESB537	Applied Geophysics	1	8	3
ESB547	Igneous & Metamorphic Petrology	1	8	3
ESB557	Petroleum Geology	2	8	3
ESB577	Field Excursion	1	8	3
ESB607	Coal Geology	2	8	3
ESB617	Mining Geology	2	8	3
ESB627	Hydrogeology	2	8	3
ESB647	Structural Geology & Geotectonics	2	8	3

ESB653	Engineering Geology	2	8	3
ESB677	Field Excursion	2	8	3
ESB687	Geological Investigations	2	8	3
ESB697	Mining Feasibility Studies	2	8	3
LSB622	Case Studies	2	12	5
LSB642	Plant Tissue Culture 2	1	12	5
LSB980	Environmental Monitoring	1	8	3
LSB981	Field Studies 2	1	8	3
LSB982	Selected Topics 1	1	8	3
LSB983	Population Genetics	1	8	3
LSB984	Projects 1	1	16	6
LSB985	Biological Resources	2	8	3
LSB986	Aquaculture 2	1	8	3
LSB987	Selected Topics 2	2	8	3
LSB988	Plant Physiology	2	8	3
LSB989	Population Management	2	8	3
LSB990	Projects 2	2	16	6
LSB991	Hydrobiology & Aquaculture	2	8	3
LSB508	Biochemistry 5	1	12	5
LSB528	Microbial Physiology & Metabolism	1	12	5
LSB538	Molecular Biology	1	12	5
LSB548	Biochemical Separations	1	12	5
LSB558	Applied Physiology	1	12	5
LSB568	Electron Microscopy	1	12	5
LSB608	Biochemistry 6	2	12	5
LSB618	Analytical Biochemistry	2	12	5
LSB628	Applied Microbiology	2	12	5
LSB638	Genetic Engineering	2	12	5
LSB648	Microbial Technology	2	12	5
LSB658	Clinical Physiology	2	12	5
LSB992	Virology 5	1	8	3
MAB720	Introduction to Cryptology	1	12	4
MAB721	Actuarial Mathematics	1	12	4
MAB722	Vector Field Theory	2	12	4
MAB725	Mechanics	1	12	4
MAB728	Numerical Methods 1	1	12	4
MAB729	Numerical Methods 2	1	8	3
MAB747	Statistics 2A	1	12	4
MAB748	Statistics 2B	2	8	3
MAB777	Operations Research 1A	1	12	4
MAB778	Operations Research 1B	2	8	3
PHB501	Applied Quantum Mechanics	1	8	3
PHB502	Electromagnetic Field Theory	1	8	3
PHB508	Electronics 3	1	8	3
PHB510	Physical Methods of Analysis	1	8	3
PHB516	Experimental Physics 5	1	12	6
PHB601	Solid State Physics	2	8	3
PHB602	Nuclear Physics & Energy	2	8	3
PHB608	Applied Acoustics	2	8	3
PHB609	Applied Radiation Physics	2	8	3
PHB613	Biophysics	2	8	3
PHB616	Project	1,2	16	6
PHB620	Topics in Physics	2	8	3

OTHER SUBJECTS

Students may take subjects from any discipline within the University. Some other subjects offered at third level are listed below.

PUB631	Nutritional Biochemistry	2	12	5
SCB510	Introduction to Quality Management	1	8	3

Note: Third level Chemistry, Geology, Mathematics and Physics subjects will be restructured to 12 credit points subjects commencing 1993.

■ Bachelor of Applied Science (Applied Chemistry) (CH32)

Location: Gardens Point campus

Course Duration: 3 years full-time, 6 years part-time

Total Credit Points: 288 (minimum)

Standard Credit Points/Full-Time Semester: 48

Course Coordinator: Mr Eric O'Reilly

		Credit Points	Contact Hrs/Wk
Year 1, Semester 1			
SCB001	Learning at University	2	1
CHB173	Chemistry 1A	12	6
CHB183	Chemistry 1B	12	6
MAB212	Mathematics 1	12	4
PHB122	Physics 1	12	5
Year 1, Semester 2			
CHB283	Chemistry 2A	12	5
CHB253	Chemistry 2B	12	5
CSB263	Computing	12	4
MAB237	Statistics	12	4
Year 2, Semester 1			
CHB313	Analytical Chemistry 3	12	5
CHB333	Inorganic Chemistry 3	12	5
CHB353	Organic Chemistry 3A	12	5
CHB373	Physical Chemistry 3A	12	5
Year 2, Semester 2			
CHB423	Chemical Technology 4	12	5
CHB453	Organic Chemistry 4	12	5
CHB473	Physical Chemistry 4	12	5
	Elective	12	
Year 3, Semester 1 (First Offering 1993)			
CHB513	Instrumental Analysis 5	12	5
CHB523	Chemical Technology 5	12	5
Two of:			
CHB533	Inorganic Chemistry 5	12	5
CHB553	Organic Chemistry 5	12	5
CHB573	Physical Chemistry 5	12	5
	Elective	12	
Year 3, Semester 2 (First Offering 1993)			
CHB613	Instrumental Analysis 6	12	5
CHB623	Chemical Technology 6	12	5
CHB693	Materials Chemistry	12	5
One of:			
CHB603	Project	12	5
CHB643	Applied Spectroscopy	12	5
CHB653	Applied Biological Chemistry	12	5
CHB663	Environmental Chemistry	12	5
	Elective	12	

Year 3, Semester 1 (Final Offering 1992)

CHB510	Instrumental Analysis	8	4
CHB527	Chemical Technology 5	8	4
CHB530	Inorganic Chemistry 5	8	3
CHB550	Organic Chemistry 5	8	4
CHB570	Physical Chemistry 5	8	4
CHB590	Material Science	8	3
	Elective Subject for Strand*		
LSB300	A Microbiology 3	6	3
	OR		
PHB508	B Electronics 3	8	3
	OR		
ESB520	C Applied Geochemistry	8	3

Year 3, Semester 2 (Final Offering 1992)

CHB600	Project	20	10
CHB610	Advanced Analysis	4	2
CHB627	Chemical Technology 6	4	2
CHB640	Chemistry 6	4	2
CHB660	Industrial Visits	2	1
HRB122	Management	4	1
	Chemistry Elective		
CHB628	Energy Technology	6	3
	OR		
CHB690	Advanced Materials Science	8	3
	OR		
	Other Approved Chemistry Elective		
	Elective subject for Strand*		
LSB400	A Microbiology 4	8	4
	OR		
CHB618	B Laboratory Automation	8	3
	OR		
ESB462	C Lithology	8	3

Cooperative Education Program

A registered student who has completed the equivalent of the first and second years of the standard full-time course, normally with a GPA of not less than 4.5 overall, may, at the discretion of the Cooperative Education Program Coordinator, undertake the Cooperative Education option.

This involves 10-12 months of paid full-time employment in an approved industrial/commercial environment during which time the student is enrolled in the subject SCB100 Cooperative Education. On completion of the approved industrial experience the student resumes formal studies.

Part-Time Course Structure

		Credit Points	Contact Hrs/Wk
Year 1, Semester 1			
CHB173	Chemistry 1A	12	6
PHB122	Physics 1	12	5
SCB001	Learning at University	2	1
Year 1, Semester 2			
CHB183	Chemistry 1B	12	6
MAB212	Mathematics 1	12	4

* Elective Strand is indicated by: A: Biochemistry/Microbiology; B: Computing/Electronics; or C: Geology.

Year 2, Semester 1

CHB283	Chemistry 2A	12	5
MAB237	Statistics	12	4

Year 2, Semester 2

CHB253	Chemistry 2B	12	5
CSB263	Computing	12	4

Year 3, Semester 1

CHB353	Organic Chemistry 3A	12	5
CHB373	Physical Chemistry 3A	12	5

Year 3, Semester 2

CHB473	Physical Chemistry 4	12	5
CHB453	Organic Chemistry 4	12	5

Year 4, Semester 1

CHB313	Analytical Chemistry 3	12	5
CHB333	Inorganic Chemistry 3	12	5

Year 4, Semester 2

CHB423	Chemical Technology 4	12	5
	Elective	12	

Year 5, Semester 1 (First Offering 1993)

CHB513	Instrumental Analysis 5	12	5
CHB523	Chemical Technology 5	12	5

Year 5, Semester 2 (First Offering 1993)

CHB613	Instrumental Analysis 6	12	5
CHB623	Chemical Technology 6	12	5

Year 6, Semester 1 (First Offering 1994)

Two of:

CHB533	Inorganic Chemistry 5	12	5
CHB553	Organic Chemistry 5	12	5
CHB573	Physical Chemistry 5	12	5
	Elective	12	

Year 6, Semester 2 (First Offering 1994)

CHB693	Materials Chemistry	12	5
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One of:

CHB653	Applied Biological Chemistry	12	5
CHB663	Environmental Chemistry	12	5
CHB601	Project*	12	5

Year 5, Semester 1 (Final Offering 1992)

CHB550	Organic Chemistry 5	8	4
CHB570	Physical Chemistry 5	8	4
	Elective Subject for Strand+		
LSB300	A Microbiology 3	6	3
	OR		
PHB508	B Electronics 3	8	3
	OR		
ESB520	C Applied Geochemistry	8	3

* *Subject extends over two semesters.*+ *Elective Strand is indicated by: A: Biochemistry/Microbiology; B: Computing/Electronics; or C: Geology.*

Year 5, Semester 2 (Final Offering 1992)

CHB527	Chemical Technology 5	8	4
CHB530	Inorganic Chemistry 5	8	3
CHB590	Material Science	8	3
	Elective Subject for Strand		
LSB400	A Microbiology 4	8	4
	OR		
CHB618	B Laboratory Automation	8	3
	OR		
ESB417	C Petrography	8	3

Year 6, Semester 1 (Final Offering 1993)

CHB510	Instrumental Analysis	8	4
CHB601	Project*	10	4
CHB627	Chemical Technology 6	4	2
CHB640	Chemistry 6	4	2

Year 6, Semester 2 (Final Offering 1993)

CHB601	Project*	10	6
CHB610	Advanced Analysis	4	2
CHB660	Industrial Visits	2	1
HRB122	Management	4	1
	Chemistry Elective+		
CHB628	Energy Technology	6	3
	OR		
CHB690	Advanced Material Science	8	3
	OR		
	Other Approved Chemistry Elective		

■ Bachelor of Applied Science (Mathematics) (MA34)**Location:** Gardens Point campus**Course Duration:** 3 years full-time, 6 years part-time**Total Credit Points:** 288**Standard Credit Points/Full-Time Semester:** 48**Course Coordinator:** Mr Clif Bothwell**Course Requirements**

A student selects subjects from the list given below, having regard to specified prerequisites and co-requisites, and must complete:

- (i) all subjects from List A;
- (ii) at least 36 credit points from List B;
- (iii) at least 144 credit points from Lists C and D with at least 48 credit points from List D;
- (iv) a minimum of 288 credit points.

* *Subject extends over two semesters.*

† *It is not intended that all Chemistry Elective units will be offered. Those units offered in any one year will be determined by student demand.*

List A		Semester Offered	Credit Points	Contact Hrs/Wk
CSB155	Introduction to Computing	1,2	12	4
MAB301	Calculus and Analysis A	1,2	12	4
MAB303	Algebra and Analysis B	1,2	12	4
MAB347	Statistics 1A	1,2	12	4
List B				
MAB304	Calculus and Vector Algebra	1,2	12	4
MAB321	Computational Mathematics	1,2	12	4
MAB342	Mathematics of Finance	1,2	12	4
MAB348	Statistics 1B	1,2	12	4
List C				
MAB601	Multivariable Calculus	1	12	4
MAB602	Vector Field Theory	2	12	4
MAB612	Differential Equations	2	12	4
MAB618	Numerical Analysis 1	1	12	4
MAB619	Numerical Analysis 2	2	8	3
MAB620	Finite Mathematics	1	12	4
MAB630	Linear Algebra & its Applications	2	12	4
MAB635	Mechanics	1	12	4
MAB637	Operations Research 1A	1	12	4
MAB638	Operations Research 1B	2	8	3
MAB641	Actuarial Mathematics	1	12	4
MAB647	Statistics 2A	1	12	4
MAB648	Statistics 2B	2	8	3
Electives [a maximum total of 72 credit points with not more than 48 at first level]		1,2	8-12ea	3-6ea
List D				
MAB906	Topics in Analysis	1	12	4
MAB907	Statistics 3A	1	12	4
MAB908	Statistics 3B	2	12	4
MAB913	Numerical Analysis 3	2	12	4
MAB920	Coding & Encryption Technique	1	12	4
MAB927	Operations Research 2A	1	12	4
MAB928	Operations Research 2B	2	12	4
MAB929	Time Series & Statistical Forecasting	1	12	4
MAB941	Mathematical Modelling in Economics	2	12	4
MAB942	Optimisation Methods	1	12	4
MAB960	Project Work	1,2	12	4
MAB973	Partial Differential Equations	2	12	4
MAB970	Probability Theory & Stochastic Processes	1	12	4
MAB971	Advanced Mathematics of Finance	2	12	4
MAB972	Error Correction & Data Compression	2	12	4
MAB974	Sampling & Survey Techniques	2	12	4
MAB975	Ordinary Differential Equations & Chaos	1	12	4
SCB510	Introduction to Quality Management	1	8	3

Cooperative Education Program

A registered student who has completed the equivalent of the first and second years of the standard full-time course, normally with a GPA of not less than 4.5 overall, may, at the discretion of the Cooperative Education Program Coordinator, undertake the Cooperative Education option.

This involves 10-12 months of paid full-time employment in an approved industrial/commercial environment during which time the student is enrolled in the subject SCB100 Cooperative Education. On completion of the approved Cooperative Education placement the student resumes formal studies.

■ Bachelor of Applied Science (Medical Laboratory Science) (LS36)

Location: Gardens Point campus

Course Duration: 3 years full-time, 6 years part-time

Total Credit Points: 288

Standard Credit Points/Full-Time Semester: 48

Course Coordinator: Miss Pam Stallybrass

Professional Recognition

Graduates are immediately eligible for graduate membership of the Australian Institute of Medical Laboratory Scientists and will have completed the academic requirements for admission as associate members.

Special Course Requirement

Students in the part-time program should be aware that they are required to attend much of their program during the day.

From 1992, students in this course is required to undertake a 2-4 week work experience program in a practising pathology laboratory. This takes place at the end of the second year full-time and in a suitable vacation period during the part-time program. This is a requirement for the subject LSB480 Professional Practice.

Full-Time Course Structure		Credit Points	Contact Hrs/Wk
Year 1, Semester 1			
CHB142	Chemistry 1	12	6
ISB382	Microcomputer Applications	8	3
LSB130	Anatomy 1	8	3
LSB100	Microbiology 1	8	3
PHB150	Physics 1H	12	6
Year 1, Semester 2			
CHB242	Chemistry 2	12	6
LSB210	Quantitative Laboratory Techniques 2	12	5
LSB230	Anatomy 2	8	3
LSB240	Physiology 2	8	4
PHB262	Physics 2L	8	4
Year 2, Semester 1			
CHB382	Chemistry 3	4	2
LSB300	Microbiology 3	8	4
LSB308	Biochemistry 3	12	5
LSB310	Quantitative Laboratory Techniques 3	8	4
LSB330	Introductory Biotechnology	8	4
LSB340	Physiology 3	8	4
Year 2, Semester 2			
LSB400	Microbiology 4	8	4
LSB408	Biochemistry 4	12	5
LSB430	Immunology 4	8	4
LSB450	Haematology 4	8	4
LSB460	Histopathology 4	8	4
LSB470	Disease Processes 4	4	2

Year 3, Semester 1

LSB500	Microbiology 5	16	7
LSB520	Clinical Biochemistry 5	8	4
LSB530	Immunology 5	8	4
LSB550	Haematology 5	8	4
LSB560	Histopathology 5	8	4

Year 3, Semester 2

LSB600	Clinical Bacteriology 6	16	7
LSB620	Clinical Biochemistry 6	8	4
LSB630	Immunohaematology 6	8	4
LSB650	Haematology 6	8	4
LSB660	Histopathology 6	8	4

Part-Time Course Structure

Credit Points **Contact Hrs/Wk**

Year 1, Semester 1

CHB142	Chemistry 1	12	6
LSB100	Microbiology 1	8	3
LSB130	Anatomy 1	8	3

Year 1, Semester 2

CHB242	Chemistry 2	12	6
LSB230	Anatomy 2	8	3
LSB240	Physiology 2	8	4

Year 2, Semester 1

ISB382	Microcomputer Applications	8	3
LSB300	Microbiology	8	4
PHB150	Physics 1H	12	6

Year 2, Semester 2

PHB262	Physics 2L	8	4
LSB210	Quantitative Laboratory Techniques 2	12	5

Year 3, Semester 1

CHB382	Chemistry 3	4	2
LSB310	Quantitative Laboratory Techniques 3	8	4
LSB308	Biochemistry 3	12	5

Year 3, Semester 2

LSB400	Microbiology 4	8	4
LSB408	Biochemistry 4	12	5
LSB470	Disease Processes 4	4	2

Year 4, Semester 1

LSB330	Introductory Biotechnology	8	4
LSB340	Physiology 3	8	4
LSB400	Microbiology 4	8	4

Year 4, Semester 2

LSB430	Immunology 4	8	4
LSB450	Haematology 4	8	4
LSB460	Histopathology 4	8	4

Year 5, Semester 1

LSB520	Clinical Biochemistry 5	8	4
LSB550	Haematology 5	8	4
LSB560	Histopathology 5	8	4

Year 5, Semester 2

LSB620	Clinical Biochemistry 6	8	4
LSB650	Haematology 6	8	4
LSB660	Histopathology 6	8	4

Year 6, Semester 1

LSB600	Clinical Bacteriology 6	16	7
LSB530	Immunology 5	8	4

Year 6, Semester 2

LSB500	Microbiology 5	16	7
LSB630	Immuno-haematology 6	8	4

■ Bachelor of Applied Science (Medical Radiation Technology) with Majors in Medical Imaging Technology and Radiotherapy Technology (PH38)

Location: Gardens Point campus

Course Duration: 3 years full-time

Total Credit Points: 288

Standard Credit Points/Full-Time Semester: 48

Course Coordinator: Associate Professor Brian J. Thomas

Assistant Coordinators:

Medical Imaging Technology Major – Ms Pam Rowntree

Radiotherapy Technology Major – Ms Jan Veitch

Full-Time Course Structure

Credit Points **Contact Hrs/Wk**

Year 1, Semester 1**COMMON SUBJECTS**

COB135	Professional Communication	6	3
LSB141	Anatomy & Physiology 1	10	4
MAB151	Quantitative Techniques	4	2
SSB910	Introductory Psychology for Health Professionals	4	2
NSB201	Principles of Patient Care	4	2
PHB111	Physics 1B	8	3
PHB178	Principles of Medical Radiations	10	5

Year 1, Semester 2**COMMON SUBJECTS**

LSB221	Introduction to Pathology	6	3
LSB241	Anatomy & Physiology 2	10	4
PHB272	Radiation Physics 1	12	5

MEDICAL IMAGING TECHNOLOGY MAJOR

PHB275	Processing Technology	4	2
PHB276	General Radiography 1	14	7
PHB279	Clinical Radiography 1	4	2

RADIOTHERAPY TECHNOLOGY MAJOR			
PHB286	Treatment Planning 1	12	6
PHB287	Megavoltage Therapy 1	6	3
PHB289	Clinical Radiotherapy 1	4	2

Year 2, Semester 1

COMMON SUBJECTS

LSB321	Systematic Pathology	8	3
LSB341	Regional & Sectional Anatomy	8	4

MEDICAL IMAGING TECHNOLOGY MAJOR

PHB373	Nuclear Medicine Imaging 1	4	2
PHB374	Radiographic Equipment 1	6	3
PHB376	General Radiography 2	12	5
PHB379	Clinical Radiography 2	10	5

RADIOTHERAPY TECHNOLOGY MAJOR

PHB382	Radiotherapy Physics 1	4	2
PHB386	Treatment Planning 2	8	4
PHB387	Megavoltage Therapy 2	10	5
PHB389	Clinical Radiotherapy 2	10	5

Year 2, Semester 2

COMMON SUBJECTS

PHB475	Medical Radiation Computing 1	8	3
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MEDICAL IMAGING TECHNOLOGY MAJOR

LSB441	Imaging Anatomy	8	4
PHB473	Medical Ultrasound	4	2
PHB474	Radiographic Equipment 2	4	2
PHB476	Special Procedures	8	3
PHB479	Clinical Radiography 3	8	4
PHB573	Digital Imaging Modalities	6	2

RADIOTHERAPY TECHNOLOGY MAJOR

PHB481	Dosimetry	6	3
PHB482	Radiotherapy Physics 2	6	3
PHB484	Principles of Treatment 1	6	3
PHB487	Megavoltage Therapy 3	10	4
PHB489	Clinical Radiotherapy 3	8	4
PHB585	Computer Assisted Treatment Planning 1	8	3

Year 3, Semester 1

COMMON SUBJECTS

PHB471	Radiation Physics 2	4	2
PHB575	Medical Radiation Computing 2	8	3

MEDICAL IMAGING TECHNOLOGY MAJOR

LSB421	Imaging Pathology	4	2
PHB572	Image Recording & Evaluation	4	2
PHB574	Quality Assurance in Medical Imaging	6	3
PHB576	Advanced Radiographic Technique 1	12	6
PHB578	Image Interpretation 1	4	2
PHB579	Clinical Radiography 4	8	4

RADIOTHERAPY TECHNOLOGY MAJOR

PHB583	Complementary & Evolving Techniques	6	3
PHB584	Principles of Treatment 2	4	2
PHB587	Orthovoltage & Superficial Therapy	10	4
PHB589	Clinical Radiotherapy 4	12	6

Year 3, Semester 2

COMMON SUBJECTS

PHB671	Radiation Biology	4	2
PHB672	Project	8	3
SSB918	Counselling for Health Professionals	4	2

MEDICAL IMAGING TECHNOLOGY MAJOR

PHB676	Advanced Radiographic Technique 2	8	3
PHB679	Clinical Radiography 5	14	6
	EITHER		
PHB680	Nuclear Medicine Imaging 2	10	5
	OR		
PHB681	Computed Tomography Imaging	10	5

RADIOTHERAPY TECHNOLOGY MAJOR

PHB683	Oncological Imaging	6	3
PHB685	Computer Assisted Treatment Planning 2	8	4
PHB687	Specialised Radiotherapy Technique	10	4
PHB689	Clinical Radiotherapy 5	8	4

■ Associate Diploma in Applied Science (Biology), Associate Diploma in Applied Science (Chemistry) (SC10)

Location: Gardens Point campus

Course Duration: 2 years full-time, 4 years part-time

Total Credit Points: 192

Standard Credit Points/Full-Time Semester: 48

Course Coordinators:

Biology Major – Dr Chris King

Chemistry Major – Dr Graham Smith

Full-Time Course Structure (Semester 1 common to both Majors)

Year 1, Semester 1

		Credit Points	Contact Hrs/Wk
CHA111	Laboratory Techniques	8	3
CHA145	Introductory Chemistry	8	3
LSX110	Introductory Biology	8	3
LSX111	Microscopy Techniques	8	3
MAA251	Statistics & Data Processing	8	3
PHA154	Introductory Physics	8	3

BIOLOGY MAJOR

Year 1, Semester 2

CHA218	Analytical Chemistry 1	8	3
CHA240	Instrumental Techniques	8	3
LSX210	Biology B	8	3
LSX211	Cell Structure & Function	8	3
LSX212	Biological Data Handling	8	3
LSX213	Introductory Biochemistry	8	3

Year 2, Semester 1

CHA442	Introduction to Occupational Safety	4	2
LSX310	Introduction to Bioculture	8	3
LSX311	Computer Applications in Biology	8	3

LSX312	Animal & Plant Techniques	12	4
	Electives* - two of:		
LSX313	Taxonomy	8	3
LSX314	Aquaculture Techniques	8	3
LSX315	Plant Physiology	8	3
LSX316	Hydrobiological Techniques	8	3
	OR		
	Other approved electives		

Year 2, Semester 2

LSX223	Microbiology 2	8	3
LSX410	Environmental Biology	8	3
LSX411	Population Biology	8	3
LSX412	Field Techniques	8	3
LSX413	Applications in Electron Microscopy	8	3
	Elective* - one of:		
CSA259	Introduction to Computing	8	2
LSX414	Animal Physiology	8	3
LSX415	Plant Cell & Tissue Culture	8	3
	OR		
	Another approved elective		

CHEMISTRY MAJOR

Year 1, Semester 2

CHA218	Analytical Chemistry 1	8	3
CHA219	Qualitative Analysis	6	3
CHA230	Chemistry of Inorganic Materials	4	2
CHA240	Instrumental Techniques	8	3
CHA250	Organic Chemistry 1	8	3
CHA270	Physical Chemistry 1	8	3
CSA259	Introduction to Computing	8	2

Year 2, Semester 1

CHA318	Instrumental Analytical Chemistry	8	4
CHA319	Analytical Chemistry 2	6	3
CHA320	Chemical Process Principles 1	8	3
CHA350	Organic Chemistry 2	8	3
CHA370	Physical Chemistry 2	6	2
CHA442	Introduction to Occupational Safety	4	2
	Elective* - one of:		
CHA580	Food Chemistry 1	8	3
	OR		
ESA310	Geology	8	3
	OR		
LSX123	Microbiology 1	8	3
	OR		
	Any other approved Elective		

Year 2, Semester 2

CHA368	Industrial Chemistry	8	3
CHA410	Computers in Chemistry	8	3
CHA550	Organic Chemistry 3	8	3
CHA610	Industrial Analysis	8	3
CHA670	Physical Chemistry 3	8	3
	Elective*- one of:		
CHA680	Food Chemistry 2	8	3
	OR		
ESB220	Principles of Mineralogy	8	3
	OR		
LSX223	Microbiology 2	8	3
	OR		

* Students should discuss their choice of electives with the Course Coordinator.

CHA520	Chemical Process Principles 2 OR Any other approved Elective	8	3
Part-Time Course Structure (Year 1 common to both Majors)		Credit Points	Contact Hrs/Wk
Year 1, Semester 1			
CHA145	Introductory Chemistry	8	3
LSX110	Introductory Biology	8	3
PHA154	Introductory Physics	8	3
Year 1, Semester 2			
CHA111	Laboratory Techniques	8	3
LSX111	Microscopy Techniques	8	3
MAA251	Statistics & Data Processing	8	3
BIOLOGY MAJOR			
Year 2, Semester 1			
CHA218	Analytical Chemistry 1	8	3
LSX211	Cell Structure & Function	8	3
LSX212	Biological Data Handling	8	3
Year 2, Semester 2			
CHA240	Instrumental Techniques	8	3
LSX210	Biology B	8	3
LSX213	Introductory Biochemistry	8	3
Year 3, Semester 1			
LSX311	Computer Applications in Biology	8	3
LSX413	Applications in Electron Microscopy*	8	3
Year 3, Semester 2			
LSX223	Microbiology 2	8	3
LSX312	Animal and Plant Techniques+	12	4
LSX410	Environmental Biology+	8	3
Year 4, Semester 1			
CHA442	Introduction to Occupational Safety#	4	2
LSX310	Introduction to Bioculture Electives** - two of:	8	3
LSX010	External Project 1	8	3
LSX011	External Project 2	8	3
LSX313	Taxonomy	8	3
LSX314	Aquaculture Techniques	8	3
LSX315	Plant Physiology	8	3
LSX316	Hydrobiological Techniques OR Other approved Electives	8	3
Year 4, Semester 2			
LSX010	External Projects 1	8	3
LSX011	External Projects 2	8	3
LSX411	Population Biology+	8	3
LSX412	Field Techniques+	8	3

* Day release will be required.

+ Day release will be required for the field component of this subject.

Students in appropriate employment may claim exemption from this subject.

** Students should discuss their choice of electives with the Course Coordinator.

	Elective* - one of:		
CSA259	Introduction to Computing	8	2
LSX414	Animal Physiology	8	3
LSX415	Plant Cell & Tissue Culture	8	3
	OR		
	Another approved Elective		

CHEMISTRY MAJOR

Year 2, Semester 1

CHA218	Analytical Chemistry 1	8	3
CHA230	Chemistry of Inorganic Materials	4	2
CHA250	Organic Chemistry 1	8	3
CHA270	Physical Chemistry 1	8	3

Year 2, Semester 2

CHA219	Qualitative Analysis	6	3
CHA240	Instrumental Techniques	8	3
CHA350	Organic Chemistry 2	8	3

Year 3, Semester 1

CHA318	Instrumental Analytical Chemistry	8	4
CHA319	Analytical Chemistry 2	6	3
CHA370	Physical Chemistry 2	6	2

Year 3, Semester 2

CHA550	Organic Chemistry 3	8	3
CHA610	Industrial Analysis	8	3
CHA670	Physical Chemistry 3	8	3
CSA259	Introduction to Computing	8	2

Year 4, Semester 1

CHA320	Chemical Process Principles 1	8	3
CHA442	Introduction to Occupational Safety+	4	2
	Elective* - one of:		
CHA580	Food Chemistry 1		
	OR	8	3
ESA310	Geology		
	OR	8	3
LSX123	Microbiology 1	8	3
	OR		
	Any other approved Elective		

Year 4, Semester 2

CHA410	Computers in Chemistry	8	3
CHA368	Industrial Chemistry	8	3
	Elective+ - one of:		
CHA680	Food Chemistry 2	8	3
	OR		
ESB220	Principles of Mineralogy	8	3
	OR		
LSX223	Microbiology 2	8	3
	OR		
CHA520	Chemical Process Principles 2	8	3
	OR		
	Any other approved Elective		

* Students should discuss their choice of electives with the Course Coordinator.

+ Students in appropriate employment may claim exemption from this subject.

Notes: Students in the Biology Major may apply to have their current employment arranged and assessed in lieu of one or more electives. In such cases, the employer, in consultation with the Head of Department, nominates an honorary supervisor to collaborate with a departmental tutor. Under such an arrangement students are required to maintain a work log and complete such exercises and assignments as required.

Students in the Biology Major with relevant technical experience may seek total or partial exemption from one or more of the elective subjects of the course.

Students participate in excursions and field work where these form part of the curriculum. Occasionally field work may be scheduled at weekends or during University recess periods.

Students who commenced the course prior to 1988 should consult the Course Coordinator concerning requirements to complete the course.

■ Associate Diploma in Clinical Techniques with Electives in Laboratory Techniques and Anaesthetic Techniques (LS15)

Location: Gardens Point campus

Course Duration: 2 years full-time, 4 years part-time

Total Credit Points: 192

Standard Credit Points/Full-Time Semester: 48

Course Coordinator: Mrs Anne Pope

Professional Recognition

LABORATORY TECHNIQUES ELECTIVES

This program is recognised by both the Commonwealth and State Governments as a suitable employment qualification. Graduates from this program are recognised by the Australian Institute of Medical Laboratory Scientists and are eligible to become intermediate members of this professional body.

ANAESTHETIC TECHNIQUES ELECTIVES

This program is endorsed by the Faculty of Anaesthetists.

Special Course Requirements

Students may undertake the course on a full-time or part-time basis. Part-time students are required to attend lectures during normal working hours.

Students entering the course may undertake to specialise in either: Laboratory Techniques (Electives in Group A), or Anaesthetic Techniques (Electives in Group B). To be awarded the Associate Diploma in Clinical Techniques, a student must complete all the subjects in either the prescribed program.

Students undertaking the Anaesthetic Techniques Electives may be exempted from whole or part of a subject on providing evidence of training and experience acceptable to the Head of School.

Full-Time Course Structure
The first year is common to both Programs

Year 1, Semester 1

		Credit Points	Contact Hrs/Wk
COX104	Communication Techniques	4	2
LSX121	Biological Chemistry 1	8	4
LSX122	Laboratory Instrumentation 1	8	4
LSX123	Microbiology 1	8	3
LSX124	Perspectives in Medicine	4	1
LSX125	Anatomy & Physiology 1	8	3
PHA154	Introductory Physics	8	3

Year 1, Semester 2

LSX221	Biological Chemistry 2	8	4
LSX222	Laboratory Instrumentation 2	8	4
LSX223	Microbiology 2	8	3
LSX224	Pathology	8	2
LSX225	Anatomy & Physiology 2	8	3
PHA213	Medical Instrumentation 2	8	4

In Year 2 students should choose either the Laboratory Techniques Electives (Group A) or the Anaesthetic Techniques Electives (Group B).

LABORATORY TECHNIQUES PROGRAM

Year 2, Semester 1

MAA251	Statistics & Data Processing	8	2
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Group A Electives

Five of the following:

LSX320	Clinical Biochemical Techniques 3	8	4
LSX321	Clinical Microbiological Techniques 3	8	4
LSX322	Haematological Techniques 3	8	4
LSX323	Histological Techniques 3	8	4
LSX324	Immunological Techniques 3	8	4
LSX325	Cytological Techniques 3	8	4

Year 2, Semester 2

CSA259	Introduction to Computing	8	2
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Group A Electives

Five of the following:

LSX420	Clinical Biochemical Techniques 4	8	4
LSX421	Clinical Microbiological Techniques 4	8	4
LSX422	Haematological Techniques 4	8	4
LSX423	Histological Techniques 4	8	4
LSX424	Transfusion Techniques 4	8	4
LSX425	Cytological Techniques 4	8	4

ANAESTHETIC TECHNIQUES PROGRAM

Group B Electives

Year 2, Semester 1

LSX331	Foundations of Anaesthetic Techniques	12	5
LSX332	Physiology and Pharmacology	12	5
LSX333	Electronics and Computing	12	5
LSX334	Operating Room Equipment	12	5

Year 2, Semester 2

LSX431	Cardiac Care and Resuscitation	12	5
LSX432	Care of Respiratory Airways & Intensive Care	12	5
LSX433	Anaesthesia for Specialised Surgery	12	5
LSX434	Professional Practice	12	5

Part-Time Course Structure		Credit Points	Contact Hrs/Wk
Year 1, Semester 1			
LSX121	Biological Chemistry 1	8	4
LSX122	Laboratory Instrumentation 1	8	4
PHA154	Introductory Physics	8	3
Year 1, Semester 2			
LSX221	Biological Chemistry 2	8	4
LSX222	Laboratory Instrumentation 2	8	4
PHA213	Medical Instrumentation 2	8	4
Year 2, Semester 1			
COX104	Communication Techniques	4	2
LSX123	Microbiology 1	8	3
LSX124	Perspectives in Medicine	4	1
LSX125	Anatomy & Physiology 1	8	3
Year 2, Semester 2			
LSX223	Microbiology 2	8	3
LSX224	Pathology	8	2
LSX225	Anatomy & Physiology 2	8	3
MAA251*	Statistics & Data Processing	8	2
In Year 3, Semester 1 students should choose either the Laboratory Techniques Electives or the Anaesthetic Techniques Electives.			
LABORATORY TECHNIQUES PROGRAM			
Students enrolled in the part-time program are required to pass Introduction to Computing together with five Techniques 3 subjects and five Techniques 4 subjects over the four semesters.			
Year 3, Semester 1			
LSX320	Clinical Biochemical Techniques 3	8	4
LSX321	Clinical Microbiological Techniques 3	8	4
LSX322	Haematological Techniques 3	8	4
Year 3, Semester 2			
LSX420	Clinical Biochemical Techniques 4	8	4
LSX421	Clinical Microbiological Techniques 4	8	4
LSX422	Haematological Techniques 4	8	4
CSA259	Introduction to Computing	8	2
Year 4, Semester 1			
LSX323	Histological Techniques 3	8	4
LSX324	Immunological Techniques 3	8	4
LSX325	Cytological Techniques 3	8	4
Year 4 Semester 2			
LSX423	Histological Techniques 4	8	4
LSX424	Transfusion Techniques 4	8	4
LSX425	Cytological Techniques 4	8	4

ANAESTHETIC TECHNIQUES PROGRAM

Students wishing to study the second year of the full-time course in a part-time program should consult the course coordinator.

* This subject for Laboratory Techniques Program only.

■ Policy on Submission of Project Reports for Assessment

The Science Academic Board has approved the following rules with regard to the completion of project subjects in all undergraduate and postgraduate courses (including honours projects):

- (i) A student enrolled in a project subject is required to submit the associated project report, dissertation or thesis for assessment by no later than the final day of the examination period for the semester in which the student's enrolment in that subject will terminate.
- (ii) In special circumstances and on the written recommendation of the student's supervisor, the Dean may grant an extension of time to complete the work associated with the project. The final date for submission of the report after such an extension shall be the last day of the deferred examination period for the semester in which the student's enrolment in that subject would terminate. In such cases, a 'V' result shall be given initially to the student in respect of this subject.
- (iii) The Academic Board may grant a further extension of time to complete the work associated with a project, on condition that the student re-enrols in the project subject for the succeeding semester. Failure to re-enrol in the project subject by the last day of the deferred examination period for the semester in which, otherwise, the student's enrolment in that subject would terminate will result in a grade of Fail (N) being awarded in that subject.

Subsequent to the assessment process, the relevant school or department shall have discretion as to whether a candidate needs to re-enrol to effect any amendments required, or whether such amendments are essentially editorial. However, a student who is required to undertake further investigative work relating to his/her project must continue to be enrolled in the relevant project subject.

Students seeking extensions are advised that late submission of a project report for assessment as indicated in (ii) above may prevent publication of the associated result in time for the student to be included on the graduation list for that semester. Thus, course completion and graduate status from the relevant course may be delayed. This could disadvantage students seeking employment or promotion on the basis of the qualification in question.

INDEX OF COURSES

University-wide and Interfaculty Courses

■ Doctor of Philosophy (IF49)	137
■ Master of Applied Science (Research)	144
■ Graduate Diploma in Quality (IF69).....	149
■ Honours Degrees	150
■ Bachelor of Engineering (Electronics)/Bachelor of Applied Science (Computing) (IF22)	152
■ Bachelor of Business (Accountancy)/Bachelor of Laws (IF31)	154
■ Bachelor of Business (Computing)/Bachelor of Laws (IF32)	156
■ Bachelor of Engineering (Manufacturing Systems)/ Bachelor of Business (Marketing) (IF53)	158
■ Bachelor of Applied Science (Surveying)/Bachelor of Business (Information Management) (IF51)	160
■ New Opportunities in Tertiary Education (NOTE) Program (BN10).....	162

Faculty of Arts

■ Master of Arts (Drama) (AA22), Master of Arts (Visual Arts) (AA72)	165
■ Graduate Diploma of Social Science (Counselling) (SS10)	166
■ Bachelor of Arts (Honours) (Drama or Visual Arts) (AA40).....	167
■ Bachelor of Arts (Dance) (AA11).....	168
■ Bachelor of Arts (Drama) (AA21)	169
■ Bachelor of Arts (Music) (AA51).....	172
■ Bachelor of Arts (Visual Arts) (AA71).....	174
■ Bachelor of Social Science (Human Services) (SS07)	175
■ Associate Diploma in Arts (Dance) (AA10)	176

Faculty of Built Environment and Engineering

■ Master of Built Environment (BN73).....	181
■ Master of Engineering Science (Civil Engineering) (CE74).....	188
■ Master of Engineering Science (Computer Engineering) (EE75)	190
■ Master of Engineering (BN72)	191
■ Graduate Diploma in Computer Engineering (EE65).....	196
■ Graduate Diploma in Industrial Design (AR61).....	197
■ Graduate Diploma in Interior Design (AR62)	198
■ Graduate Diploma in Landscape Architecture (PL66).....	199
■ Graduate Diploma in Municipal Engineering (CE63)	201
■ Graduate Diploma in Project Management (CN64)	203
■ Graduate Diploma in Surveying Practice (SV68)	205

■ Graduate Diploma in Urban and Regional Planning (PL67).....	206
■ Bachelor of Built Environment (Architectural Studies), Bachelor of Built Environment (Industrial Design), Bachelor of Built Environment (Interior Design), Bachelor of Built Environment (Landscape Architecture), Bachelor of Built Environment (Urban and Regional Planning) (BN30) ...	208
■ Bachelor of Applied Science (Construction Management) (CN31)	214
■ Bachelor of Applied Science (Property Economics) (CN32)	217
■ Bachelor of Applied Science (Quantity Surveying) (CN33).....	220
■ Bachelor of Architecture (AR41)	223
■ Special notes relating to Honours and With Distinction in courses in the Faculty of Built Environment and Engineering	225
■ Special notes relating to Bachelor of Engineering courses.....	226
■ Bachelor of Applied Science (Surveying) (SV34)	227
■ Bachelor of Engineering (Aerospace Avionics) (EE34).....	229
■ Bachelor of Engineering (Civil) (CE42)	231
■ Bachelor of Engineering (Electrical and Computer Engineering) (EE44)	235
■ Bachelor of Engineering (Mechanical) (ME45)	239
■ Associate Diploma in Cartography (SV24)	243
■ Associate Diploma in Civil Engineering (CE21).....	244
■ Associate Diploma in Electrical Engineering (EE22)	247
■ Associate Diploma in Mechanical Engineering (ME23)	250

Faculty of Business

■ Master of Business (Accountancy), Master of Business (Communication), Master of Business (Management) (BS80).....	257
■ Master of Business (Industrial Relations), Master of Business (Marketing Science) (BS82).....	262
■ Master of Business Administration (BS81)	263
■ Graduate Diploma in Business Administration	267
■ Graduate Diploma in Advanced Accounting (BS70)	267
■ Graduate Diploma in Business (Administration) (BS73)	268
■ Graduate Diploma in Communication Practice (BS72)	270
■ Graduate Diploma in Business (Industrial Relations) (BS74)	275
■ Graduate Diploma in Social Science (Human Services Management) (BS76).....	276
■ Bachelor of Business (Honours) (Accountancy) (BS60)	276
■ Bachelor of Business (Honours) (Communication) (BS61).....	277
■ Bachelor of Business (Honours) (Management) (BS62)	278
■ Special requirements for the Bachelor of Business degree course in the Faculty of Business	279

■ Bachelor of Business (BS50)	279
□ Accountancy Major	280
□ Advertising Major.....	284
□ Banking and Finance Major	286
□ Economics Major.....	288
□ Film and TV Production Major.....	290
□ Human Resource Management Major	292
□ Industrial Relations Major	294
□ International Business Major	297
□ Journalism Major.....	299
□ Management Major	301
□ Marketing Major	303
□ Organisational Communication Major	305
□ Organisational Studies Major.....	307
□ Public Administration Major	309
□ Public Relations Major	311
■ Associate Diploma in Business (Industrial Relations) (BS10)	317

Faculty of Education

■ Master of Education (Research) (ED12)	321
■ Master of Education (ED13).....	326
■ Graduate Diploma in Education (Computer Education) (ED21).....	333
■ Graduate Diploma in Education (Curriculum) (ED22).....	334
■ Graduate Diploma in Education (Early Childhood) (ED20).....	336
■ Graduate Diploma in Education (Early Childhood Teaching) (ED30)	337
■ Graduate Diploma in Education (Primary Teaching) (ED31)	337
■ Graduate Diploma in Education (Resource Teaching) (ED24).....	338
■ Graduate Diploma in Education (Secondary Teaching) (ED32)	339
■ Graduate Diploma in Education (Teacher-Librarianship) (ED25)	341
■ Bachelor of Education (In-service) (ED26).....	343
■ Bachelor of Education (Secondary) (ED50)	347
■ Bachelor of Teaching (Early Childhood/Primary)	362
□ Bachelor of Teaching (Early Childhood) (ED40)	362
□ External Child Care Upgrading Program (ED42).....	364
□ Bachelor of Teaching (Primary) (ED41)	365

Faculty of Health

■ Master of Nursing (NS85).....	371
■ Master of Public Health (PU85).....	373
■ Graduate Diploma in Advanced Nursing Practice (NS62).....	376
■ Graduate Diploma in Health Science (Health Education) (PU68)	378

■ Graduate Diploma in Nutrition and Dietetics (PU62)	379
■ Graduate Diploma in Occupational Health and Safety (PU65).....	380
■ Bachelor of Applied Science (Environmental Health) (PU42)	381
■ Bachelor of Applied Science (Home Economics) (PU49)	382
■ Bachelor of Applied Science (Occupational Health and Safety (PU44)).....	384
■ Bachelor of Applied Science (Optometry) (OP42).....	385
■ Bachelor of Applied Science (Podiatry) (PU45)	387
■ Bachelor of Business (Health Administration) (PU48).....	388
■ Bachelor of Nursing (Postregistration) (NS48).....	390
■ Bachelor of Nursing (Preregistration) (NS40).....	393

Faculty of Information Technology

■ Master of Applied Science (Computing) (CS36).....	401
■ Master of Information Technology (IS250).....	403
■ Graduate Diploma in Business (Information Systems) (IS18).....	404
■ Graduate Diploma in Commercial Computing (IS04).....	405
■ Graduate Diploma in Computing Science (CS19)	406
■ Graduate Diploma in Library Science (IS65)	408
■ Bachelor of Applied Science (Computing) (Honours) (CS55)	409
■ Bachelor of Business (Computing) (Honours) (IS61)	410
■ Common First Year: Bachelor of Business (Computing), Bachelor of Applied Science (Computing) (IT32)	411
■ Bachelor of Applied Science (Computing) (CS28)	412
■ Bachelor of Applied Science (Computing) (IS28)	414
■ Bachelor of Business (Computing) (IS10)	416
■ Bachelor of Business (Information Management) (IS43)	418
■ Associate Diploma in Business (Computing) (IS08)	421

Faculty of Law

■ Master of Laws by Coursework (LW51).....	425
■ Master of Laws by Research and Thesis (LW52)	427
■ Master of Legal Practice (LP51)	430
■ Graduate Diploma in Legal Practice (LP41).....	432
■ Bar Practice Course	434
■ Bachelor of Arts (GU)/Bachelor of Laws (LX32)	434
■ Bachelor of Business – Accounting (USQ)/Bachelor of Laws (LX31).....	438
■ Bachelor of Laws (LW31)	439
■ Bachelor of Arts (Justice Studies) (JS31)	445
■ Associate Diploma in Business (Court and Parliamentary Reporting) (JS21)	447

Faculty of Science

■ Master of Applied Science (SC80).....	451
■ Master of Applied Science (Medical Physics), Master of Applied Science (Medical Ultrasound) (PH80)	456
■ Master of Applied Science (Medical Laboratory Science) (LS85).....	458
■ Graduate Diploma in Applied Science (SC71)	460
■ Graduate Diploma in Applied Science (Medical Physics), Graduate Diploma in Applied Science (Medical Ultrasound) (PH71).....	460
■ Graduate Diploma in Biotechnology (LS70)	460
■ Policy on Credit Transfer, relating to Bachelor-level courses in the Faculty of Science	461
■ Bachelor of Applied Science (Honours) (SC60)	461
■ Bachelor of Applied Science (Honours) with Major in Life Science (LS65).....	464
■ Bachelor of Applied Science with Majors in Biology, Chemistry, Microbiology/Biochemistry, Geology, Mathematics, Physics (SC30)	464
■ Bachelor of Applied Science (Applied Chemistry) (CH32)	470
■ Bachelor of Applied Science (Mathematics) (MA34)	473
■ Bachelor of Applied Science (Medical Laboratory Science) (LS36)	475
■ Bachelor of Applied Science (Medical Radiation Technology) with Majors in Medical Imaging Technology and Radiotherapy Technology (PH38)	477
■ Associate Diploma in Applied Science (Biology), Associate Diploma in Applied Science (Chemistry) (SC10)	479
■ Associate Diploma in Clinical Techniques with Electives in Laboratory Techniques and Anaesthetics Techniques (LS15).....	483
■ Policy on Submission of Project Reports for Assessment.....	486

