## FACULTY OF BUILT ENVIRONMENT AND ENGINEERING

BUILT ENVIRONMENT & ENGINEERING

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## FACULTY OF BUILT ENVIRONMENT AND ENGINEERING

## **Course Structures**

# □ Course Requirements and Notes Relating to Postgraduate Courses

### **Course Progression**

It is important that students follow as normal a progression through their courses as possible. Units should be taken in an orderly sequence as set out in published course structures. Units failed should be picked up in the next semester they are offered. In order to maintain orderly progression through a course, a prerequisite requirement **may** be waived if a student has attempted but not passed the prerequisite and the approval of the course coordinator has been obtained. This is considered to be a major concession. Students who have failed units or have doubts about having the necessary background to proceed should seek the advice of the course coordinator.

### Supplementary Assessment

It is not normally faculty policy to grant supplementary examinations. However, at the discretion of the Dean of the Faculty, supplementary or further assessment may be permitted in cases where a student is near to the completion of their course.

In such cases it is normal policy to award an 'A' (Result Unfinalised) and to give the student further assessment. Following satisfactory completion of this further assessment, the highest grade which may normally be awarded is a grade of 3 (Pass Conceded).

### School of Civil Engineering Safety Shoes Policy

Students enrolled in the units CEP998 Project B and CEP999 Project A will be required to wear safety shoes for some laboratory practicals and/or field trips. Students not wearing appropriate safety shoes on these occasions will be barred from (i) participating in activities in these units, and (ii) submitting any assessment associated with these activities. Hard hats and safety glasses/goggles will be supplied by the School of Civil Engineering if required.

### Master of Applied Science (Research) (BN71)

Location: Gardens Point campus

### Introduction

The objectives of the program are:

- □ to provide for postgraduate educational opportunities in the specialised fields of applied science relating to the built environment, by means of a program which involves either an advanced contribution to knowledge or an advanced application of existing knowledge
- □ to provide further education in research methods

- □ to enable graduates employed in industry to undertake further education by thesis and research
- □ to enable industrial organisations and other external agencies to sponsor a candidate research program under the control and supervision of the faculty
- □ 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 is 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 Research Management Committee on progress made by research master degree candidates.

1.4 This program is administered by the Academic Board of the Faculty of Built Environment & Engineering through its Faculty Research Committee. The program is offered by Architecture, Construction Management and Planning, Interior Design, Industrial Design, Landscape Architecture, and Surveying.

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

- □ have completed the approved course of study involving advanced work under the supervision of a Thesis Panel prescribed by the Faculty Research Committee of the Built Environment & Engineering Academic Board
- □ have submitted and the Faculty Research Committee accepted a thesis, together with reports, and/or documents where applicable, prepared under the supervision of the Thesis Panel
- □ have completed such other work as may be prescribed by the Faculty Research Committee, and
- □ submit to the Faculty Research Committee a declaration signed by the candidate that they have not been a candidate for another tertiary award without permission of the Faculty Research Committee.

### 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 There is a six month maximum period between acceptance by the Faculty Research Committee and enrolment by the candidate in the Master of Applied Science before the offer of admission to the program lapses. Candidates are required to complete an enrolment form each semester.

2.4 The minimum academic qualifications for admission to the Master of Applied Science (Research) program, are:

D possession of an honours degree, or

- possession of a qualification judged equivalent by the Faculty Research Committee, or
- □ a grade point average of 5.0 or better in a graduate diploma in a relevant discipline with demonstrated potential for further study and/or evidence of professional standing, or
- □ a grade point average of 5.0 or better in a coursework master degree program in a relevant discipline with demonstrated potential for further study and/or evidence of professional standing.

An applicant for the Master of Applied Science (Research) program without the minimum entry requirement may present a case for admission based on the submission of evidence of qualifications which demonstrate the applicant's capacity to pursue the course of study.

The case may be based on the following:

- (i) three years professional experience in the general field in which the proposed work lies, or
- (ii) satisfactory completion of an appropriate master's qualifying program including formal coursework and/or reading program in related fields stipulated by the Faculty Research Committee, or
- (iii) the submission of technical publications or other appropriate evidence which satisfies the Faculty Research Committee that advanced knowledge has been acquired in a branch of applied science relevant to the built environment in which the applicant has worked as a professional practitioner in a position of responsibility; this knowledge should be relevant to the field of study proposed.
- 2.5 A candidate shall be registered initially as:
- □ a graduate student (provisional) if they are is to undertake an appropriate qualifying program, or
- a graduate student if they are considered by the Faculty Research Committee to meet the requirements for entry.

A graduate student (provisional) becomes a graduate student when registration is confirmed. Applicants not holding an appropriate honours degree or its equivalent shall normally be given provisional registration.

- 2.6 A candidate shall receive confirmed registration as a graduate student when they:
- □ have satisfied the requirements for admission and achieved by work and study a standard recognised by the Faculty Research Committee, or
- have been accepted for provisional registration in the faculty and has achieved, by subsequent work and study, a standard recognised by the Faculty Research Committee
- □ have satisfied the Faculty Research Committee that they are a suitable person to undertake the program
- □ have satisfied the Faculty Research Committee that they can devote sufficient time to the research and study.

2.7 In considering an applicant for registration, the Faculty Research Committee shall, in addition to assessing the applicant's suitability, be satisfied that:

- □ the proposed program is relevant to the aims and objectives of the University, and
- $\Box$  the proposed program has relevance to the needs of industry.

2.8 An application for registration should set out systematically and fully the candidate's intended course of study including the following:

- □ a description of the area of study within which the candidate's course lies
- □ a summary of the work 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
- □ the location at which the work will be undertaken, the amount of time which will be devoted to it and the resources required
- □ details of academic qualifications and supporting evidence, including copies of results for each year of courses undertaken
- □ a brief account of industrial experience
- □ a list of publications
- □ sponsorship details
- □ statement of approval by the Head of School and/or Director of Centre

□ any other relevant material.

2.9 The program is offered on a full-time and/or a part-time basis. Part-time students normally will be employed in some professional capacity during the day and carry out their research on a part-time basis at QUT, in their place of employment, or in a sponsoring organisation.

2.10 Full-time students may be on a scholarship from industry or QUT, and may carry out their research at QUT or in a sponsoring organisation. Normally full-time students would be expected to work on their research at QUT for not less than three-quarters of a normal working week, averaged over each year of candidacy. Such a candidate may not devote more than300 hours annually to teaching activities, including preparation and marking.

2.11 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.

2.12 The Faculty Research Committee may cancel a candidate's registration if, after consulting a candidate's supervisors and having taken account of all relevant circumstances, the committee is of the opinion that the candidate either has effectively discontinued their studies or has no reasonable expectation of completing the course of study within the maximum time allowed (see Section 4).

2.13 A candidate whose registration has lapsed or has been cancelled, and who wishes subsequently to re-enter the course of stndy to pursue a research program which is substantially the same as the previous investigation, may be re-admitted under such conditions as the Faculty Research Committee shall prescribe.

#### 3. Course of Study

3.1 A candidate for the degree of Master of Applied Science (Research) shall undertake a program of research and investigation on a topic approved by the Faculty Research Committee.

3.2 All research activity should be sponsored by outside agencies such as industry, government authorities and professional organisations, or by QUT itself. This provision

is to ensure that programs are relevant to the aims of the University and the community. It is important that the research be primarily directed towards industry need.

3.3 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.

3.4 Where advised, a candidate may be required to complete satisfactorily a qualifying program of formal coursework in subjects relevant to the field of study up to a total class contact of 48 credit points.

- 3.5 The course of study will normally include:
- □ participation in University scholarly activities such as research seminars, teaching and publication
- □ regular face-to-face interactions with supervisors, and
- □ a program of supervised research and investigation.

The course of study may also include a program of assessed coursework.

3.6 Coursework at masters level demands a capacity for critical analysis and a specialisation of research interests not normally appropriate for an undergraduate program. Such coursework may be conducted in a number of ways:

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

Candidates will be encouraged to attend conferences, where these are related to the field of the research.

In all cases, coursework will be 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.

3.7 Coursework will not occupy more than half of the total period of registration.

### 4. Period of Time for Completion of Course Study

4.1 The duration of study for candidates with four years of relevant study at tertiary level will normally be up to two years of full-time study or the part-time equivalent.

4.2 In order to encourage completion of research degrees within a reasonable timeframe, QUT has set a limit of two years on the length of time for which it will fund a faculty for full-time research masters degree candidates.

4.3 A registered graduate full-time student shall present the thesis for examination after a period of at least one year but not more than two years has elapsed from the time of confirmed registration. A registered graduate part-time student shall present the thesis for examination after a period of at least two years but not more than four years has elapsed from the time of confirmed registration. In special cases the Faculty Research Committee may approve a shorter period. 4.4 Time limits are measured in years from the first day of the first semester in which the candidate was enrolled as a graduate student. Periods of exclusion or absence with or without approval are included.

4.5 Candidates who exceed these limits may be asked to show cause why they should not have their registration in the program terminated. Such candidates must make formal application to the Faculty Research Committee to have their registration extended beyond the normal time. Details of the candidate's progress shall be presented to the committee together with the reasons for the delay in completing the course and the expected date of completion. Where the committee agrees to an extension, a time limit will be set for the maximum period of registration in the program.

4.6 Candidates are notified of exclusion from the program by registered mail. They have right of appeal to the Academic Appeals Committee.

### 5. Supervision

5.1 The Faculty Research Committee shall appoint two or more supervisors with appropriate experience in respect of each candidate. One shall be nominated as the Principal Supervisor and others as associate supervisors. The supervisors shall form a Thesis Panel.

5.2 The Principal Supervisor shall normally be from the academic staff of the QUT school in which the candidate is enrolled.

5.3 The Thesis Panel shall supervise all aspects of the candidate's work program, shall receive reports from the candidate on progress and shall recommend both on successful and unsuccessful completion of components of the coursework incorporated in the candidate's program, on progress on the thesis research, and on continued enrolment.

5.4 The Thesis Panel shall receive a formal oral and written report from the candidate at least once every semester on progress on the research.

### 6. Place and Conditions of Work

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

6.2 The Faculty Research Committee shall not admit a candidate to a program of research based at the University unless it has received:

□ a supporting statement from the Head of School and/or Director of Centre in which the study is proposed that, in his or her opinion, the applicant is a suitable person to undertake a research program leading to the master degree, that the program is supported, that the school or centre is willing to undertake the responsibility of supervising the work of the applicant, and that resources are available to support the proposed research.

6.3 The Faculty Research Committee shall not admit a candidate to a program of research based at a sponsoring establishment unless it has received:

- □ a supporting statement from the employer or director of the sponsoring institution that they are aware of the course rules and are prepared to sponsor and support the applicant, that the applicant will be provided with facilities and time to undertake the research project, and that they are willing to accept responsibility for supervising the applicant's work, and
- □ a supporting statement from the head of QUT school or director of centre in which the study is proposed that, in their opinion, the applicant is a suitable 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/centre is willing to accept the responsibility of supervising the work.

### 7. Thesis

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

7.2 Not later than six months after confirmed registration, a candidate shall submit the title of his or her thesis for approval by the Faculty Research Committee, and after approval has been granted, no change shall be made except with the permission of the committee.

7.3 The candidate shall give two months written notice of intention to submit his or her thesis through the Principal Supervisor.

7.4 The thesis shall comply with the following requirements:

- □ a significant proportion of the work described (as determined by the Faculty Research Committee) must have been carried out subsequent to initial registration for the master degree
- □ it must describe a program of work carried out by the candidate and must involve either an advanced contribution to the knowledge of the subject or an advanced 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 conjointly with other persons, the Faculty Research Committee 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 candidate has previously submitted for another degree or similar award
- □ the thesis may consist of reports, plans and/or documents or may be supported by these if they have a bearing on the thesis. Other supporting documents such as published papers may also be submitted with the thesis, and

□ the thesis shall contain an abstract of not more than 300 words.

7.5 Except with the specific permission of the Faculty Research Committee 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.

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

7.7 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 Research Management Committee when the thesis is submitted. The period 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.

### 8. Examination of Thesis

8.1 The Faculty Research Committee shall appoint two/three examiners, of whom at least one shall be from outside the University. No supervisor of the candidate shall be appointed as one of the examiners.

8.2 Normally, examiners must agree to read and report on the thesis within two months of its receipt.

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

8.4 On receipt of the reports from the examiners, the Faculty Research Committee shall:

- (i) recommend that the thesis be accepted without modification, and to the Academic Committee that the candidate be awarded the degree, or
- (ii) recommend to the Academic Committee that the candidate be awarded the degree, after any minor amendments requested by the examiners have been made, or
- (iii) recommend that the thesis not be accepted until major revisions have been made, such revisions might be rewriting one of the sections, with or without additional work, or
- (iv) not accept the thesis and terminate the candidate's registration.

8.5 If the examiners' reports are conflicting, the Faculty Research Committee may, after appropriate consultation with the Thesis Panel, resubmit the thesis to the examiners with copies of the examiners' reports and/or seek the advice of a further external examiner. After due consideration of further reports from the examiners, a majority decision will be accepted by the Faculty Research Committee.

## Master of Built Environment (BN73)

### CITY AND REGIONAL PLANNING MAJOR

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

Coordinator: Dr John Minnery

### **Entry Requirements**

Applicants for admission should:

- (i) hold a Graduate Diploma in Urban and Regional Planning from QUT, or
- (ii) hold a professional planning degree or diploma from a recognised university, college of advanced education, or approved equivalent tertiary institution, and
- (iii) have attained a level of achievement in previous studies which attests to the applicant's ability to undertake successfully a masters program in the field of City and Regional Planning.

Full-Time Course Structure		Credit Points	Contact Hrs/Wk
Year 1, Se	emester 1		
PSN001	Applied Research Techniques	6	2
PSN111	Comparative Planning Theory	6	2
PSN112	Concentration Studies	12	2.5
PSN113	Option Projects	12	2
PSN114	Metropolitan Planning Practice & Law	12	3



Year 1, Semester 2			
PSN121	Planning Project	24	1
PSN122	Professional Seminars	6	2 2 2
PSN123	Planning in Developing Countries	6	2
PSN124	Option Course	12	2
Part-Time	Course Structure		
Year 1, Sei	nester 1		
PSN111	Comparative Planning Theory	6	2 3
PSN114	Metropolitan Planning Practice & Law	12	3
Year 1, Semester 2			
PSN122	Professional Seminars	6	2
PSN123	Planning in Developing Countries	6	2 2 2
PSN124	Option Course	12	2
Year 2, Sei	nester 1		
PSN001	Applied Research Techniques	6	2
PSN112	Concentration Studies	12	2.5
PSN113	Option Projects	12	2
Year 2, Semester 2			
PSN121	Planning Project	24	1

### LANDSCAPE ARCHITECTURE MAJOR

### 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

Coordinator: To be advised

### **Entry Requirements**

Applicants for admission shall:

- (i) hold the Graduate Diploma in Landscape Architecture from QUT with a grade point average of 5.0 or better or an equivalent qualification, and
- (ii) have demonstrated potential through relevant professional activities to participate actively in a masters program.

In addition, as part of the documentation for application, each applicant is required to submit:

- (i) a written statement identifying the specialised area of study to be pursued (as a means of defining potential areas of concentrations and of giving a preliminary indication of the Dissertation topic) and the contribution the applicant intends to make to the course and the profession by undertaking the particular focus of study, and
- (ii) a folio in A4 or A3 format demonstrating the applicant's professional experience and expertise.

### **Course Requirements**

Students must complete a minimum of 48 credit points per semester in the full-time course and a minimum of 24 credit points per semester in the part-time course.

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Full-Time	Course Structure		Credit Points	Contact Hrs/Wk
Year 1, Se	mester 1			
IFN001 PSN201 PSN202 PSN204 PSN206 PSN002 PSN003	Advanced Information Retrieval Skills Masters Studio Advanced Practice 1 Practice Seminar Research Method, AND Concentration Studies A Concentration Studies B Elective Unit/s* OR	}	4 12 4 4 4 8 8	 3   1   1   2 2
	Elective Units* totalling		20	5
Year 1, Se	nester 2			
PSN099 PSN203 PSN205	Dissertation Advanced Practice 2 Professional Seminars Elective Unit/s		24 8 8 8	6 2 2 2
Part-Time	Course Structure			
Year 1, Se	mester 1			
IFN001 PSN201 PSN202 PSN002	Advanced Information Retrieval Skills Masters Studio Advanced Practice 1, AND Concentration Studies A OR		4 12 4 4	 3   
	Elective Unit/s* totalling		4	1
Year 1, Se			_	_
PSN203 PSN205 PSN003	Advanced Practice 2 Professional Seminars, AND Concentration Studies B OR		8 8 8	2 2 2
	Elective Unit/s totalling		8	2
Year 2, Se	mester 1			
PSN204 PSN206 PSN002 PSN003	Practice Seminar Research Method, AND Concentration Studies A Concentration Studies B Elective Unit/s* OR Elective Units* totalling	}	4 4 8 4	1 1 2 2 4
Year 2, Semester 2				
PSN099	Dissertation		24	6
PROJECT MANAGEMENT MAJOR				
Course Duration: 1.5 years full-time, 3 years part-time				

**Total Credit Points: 144** 

### Standard Credit Points/Full-Time Semester: 48

### Coordinator for Project Management Major: Mr Andrew Leicester

\* Elective units may include any other units in the semester not already taken or a unit from another course, with the prior approval of the course coordinator.

The first two semesters full-time or four semesters part-time are identical to the Graduate Diploma in Project Management (CN64). Persons admitted to the Master of Built Environment who are graduates of the Graduate Diploma in Project Management will complete CNN441 (one semester full-time) or CNN442 (two semesters part-time).

### **Entry Requirements**

Applicants for admission shall hold:

- (i) a bachelor degree and demonstrated potential in professional activity to undertake a masters degree course; or
- (ii) a bachelor degree and a relevant graduate diploma or qualifying program with a grade point average of 5 or better; or
- (iii) qualifications deemed equivalent to (i) or (ii) by the Dean of Faculty on the recommendation of the course coordinator; and
- (iv) shall normally have at least three years of appropriate work experience after graduation.

As the coursework of the Graduate Diploma in Project Management and the Master of Built Environment (Project Management) are identical, students may transfer from the graduate diploma to the masters degree program providing that they have a grade point average of 5.0 or better. Students are normally required to transfer at the completion of one semester (48 credit points) of the graduate diploma.

At the completion of the coursework component of the masters degree program but before the completion of the Dissertation, students have the option of electing to graduate with the Graduate Diploma in Project Management.

The Graduate Diploma in Project Management has majors in Project Management and Property Development. These areas are available as specialisations within the masters degree program.

**Note:** Whilst the unit CNN441 (or CNN442) Dissertation incorporates the unit IFN001 Advanced Information Retrieval Skills, it is recommended that IFN001 be completed prior to the commencement of the masters degree program or as early as possible in the first semester. (The credit point value of IFN001 is incorporated in the credit point value of CNN441 (or CNN442). Therefore, as students are required to enrol in CNN441 (or CNN442 as part of the course, they will not need to enrol separately in IFN001.

### PROJECT MANAGEMENT SPECIALISATION

Full-Time Course Structure		Credit Points	Contact Hrs/Wk
Year 1, Sei	mester 1		
CNP417 CNP426/1 CNP429/1 CNP430/1 CNP431/1 CNP433/1 CNP434	Design Management Project Development Cost Management & Economics Current Issues* Project Management* Project Management Law Time Management 1	6 6 9 6 6 6	2 2 3 2 2 2 2
Year 1, Sei	mester 2		
CNP426/2 CNP429/2 CNP430/2 CNP431/2 CNP433/2	Project Development Cost Management & Economics Current Issues* Project Management* Project Management Law	6 6 9 6 6	2 2 3 2 2

Compulsory core unit.

CNP437	Field Trip* Elective Unit	12 6	5 days
<b>Year 2, Ser</b> CNN441	nester 1 Dissertation	48	4
Part-Time	Course Structure		
Year 1, Ser	nester 1		
CNP417 CNP429/1 CNP431/1 CNP434	Design Management Cost Management & Economics Project Management* Time Management 1	6 6 6	2 2 2 2
Year 1, Ser	nester 2		
CNP429/2 CNP431/2 CNP437	Cost Management & Economics Project Management* Field Trip* Elective Unit	6 6 12 6	2 2 5 days
Year 2, Ser	nester 1		
CNP426/1 CNP430/1 CNP433/1	Project Development Current Issues* Project Management Law	6 9 6	2 3 2
Year 2, Ser	nester 2		
CNP426/2 CNP430/2 CNP433/2	Project Development Current Issues* Project Management Law	6 9 6	2 3 2
Year 3, Ser	nester 1		
CNN442/1	Dissertation	24	2
Year 3, Ser	nester 2		
CNN442/2	Dissertation	24	2
PROPERTY	DEVELOPMENT SPECIALISATION		
Full-Time	Course Structure		
Year 1, Ser	nester 1		
CNP422 CNP426/1 CNP430/1 CNP431/1 CNP433/1 CNP438/1 CNP439	Specialist Valuations Project Development Current Issues* Project Management* Project Management Law Real Estate Investment Analysis Property Management	6 9 6 6 6 6 6	2 2 3 2 2 2 2 2
Year 1, Semester 2			
CNP426/2 CNP430/2 CNP431/2 CNP433/2 CNP437 CNP438/2 CNP667	Project Development Current Issues* Project Management* Project Management Law Field Trip* Real Estate Investment Analysis Applied Computing	6 9 6 12 6 6	2 3 2 5 days 2 2 2
Year 2, Ser	nester 1		
CNN441	Dissertation	48	4

\* Compulsory core unit.



### **Part-Time Course Structure**

### Year 1, Semester 1

Tear 1, Semester 1			
CNP426/1 CNP431/1 CNP438/1 CNP439	Project Development Project Management* Real Estate Investment Analysis Property Management	6 6 6 6	2 2 2 2
Year 1, Se	nester 2		
CNP426/2 CNP431/2 CNP437 CNP438/2	Project Development Project Management* Field Trip* Real Estate Investment Analysis	6 6 12 6	2 2 5 days 2
Year 2, Se	mester 1		
CNP422 CNP430/1 CNP433/1	Specialist Valuations Current Issues* Project Management Law	6 9 6	2 3 2
Year 2, Se	mester 2		
CNP430/2 CNP433/2 CNP667	Current Issues* Project Management Law Applied Computing	9 6 6	3 2 2
Year 3, Semester 1			
CNN442/1	Dissertation	24	2
Year 3, Semester 2			
CNN442/2	Dissertation	24	2

URBAN DESIGN MAJOR

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

Coordinator: Mr Danny O'Hare

### **Entry Requirements**

#### NORMAL ENTRY

A grade point average of 5.0 or better in the Graduate Diploma in Urban Design at the completion of one semester full-time or two semesters part-time.

Relevant professional activity normally means the areas of Architecture, Planning and Landscape Architecture.

#### PROVISIONAL ENTRY

Applicants with other than normal entry requirements may be registered provisionally in the course if they submit other evidence of academic and professional attainment and candidature is approved by the Dean of the Faculty on the recommendation of the course coordinator.

A person provisionally enrolled is required to satisfactorily undertake a qualifying program which may include course units, and/or such other work as is determined before admission is confirmed. Provisional registration in the course will apply for a maximum period of 12 months for both full-time and part-time students.

\* Compulsory core unit.



### Articulation to the Masters Program from the Graduate Diploma in Urban Design

Applicants are considered initially for acceptance in the Graduate Diploma in Urban Design. At the completion of one semester for full-time students and at the completion of two semesters for those studying part-time, students will be considered for enrolment in the Master of Built Environment (Urban Design). A grade point average of 5.0 or better in the course is normally required for progression to the masters level.

#### Focus in the Masters Program

The masters program includes skills and knowledge development through set coursework in common with the Graduate Diploma in Urban Design, but also requires individual research and the writing of a dissertation.

#### **Course Requirements**

Students must complete a minimum of 48 credit points per semester in the full-time course and a minimum of 24 credit points per semester in the part-time course.

Full-Time Course Structure		Credit Points	Contact Hrs/Wk
Year 1, Ser	nester 1		
IFN001 PSN004 PSP401 PSP403 PSP405 PSP421 PSP424	Advanced Information Retrieval Skills Applied Research Techniques Urban Design Analysis Studio Urban Design Conjecture Studio Urban Design Field Studies History of Urban Systems Urban Design Theory & Criticism	4 12 12 4 4	1 3 3 10 days 1 1
Plus a selec	tion from the following totalling at least 4 credit p	oints:	
CNP439 PSP011 PSP411 PSP416 PSP442	Property Management Conservation Theory Environmental Psychology Computer Aided Data Analysis Law & Legislation in Urban Design	6 3 4 2 4	2 1 2 1 1
Year 1, Sei	nester 2		
PSN099 PSP402	Dissertation Urban Design Context Studio	24 12	3
Plus a selec	tion of the following totalling a minimum of 12 cr	edît points:	
PSN002 PSN003 PSP011 PSP432 PSP434 PSP441	Concentration Studies A Concentration Studies B Conservation Theory Urban Landscape Urban Services & Functions Computer Applications in Urban Design Elective Unit/s	4 8 3 4 4 4	1 2 1 1 1 1
Part-Time	Course Structure		
Year 1, Sei	nester 1		
IFN001 PSP401 PSP421 PSP424	Advanced Information Retrieval Skills Urban Design Analysis Studio History of Urban Systems Urban Design Theory & Criticism	4 12 4 4	1 3 1 1
Year 1, Ser	nester 2		
PSN004 PSP402 PSP405	Applied Research Techniques Urban Design Context Studio Urban Design Field Studies	4 12 4	1 3 10 days

Plus a selection from the following totalling at least 4 credit points:			
PSP011	Conservation Theory	3	
PSP416	Computer Aided Data Analysis	2	
PSP432	Urban Landscape	4	
PSP434	Urban Services & Functions	4	
PSP441	Computer Applications in Urban Design	4	
Year 2, Ser	Year 2, Semester 1		
PSP403	Urban Design Conjecture Studio	12	
Plus a selection of the following totalling a minimum of 12 credit points:			
Plus a selec	tion of the following totalling a minimum of 12	2 credit points:	
Plus a selec CNP439	tion of the following totalling a minimum of 12 Property Management	2 credit points: 6	
	Property Management Conservation Theory		
CNP439 PSP011 PSP411	Property Management Conservation Theory Environmental Psychology	6 3 4	
CNP439 PSP011 PSP411 PSP416	Property Management Conservation Theory Environmental Psychology Computer Aided Data Analysis	6 3 4 2	
CNP439 PSP011 PSP411	Property Management Conservation Theory Environmental Psychology	6 3 4	
CNP439 PSP011 PSP411 PSP416	Property Management Conservation Theory Environmental Psychology Computer Aided Data Analysis Law & Legislation in Urban Design	6 3 4 2	

### ■ Master of Engineering (BN72)

Location: Gardens Point campus

### Introduction

The objectives of the program are:

- □ to provide for postgraduate educational opportunities in design, investigation, development, research or any combination thereof, directly related to professional engineering practice, by means of a program which involves either an advanced contribution to knowledge or an advanced application of existing knowledge
- □ to provide further education in research methods
- □ to further relationships between the University and industry or other external agencies involved in engineering to their mutual advantage, and
- □ to provide formal recognition of work of an advanced nature.

### **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 procedures relating to research degrees is exercised through a Research Management Committee which is a subcommittee of the Academic Committee.

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

1.4 This program is administered by the Academic Board of the Faculty of Built Environment and Engineering through its Faculty Research Committee. The program is offered in Civil, Electrical and Electronic Systems, and Mechanical and Manufacturing Engineering.

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1.5 In order to qualify for the award of the degree of Master of Engineering a candidate must:

- □ have completed the approved program involving advanced work under the supervision of a Thesis Panel prescribed by the Faculty Research Committee of the Built Environment and Engineering Academic Board
- □ have submitted and the Faculty Research Committee accepted a thesis, together with reports, and/or documents where applicable, prepared under the supervision of the Thesis Panel
- □ have completed such other work as may be prescribed by the Faculty Research Committee, and
- □ submit to the Faculty Research Committee a declaration signed by the candidate that they have not been a candidate for another tertiary award without permission of the Faculty Research Committee.

### 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 There is a six month maximum period between acceptance by the Faculty Research Committee and enrolment by the candidate in the Master of Engineering before the offer of admission to the program lapses. Candidates are required to complete an enrolment form each semester.

2.4 Normal admission will require the candidate to have at least an Honours 2A degree in a bachelor degree in Engineering from the Queensland University of Technology or a qualification judged equivalent by the Faculty Research Committee.

Entry to the program may be allowed to candidates without an Honours 2A degree if the candidate has a grade point average of 5.0 or better in the coursework component of a masters degree program or a graduate diploma program in a relevant discipline, together with demonstrated potential for further study and/or evidence of professional standing.

An applicant for the Master of Engineering program without the minimum entry requirement may present a case for admission based on the submission of evidence of qualifications which demonstrate the applicant's capacity to pursue the course of study.

The case may be based on the following:

- (i) three years professional experience in the general field in which the proposed work lies, or
- (ii) satisfactory completion of an appropriate master's qualifying program including formal coursework and/or reading program in related fields stipulated by the Faculty Research Committee, or
- (iii) the submission of technical publications or other appropriate evidence which satisfies the Faculty Research Committee that advanced knowledge has been acquired in a division of engineering in which the applicant has worked as a professional engineer in a position of responsibility; this knowledge should be relevant to the field of study proposed.
- 2.5 A candidate shall be registered initially as:
- □ a graduate student (provisional) if he or she is to undertake an appropriate qualifying program, or
- □ a graduate student if he or she is considered by Faculty Research Committee to meet the requirements for entry.

A graduate student (provisional) becomes a graduate student when registration is confirmed. Applicants not holding an appropriate honours degree or its equivalent shall normally be given provisional registration.

2.6 A candidate shall receive confirmed registration as a graduate student when he or she:

- □ has satisfied the requirements for admission and achieved by work and study a standard recognised by the Faculty Research Committee, or
- □ has been accepted for provisional registration in the faculty and has achieved, by subsequent work and study, a standard recognised by the Faculty Research Committee
- □ has satisfied the Faculty Research Committee that they are a suitable person to undertake the program
- □ has satisfied Faculty Research Committee that they can devote sufficient time to the research and study.

2.7 In considering an applicant for registration, the Faculty Research Committee shall, in addition to assessing the applicant's suitability, be satisfied that:

- □ the proposed program is relevant to the aims and objectives of the University, and
- □ the proposed program has relevance to the needs of industry.

2.8 An application for registration should set out systematically and fully the candidate's intended course of study including the following:

- □ a description of the area of study within which the candidate's course lies
- □ a summary of the work to be undertaken, the proposed title of the thesis to be written, the aim of the proposed program, its background, the significance and possible application of the research program, and the research plan
- □ the location at which the work will be undertaken, the amount of time which will be devoted to it, and the resources required
- □ details of academic qualifications and supporting evidence, including copies of results for each year of courses undertaken
- □ a brief account of industrial experience
- □ a list of publications
- □ sponsorship details
- $\hfill\square$  statement of approval by the Head of School and/or Director of Centre, and
- $\hfill\square$  any other relevant material.

2.9 The program is offered on a full-time and/or a part-time basis. Part-time students normally will be employed in some professional engineering capacity during the day and carry out their research projects on a part-time basis at QUT, in their place of employment, or in a sponsoring organisation.

2.10 Full-time students may be on a scholarship from industry or QUT, and may carry out their projects at QUT or in a sponsoring organisation. Normally full-time students would be expected to work on their research projects at QUT for not less than three-quarters of a normal working week, averaged over each year of candidacy. Such a candidate may not devote more than 300 hours annually to teaching activities, including preparation and marking.

2.11 A candidate may be internal or external. An external candidate is one whose program of research 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.

2.12 The Faculty Research Committee may cancel a candidate's registration if, after consulting a candidate's supervisors and having taken account of all relevant circumstances, the committee is of the opinion that the candidate either has effectively discontinued their studies or has no reasonable expectation of completing the course of study within the maximum time allowed (see Section 4).

2.13 A candidate whose registration has lapsed or has been cancelled and who wishes subsequently to re-enter the course of study to pursue a research program which is substantially the same as the previous investigation may be re-admitted under such conditions as the Faculty Research Committee shall prescribe.

### 3. Course of Study

3.1 A candidate for the degree of Master of Engineering will undertake necessary project work in design, investigation and research and/or development work on a topic approved by the Faculty Research Committee.

3.2 All projects should be sponsored by outside agencies such as industry, government authorities and professional organisations, or by QUT itself. This provision is to ensure that programs are relevant to the aims of the University and the community. It is important that projects be primarily directed towards industry need.

3.3 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 engineering area.

3.4 Where advised, a candidate may be required to complete satisfactorily a qualifying program of formal coursework in units relevant to the field of study up to a total class contact of 48 credit points.

3.5 The course of study normally will include:

- □ participation in University scholarly activities such as research seminars, teaching and publication
- □ regular face-to-face interactions with supervisors, and
- □ a program of supervised research and investigation.

The course of study may also include a program of assessed coursework.

3.6 Coursework at masters level demands a capacity for critical analysis and a specialisation of research interests not normally appropriate for an undergraduate program. Such coursework may be conducted in a number of ways:

□ as advanced lecture courses

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

Candidates will be encouraged to attend conferences where these are related to the field of the research.

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In all cases, coursework will be 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.

3.7 Coursework will not occupy more than half of the total period of registration.

### 4. Period of Time for Completion of Course Study

4. I The duration of study for candidates with four years of relevant study at tertiary level will normally be up to two years of full-time study or the part-time equivalent.

4.2 In order to encourage completion of research degrees within a reasonable timeframe, QUT has set a limit of two years on the length of time for which it will fund a faculty for full-time research masters degree candidates.

4.3 A registered graduate full-time student shall present the thesis for examination after a period of at least one year but not more than two years has elapsed from the time of confirmed registration. A registered graduate part-time student shall present the thesis for examination after a period of at least two years but not more than four years has elapsed from the time of confirmed registration. In special cases the Faculty Research Committee may approve a shorter period.

4.4 Time limits are measured in years from the first day of the first semester in which the candidate was enrolled as a graduate student. Periods of exclusion or absence with or without approval are included.

4.5 Candidates who exceed these limits may be asked to show cause why they should not have their registration in the program terminated. Such candidates must make formal application to the Faculty Research Committee to have their registration extended beyond the normal time. Details of the candidate's progress shall be presented to the committee together with the reasons for the delay in completing the course and the expected date of completion. Where the committee agrees to an extension, a time limit will be set for the maximum period of registration in the program.

4.6 Candidates are notified of exclusion by registered mail. They have right of appeal to the Academic Appeals Committee.

### 5. Supervision

5.1 The Faculty Research Committee shall appoint two or more supervisors with appropriate experience in respect of each candidate. One shall be nominated as the Principal Supervisor and others as associate supervisors. The supervisors shall form a Thesis Panel.

5.2 The Principal Supervisor shall normally be from the academic staff of the QUT school in which the candidate is enrolled.

5.3 The Thesis Panel shall supervise all aspects of the candidate's work program, shall receive reports from the candidate on progress and shall recommend both on successful and unsuccessful completion of components of the coursework incorporated in the candidate's program, on progress on the thesis research project and on continued enrolment.

5.4 The Thesis Panel shall receive a formal oral and written report from the candidate at least once every semester on progress on the research project.

### 6. Place and Conditions of Work

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

6.2 The Faculty Research Committee shall not admit a candidate to a program of research based at the University unless it has received:

□ a supporting statement from the head of school and/or director of centre in which the study is proposed that, in their opinion, the applicant is a suitable person to undertake a research program leading to the masters degree, that the program is supported, that the school or centre is willing to undertake the responsibility of supervising the work of the applicant, and that resources are available to support the proposed research.

6.3 The Faculty Research Committee shall not admit a candidate to a program of research based at a sponsoring establishment unless it has received:

- □ a supporting statement from the employer or director of the sponsoring institution that they are aware of the course rules and are prepared to sponsor and support the applicant, that the applicant will be provided with facilities and time to undertake the research project, and that they are willing to accept responsibility for supervising the applicant's work, and
- □ a supporting statement from the head of QUT school or director of centre in which the study is proposed that, in their opinion, the applicant is a suitable person to undertake a research program leading to the masters degree, that the program is supported, and that after examination of the proposed external facilities and supervision, the school/centre is willing to accept the responsibility of supervising the work.

### 7. Thesis

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

7.2 Not later than six months after confirmed registration, a candidate shall submit the title of their thesis for approval by the Faculty Research Committee, and after approval has been granted, no change will be made except with the permission of the Committee.

7.3 The candidate shall give two months written notice of intention to submit his or her thesis through the Principal Supervisor.

7.4 The thesis shall comply with the following requirements:

- □ a significant proportion of the work described (as determined by the Faculty Research Committee) must have been carried out subsequent to initial registration for the masters degree
- □ it must describe a program of work carried out by the candidate and must involve either an advanced contribution to the knowledge of the subject or an advanced 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 conjointly with other persons, the Faculty Research Committee 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 candidate has previously submitted for another degree or similar award
- □ the thesis may consist primarily of reports, plans and/or documents or may be supported by these if they have a bearing on the subject of the thesis; other supporting documents such as published papers may also be submitted with the thesis, and

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 $\Box$  the thesis shall contain an abstract of not more than 300 words.

7.5 Except with the specific permission of the Faculty Research Committee 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.

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

7.7 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 Research Management Committee when the thesis is submitted. The period 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.

#### 8. Examination of Thesis

8.1 The Faculty Research Committee shall appoint two/three examiners, of whom at least one shall be from outside of the University. No supervisor of the candidate shall be appointed as one of the examiners.

8.2 Normally, examiners must agree to read and report on the thesis within two months of its receipt.

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

8.4 On receipt of the reports from the examiners, the Faculty Research Committee shall:

- (i) recommend that the thesis be accepted without modification, and to the Academic Committee that the candidate be awarded the degree, or
- (ii) recommend to the Academic Committee that the candidate be awarded the degree, after any minor amendments requested by the examiners have been made, or
- (iii) recommend that the thesis not be accepted until major revisions have been made; such revisions might be rewriting one of the sections, with or without additional work, or
- (iv) not accept the thesis and terminate the candidate's registration.

8.5 If the examiners' reports are conflicting, the Faculty Research Committee may, after appropriate consultation with the Thesis Panel, resubmit the thesis to the examiners with copies of the examiners' reports and/or seek the advice of a further external examiner. After due consideration of further reports from the examiners, a majority decision will be accepted by the Faculty Research Committee.

### Master of Engineering Science (Civil) (CE74)

Location: Gardens Point campus

Course Duration: 2 years part-time

Total Credit Points: 96

Standard Credit Points/Part-Time Semester: 24

Course Coordinator: Mr Robin Black

### **Entry Requirements**

Entrants to the masters degree program must either:

- (i) have obtained a Bachelor of Engineering degree with honours in Civil Engineering, or
- (ii) have obtained a Graduate Diploma with a grade point average of at least 5.0 on a 7 point scale.

Where entrants do not have honours ranking in their Bachelor of Engineering (Civil) degree and/or have not undertaken units equivalent to the available QUT undergraduate units in their chosen area of study, the Head of School may require that additional undergraduate units be undertaken.

Entrants may transfer from the Graduate Diploma in Municipal Engineering (CE63) with a grade point average of at least 5.0 after completion of 50 per cent of the coursework for the Graduate Diploma.

**Note:** In so doing students must comply with rule 4.1.1 of the Student Rules which states 'for courses of up to and including one year of equivalent full-time study, credit may be given for a maximum of one half of the credit points required for course completion'.

Graduates who have completed the prescribed units for a major will have their award certificates and academic transcripts endorsed "Majoring in...".

### **Course Structure**

The course consists of a minimum of 96 credit points. Either 36 or 20 credit points are allocated to a project and the remainder to the non-project units. The majority of the units are common with the Graduate Diploma in Municipal Engineering (CE63). Students who do not wish to undertake a major must complete the core units plus any other combination of units, to make up the minimum total of 96 credit points. Such programs should be devised in consultation with the course coordinator.

		Credit Points	Contact Hrs/Wk
Year 1, Ser	nester 1		
CEP131	Engineering Management & Administration Units chosen from major	12 12	3 3
Year 1, Ser	nester 2		
CEP200	Process Modelling Units chosen from major	8 16	2 4
Year 2, Ser	nesters 1 and 2		
CEP9999/1/2	Project A* AND Units chosen from major totalling OR	36 12	9
CEP998/1/2		20 28	5

\* Safety boots must be worn for practical exercises and field trips.

		Year/ Semester of Offer	Credit Points	Contact Hrs/Wk
ENVIRON Compulsory	MENTAL ENGINEERING MAJO 7 units:	R (EVN)		
CEP172 CEP277 CEP290 Choose rem	Water Quality Engineering Waste Management Environmental Law & Assessment aining units from the following:	even, l even, 2 odd, 2	8 12 8	2 3 2
CEP128 CEP174 CEP276 CEP310 CEP361 CHP691	Municipal Engineering Planning Public Health Engineering Practice Advanced Treatment Processes Urban Transportation Planning Drainage Engineering Environmental Chemistry	even, 1 odd, 1 odd, 2 even, 2 odd, 2 even, 2	12 12 8 8 8 8 8	3 3 2 2 2 2 2
LOCAL GO	VERNMENT ENGINEERING M 7 units:	IAJOR (LGN)		
CEP107 CEP127 CEP128	Construction Management & Economics Road & Traffic Engineering Municipal Engineering Planning	odd, 1 odd, 1 even, 1	8 12 12	2 3 3
	aining units from the following: Municipal Law & Regulations Environmental Law & Assessment Drainage Engineering	even, 2 odd, 2 odd, 2	8 8 8	2 2 2
PUBLIC HEALTH ENGINEERING MAJOR (PHN) Compulsory units:				
CEP172 CEP174 CEP276 CEP277 Choose terr	Water Quality Engineering Public Health Engineering Practice Advanced Treatment Processes Waste Management maining units from any other major.	even, 1 odd,d 1 odd, 2 even, 2	8 12 8 12	2 3 2 3
TRANSPORTATION ENGINEERING MAJOR (TRN) Compulsory units:				
CEP127 CEP215 CEP218	Road & Traffic Engineering Advanced Traffic Engineering Transportation Engineering	odd, 1 odd, 2 odd, 1	12 12 12	3 3 3
CEP310 CEP361	aining units from the following: Urban Transportation Planning Drainage Engineering paining units from any other major.	even, 2 odd, 2	8 8	2 2

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Choose remaining units from any other major.

### Master of Engineering Science (Computer and Communication Engineering) (EE75)

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: Associate Professor Anthony Maeder

### **Entry Requirements**

- (i) Bachelor degree in engineering with at least second class honours or equivalent, or
- (ii) Bachelor degree in engineering or equivalent together with successful completion of the Masters Qualifying Program
- (iii) Graduate Diploma in Computer Engineering with a grade point average (GPA) of 5.0 (credit level) or higher will meet the entry requirements for admission to the Master of Engineering Science (Computer Engineering Stream) upgrade program.

### **Masters Qualifying Program**

Applicants who do not meet the entry requirements for the Master of Engineering Science (Computer and Communication Engineering) outlined in (i) above, will be permitted to follow the first semester of the masters program. If in this first semester a GPA of 5.0 or above is attained, candidates will continue to follow the masters program. Otherwise they will continue their studies in the Graduate Diploma in Computer Engineering towards that award.

### Masters Upgrade Program

Those who have completed the Graduate Diploma in Computer Engineering may upgrade by undertaking further study in the Master of Engineering Science (Computer Engineering Stream) and be given credit for the units which they have completed at graduate diploma level. The structure of the course dictates that this upgrade program be undertaken on a part-time basis.

Students undertaking the Masters Upgrade Program will enrol in the following units:

### Semester 1

EEP302	Research Component 1
	(the research components of EEP101, EEP102, EEP123 and EEP124)

### Semester 2

EEP301	Project
EEP303	Research Component 2
	(the research components of EEP104, EEP120 and EEP129)

### **Methods of Assessment**

Assessment is undertaken in seven units and a project. The seven units are common with the Graduate Diploma in Computer Engineering. The course will also include a research training component in each unit. Candidates who have completed the Graduate Diploma in Computer Engineering will only be required to complete the project and an additional assignment for each unit in the Masters program.

### Streams

Two streams are offered in the course: Computer Engineering and Communication Engineering. Students enrol in units in the stream they wish to pursue.



	COMMONICATION ENGINEERING STREAM			
Full-Time (	Course Structure	Credit Points	Contact Hrs/Wk	
Year 1, Sen	nester 1			
EEP102 EEP135 EEP137	Unix & C for Engineers Advanced Digital Signal Processing Advanced Topic A Mathematics Elective Unit	12 12 12 12	3 3 3	
Year 1, Ser	nester 2			
EEP126 EEP127 EEP128 EEP301	Communications Digital Signal Processing Advanced Topic B Detection & Estimation Project	12 12 12 12	3 3 3 3	
Part-Time	Course Structure			
Year 1, Sen	nester 1			
EEP102 EEP135	Unix & C for Engineers Advanced Digital Signal Processing	12 12	3 3	
Year 1, Sen	nester 2			
EEP126 EEP128	Communications Digital Signal Processing Detection & Estimation	12 12	3 3	
Year 2, Ser	nester 1			
EEP137	Advanced Topic A Mathematics Elective Unit	12 12	3	
Year 2, Ser	nester 2			
EEP127 EEP301	Advanced Topic B Project	12 12	3 3	
COMPUTER ENGINEERING STREAM				
	Course Structure			
Year 1, Ser	nester 1			
EEP101 EEP102 EEP123	Algorithms for Control & Signal Processing Unix & C for Engineers Process Control & Robotics OR	12 12 12	3 3 3	
EEP137 EEP124	Advanced Topic A Data Communications	12 12	3 3	
Year 1, Ser	nester 2			
EEP104 EEP120 EEP129	Real-time Operating Systems Networks & Distributed Computing Image Processing & Computer Vision OR	12 12 12	3 3 3	
EEP127 EEP301	Advanced Topic B Project	12 12	3 3	
Part-Time	Course Structure			
Year 1, Sei	nester 1			
EEP101 EEP102	Algorithms for Control & Signal Processing Unix & C for Engineers	12 12	3 3	

COMMUNICATION ENGINEERING STREAM

### Year 1, Semester 2

EEP104 EEP129	Real-time Operating Systems Image Processing & Computer Vision OR	12 12	3 3
EEP127	Advanced Topic B	12	3
Year 2, Sen	nester 1		
EEP123	Process Control & Robotics OR	12	3
EEP137	Advanced Topic A	12	3
EEP124	Data Communications	12	3
Year 2, Sen	nester 2		
EEP120 EEP301	Networks & Distributed Computing Project	12 12	3 3

### Advanced Topics A & B Unit List

Only one of these units will be offered per semester.

Adaptive Filtering & Array Processing Digital Spectral Analysis Stochastic Processes Parallel & Supercomputing Advanced Engineering Software Tools OR Core unit of other stream

### **Mathematics Elective Units**

Students are to consult the course coordinator regarding the selection of an appropriate mathematics unit prior to enrolling.

### Master of Engineering Science in Electricity Supply Engineering (EE78)\*

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 Kame Khouzam

### **Entry Requirements**

- (i) a Bachelor degree in Electrical Engineering and at least second class honours with a study of power subjects to third year level
- (ii) students with the degree qualification, but who do not have second class honours may transfer from the Graduate Diploma (Electricity Supply) after completing 48 credit points with a grade point average (GPA) of 5.0 or greater.
- \* Subject to final University approval.

Full-Time	Course Structure	Credit Points	Contact Hrs/Wk	
Year 1, Se				
	Modules (12 of)	48	12	
Year 1, Se	mester 2			
EEP230	Thesis A	12	3	
EEP231	Thesis B	12	3 3 6	
	Modules (6 of)	24	6	
Part-Time Course Structure				
Year 1, Semester 1				
	Modules (6 of)	24	6	
Year 1, Se	mester 2			S N I
,	Modules (6 of)	24	6	BU IME
Year 2, Se	mester 1			NEI NEI
EEP230	Thesis	12	3	₩ Đ
	Modules (3 of)	12	3 3	EN
Year 2, Semester 2			8	
EEP231	Thesis B	12	3	
	Modules (3 of)	12	3 3	

### Thesis

Students must complete 100 days of supervised professional practice. The thesis is related to this industry experience.

Modules Semester 1		Weeks	Credit Points	Contact Hrs/Wk
EEP201	Fundamentals of Power System		,	-
555000	Earthing	1-5	4	3
EEP202	Thermal Ratings & Heat Transfer	1-5	4	3 3 3
EEP204 EEP213	Power System Load Flow Analysis Statistics	1-5 1-5	4 4	3
	-			
EEP203	Testing & Condition Monitoring	6-10	4	3 3
EEP205	Power System Fault Calculations	6-10	4	3
EEP208	Economic Analysis for Power Systems Engineers	6-10	4	г
EEP210	Abnormal System Voltages	6-10	4	3 3
EEP206 EEP209	Project Management	11-15 11-15	4 4	3 3
EEP209 EEP218	Power System Harmonics Introduction to Automated System	11*1J	4	2
LEF 210	Control & Supervisory Systems	11-15	4	3
EEP219	High Voltage Substation Equipment,	11 10	•	5
	Power Transformers & Reactive			
	Power Plant	11-15	4	3
Semester 2				
EEP207	Overhead Transmission Line Route			
	Selection	1-5	4	3
EEP211	Basic Power System Protection	1-5	4	3
EEP214	Risk Assessment in the Electricity			
	Supply Industry	1-5	4	3
EEP221	Limits to Power System Stability	1-5	4	3
EEP212	Advanced Power System Protection	6-10	4	3 3
EEP215	Reliability	6-10	4	3

EEP216	Transmission Line Design-Electrical	6-10	4	3
EEP223	Load Forecasting	6-10	4	3
EEP217 EEP220 EEP222	Transmission Line Design-Mechanical Distribution Planning Maintenance of Electricity Supply	11-15 11-15	4 4	3 3
EEP224	Systems	11-15	4	3
	Power System Operation	11-15	4	3

### Master of Engineering Science (Engineering Management) (ME76)

Location: Gardens Point campus

Course Duration: 1 year full-time, 2 years part-time, 2 years part-time (block release)

Total Credit Points: 96

### Standard Credit Points/Full-Time Semester: 48

Course Coordinator: Professor William Scott

### Entry Requirements

- (i) a Bachelor's degree in Engineering (or its equivalent) with honours, or
- (ii) a Bachelor's degree in Engineering (or its equivalent), together with a relevant graduate diploma or qualifying program with a grade point average of 5.0 or better, or
- (iii) a Bachelor's degree in Engineering (or its equivalent), together with at least three years' industrial experience, and potential demonstrated through professional activity to undertake a masters degree course.

Part-time students are expected to be employed in some professional engineering capacity during the day and to carry out their QUT studies at night. Students taking the block release option will need to be available for two intensive periods (one week and two weeks) per year for two years.

Students will specialise in either manufacturing systems engineering or plant maintenance.

Full-Time Course Structure		Credit Points	Contact Hrs/Wk
Semester 1			
HRN113 MEN170 MEN190/1 MEN140	Management for Engineers Systems Modelling & Simulation Project Reliability & Maintenance Optimisation* OR	12 12 12 12	3 3 3 3
MEN171	Advanced Manufacturing Technologies+	12	3
Semester 2			
FNN113 MEN190/2 MEN280 MEN240	Managerial Accounting for Engineers Project Engineering Project Management Maintenance Management & Technology* OR	12 12 12 12	3 3 3 3
MEN270	Manufacturing Resource Planning+	12	3

\* For students specialising in plant maintenance.

+ For students specialising in manufacturing systems engineering.



### **Part-Time Course Structure**

•	Year 1, Semester 1				
HRN113 MEN170	Management for Engineers Systems Modelling & Simulation	12 12	3 3		
Year 1, Sen	nester 2				
FNN113 MEN240	Managerial Accounting for Engineers Maintenance Management & Technology* OR	12 12	3 3		
MEN270	Manufacturing Resource Planning+	12	3		
Year 2, Sen	nester 1				
MEN280 MEN140	Engineering Project Management Reliability & Maintenance Optimisation* OR	12 12	3 3		
MEN171	Advanced Manufacturing Technologies+	12	3		
Year 2, Sen	nester 2				
MEN190	Project	24	6		
Block Relea	ase (Part-Time) Course Structure				
Year 1, Sen	nester 1				
HRN113	Management for Engineers	12	3		
Year 1, Sen	nester 2				
FNN113 MEN170	Managerial Accounting for Engineers Systems Modelling & Simulation	12 12	3 3		
Year 2, Ser	nester 1				
MEN190/1 MEN140	Project Reliability & Maintenance Optimisation* OR	12 12	3 3		
MEN171	Advanced Manufacturing Technologies+	12	3		
Year 2, Ser	nester 2				
MEN190/2	Project	12	3		
MEN280 MEN240	Engineering Project Management Maintenance Management & Technology*	12 12	3 3 3		
MEN270	OR Manufacturing Resource Planning+	12	3		

#### Master of Project Management (CN77)# $\mathbb{Z}_{2}^{2}$

### Location: Gardens Point campus

Course Duration: 1.5 years full-time, 3 years part-time

**Total Credit Points: 144** 

### Standard Credit Points/Full-Time Semester: 48

### Course Coordinator: Mr Andrew Leicester

The first two semesters full-time or four semesters part-time are identical to the Graduate Diploma in Project Management (CN64). Persons admitted to the Master of Project

For students specialising in plant maintenance. \*

- + For students specialising in manufacturing systems engineering.
- Subject to final University approval. #



Management who are graduates of the Graduate Diploma in Project Management will complete CNN441 (one semester full-time) or CNN442 (two semesters part-time).

### **Entry Requirements**

Applicants for admission shall hold:

- (i) a bachelor degree and demonstrated potential in professional activity to undertake a masters degree course, or
- (ii) a bachelor degree and a relevant graduate diploma or qualifying program with a grade point average of 5.0 or better, or
- (iii) qualifications deemed equivalent to (i) or (ii) by the Dean of Faculty on the recommendation of the course coordinator, and
- (iv) shall normally have at least three years of appropriate work experience after graduation.

As the coursework of the Graduate Diploma in Project Management and the Master of Project Management are identical, students may transfer from the graduate diploma to the masters degree program providing that they have a grade point average of 5.0 or better. Students are normally required to transfer at the completion of one semester (48 credit points) of the Graduate Diploma.

At the completion of the coursework component of the masters degree program but before the completion of the Dissertation, students have the option of electing to graduate with the Graduate Diploma in Project Management.

The Graduate Diploma in Project Management has majors in Project Management and Property Development. These areas are also available as majors within the masters degree program.

**Note:** Whilst the unit CNN411 (or CNN442) Dissertation incorporates the unit IFN001 Advanced Information Retrieval Skills, it is recommended that IFN001 be completed prior to the commencement of the masters degree program or as early in the first semester as possible. The credit point value of IFN001 is incorporated in the credit point value of CNN441 (or CNN442). Therefore because students are required to enrol in CNN441 or CNN442 as part of the masters program, they will not be required to enrol separately in IFN001.

### PROJECT MANAGEMENT MAJOR

Full-Time Course Structure		Credit Points	Contact Hrs/Wk
Year 1, Sei			
CNP417 CNP426/1 CNP429/1	Design Management Project Development Cost Management & Economics	6 6 6	2 2 2
CNP430/1 CNP431/1 CNP433/1	Current Issues* Project Management* Project Management Law	9 6 6	2 3 2 2
CNP434 Year 1, Sei	Time Management 1	6	2
CNP426/2 CNP429/2 CNP430/2 CNP431/2 CNP433/2 CNP437	Project Development Cost Management & Economics Current Issues* Project Management* Project Management Law Field Trip* Elective Unit	6 9 6 6 12 6	2 2 3 2 2 5 days 2

Compulsory core unit.

### Year 2, Semester 1

Year 2, Ser	nester I		
CNN441	Dissertation	48	4
Part-Time	Course Structure		
Year 1, Ser	nester 1		
CNP417 CNP429/1 CNP431/1 CNP434	Design Management Cost Management & Economics Project Management* Time Management 1	6 6 6	2 2 2 2
Year 1, Ser	nester 2		
CNP429/2 CNP431/2 CNP437	Cost Management & Economics Project Management* Field Trip* Elective Unit	6 6 12 6	2 2 5 days 2
Year 2, Ser	nester 1		
CNP426/1 CNP430/1 CNP433/1	Project Development Current Issues* Project Management Law	6 9 6	2 3 2
Year 2, Ser	nester 2		
CNP426/2 CNP430/2 CNP433/2	Project Development Current Issues* Project Management Law	6 9 6	2 3 2
Year 3, Ser	nester 1		
CNN442/1	Dissertation	24	2
Year 3, Ser	nester 2		
CNN442/2	Dissertation	24	2
PROPERT	Y DEVELOPMENT MAJOR		
Full-Time	Course Structure		
Year 1, Ser	nester 1		
CNP422 CNP426/1 CNP430/1 CNP431/1 CNP433/1 CNP438/1 CNP439	Specialist Valuations Project Development Current Issues* Project Management* Project Management Law Real Estate Investment Analysis Property Management	6 9 6 6 6 6	2 2 3 2 2 2 2 2
Year 1, Sei	nester 2		
CNP426/2	Project Development	6	2
CNP430/2 CNP431/2 CNP433/2 CNP437 CNP438/2 CNP667	Current Issues <sup>*</sup> Project Management <sup>*</sup> Project Management Law Field Trip <sup>*</sup> Real Estate Investment Analysis Applied Computing	9 6 6 12 6 6	3 2 2 5 days 2 2
Year 2, Ser	nester 1		
CNN441	Dissertation	48	4

\* Compulsory core unit.

BUILT ENVIRONMENT & ENGINEERING

### **Part-Time Course Structure**

Year 1, Semester 1				
CNP426/1	Project Development	6	2	
CNP431/1 CNP438/1	Project Management* Real Estate Investment Analysis	6 6	2 2 2 2	
CNP439	Property Management	6	2	
Year 1, Sei	nester 2			
CNP426/2		6	2	
CNP431/2	Project Management*	6	2	
CNP437	Field Trip*	12 6	5 days	
CNP438/2	Real Estate Investment Analysis	0	2	
Year 2, Ser	Year 2, Semester 1			
CNP422	Specialist Valuations	6	2	
CNP430/1	Current Issues*	9	2 3 2	
CNP433/1	Project Management Law	6	2	
Year 2, Se	nester 2			
CNP430/2	Current Issues*	9	3	
CNP433/2	· <b>J</b> · · · · · ·	6	3 2 2	
CNP667	Applied Computing	6	2	
Year 3, Se	mester 1			
CNN442/1	Dissertation	24	2	
Year 3, Se	Year 3, Semester 2			
CNN442/2	Dissertation	24	2	

### Graduate Diploma in Computer Engineering (EE65)

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: Mr Paul Wilson

### **Entry Requirements**

Applicants must hold a Bachelor's degree in Engineering or Computer Science. Applicants possessing a degree in other areas of technology such as Mathematics, Physics or Chemistry may be required to undertake prerequisite undergraduate units.

Course Structure		Credit Points	Contact Hrs/Wk
Year 1, Se	emester 1		
EEP101 EEP102 EEP123 EEP124	Algorithms for Control & Signal Processing Unix & C for Engineers Process Control & Robotics Data Communications	12 12 12 12	3 3 3 3
Year 1, Se	emester 2		
EEP103 EEP104	Computer Hardware & Interfacing Real-time Operating Systems	12 12	3 3

\* Compulsory core unit.

EEP120	Networks & Distributed Computing	12	3			
EEP129	Image Processing & Computer Vision	12	3			
Part-Time Course Structure						
Year 1, Se	mester 1					
EEP101	Algorithms for Control Engineering	12	3			
EEP102	Unix & C for Engineers	12	3			
Year 1, Semester 2						
EEP104	Real-time Operating Systems	12	3			
EEP129	Image Processing & Computer Vision	12	3			
Year 2, Semester 1						
EEP123	Process Control & Robotics	12	3			
EEP124	Data Communications	12	3			
Year 2, Semester 2						
EEP103	Computer Hardware & Interfacing	12	3			
EEP120	Network & Distributed Computing	12	3			

## ■ Graduate Diploma in Electricity Supply Engineering (EE60)\*

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: Mr David Birtwhistle

### **Entry Requirements**

A Bachelor degree in Electrical Engineering with a study of power units to third year level.

Full-Time Course Structure	Credit Points	Contact Hrs/Wk
Year 1, Semester 1 Modules (12 of)	48	12
Year 1, Semester 2 Modules (12 of)	48	12
Part-Time Course Structure		
Year 1, Semester 1 Modules (6 of)	24	6
Year 1, Semester 2 Modules (6 of)	24	6
Year 2, Semester 1 Modules (6 of)	24	6

\* Subject to final University approval.

Year 2, Semester 2

Year 2, Semester 2					
	Modules (6 of)		24	6	
MODULES		Weeks	Credit Points	Contact Hrs/Wk	
Semester 1	l				
EEP201 EEP202 EEP204	Fundamentals of Power System Earthin Thermal Ratings & Heat Transfer Power System Load Flow Analysis	1-5 1-5	4 4 4	3 3 3 3 3 3 3	
EEP213	Statistics	1-5	4	3	
EEP203 EEP205 EEP208	Testing & Condition Monitoring Power System Fault Calculations Economic Analysis for Power Systems	6-10 6-10	4 4		
FFD010	Engineers	6-10	4	3 3	
EEP210	Abnormal System Voltages	6-10	4	3	
EEP206	Project Management	11-15	4	3 3	
EEP209 EEP218	Power System Harmonics Introduction to Automated System	11-15	4	3	
EEP219	Control & Supervisory Systems High Voltage Substation Equipment,	11-15	4	3	
	Power Transformers & Reactive Power Plant	11-15	4	3	
Semester 2					
EEP207 EEP211	Overhead Transmission Line Route Selection Basic Power System Protection	1-5 1-5	4 4	3 3	
EEP214	Risk Assessment in the Electricity	1.5	4	2	
EEP221 EEP212	Supply Industry Limits to Power System Stability Advanced Power System Protection	1-5 1-5 6-10	4 4 4	3 3 3 3 3 3 3	
EEP215	Reliability	6-10	4	3	
EEP216	Transmission Line Design - Electrical	6-10	4	3	
EEP223	Load Forecasting	6-10	4	3	
EEP217	Transmission Line Design - Mechanical	11-15	4	3	
EEP220 EEP222	Distribution Planning Maintenance of Electricity Supply	11-15	4	3	
EEP224	Systems Power System Operation	11-15 11-15	4 4	3 3	

### Graduate Diploma in Industrial Design (AR61)

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: Associate Professor Vesna Popovic

### **Entry Requirements**

To be eligible for admission, an applicant must:

(i) hold an approved degree or diploma from a recognised tertiary institution, or

(ii) have attained professional recognition by an equivalent course of study or examination.

#### **Professional Recognition**

The Graduate Diploma in Industrial Design has been accredited by the Design Institute of Australia (DIA). Graduates are eligible for Associate membership on graduation.

Full-Time (	Course Structure	Credit Points	Contact Hrs/Wk		
Semester 1					
ARP613 ARP642 ARP671 ARP672 ARP674 ARP676	Advanced Ergonomics 1 Case Studies History, Theory & Criticism of Industrial Design Industrial Design 1 Industrial Design Research 1 Advanced Computer-aided Industrial Design 1	2 4 2 16 20 4	1 2 1 6 8 2		
Semester 2					
ARP623 ARP652 ARP653 ARP673 ARP675 ARP677	Advanced Ergonomics 2 Design Management & Decision Theory Professional Practice Industrial Design 2 Industrial Design Research 2 Advanced Computer-aided Industrial Design 2	4 2 16 20 4	2 1 1 6 8 2		
Part-Time	Course Structure				
Year 1, Sen	nester 1				
ARP613 ARP671 ARP672 ARP676	Advanced Ergonomics 1 History, Theory & Criticism of Industrial Design Industrial Design 1 Advanced Computer-aided Industrial Design 1	2 2 16 4	1 1 6 2		
Year 1, Sen	nester 2				
ARP623 ARP673 ARP677	Advanced Ergonomics 2 Industrial Design 2 Advanced Computer-aided Industrial Design 2	4 16 4	2 6 2		
Year 2, Sen	Year 2, Semester 1				
ARP642 ARP674	Case Studies Industrial Design Research 1	4 20	2 8		
Year 2, Sen	nester 2				
ARP652 ARP653 ARP675	Design Management & Decision Theory Professional Practice Industrial Design Research 2	2 2 20	1 1 8		

# Graduate Diploma in Interior Design (AR62)

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: Mr Peter Hedley

#### **Entry Requirements**

To be eligible for admission, an applicant must:

- (i) hold an approved degree or diploma from a recognised tertiary institution, or
- (ii) have attained professional recognition by an equivalent course of study or examination.

#### **Professional Recognition**

The Graduate Diploma in Interior Design is currently being accredited by the Design Institute of Australia.

Full-Time	Course Structure	Credit Points	Contact Hrs/wk		
Semester 1					
ARP502 ARP506 ARP507 ARP601	Advanced Interior Design 1 Brief Development Professional Practice for Interior Designers Setting the Scene	18 8 12 10	7 2 4 3		
Semester 2					
ARP503 ARP604 ARP605 ARP606	Advanced Interior Design 2 Conservation of Historic Interiors Building Evaluation Elective Unit	18 14 8 8	6 6 2 2		
Part-Time Course Structure					
Year 1, Sei	nester 1				
ARP502 ARP506	Advanced Interior Design 1 Brief Development	18 8	7 2		
Year 1, Sei	nester 2				
ARP503 ARP605	Advanced Interior Design 2 Building Evaluation	18 8	6 2		
Year 2, Sei	mester 1				
ARP507 ARP601	Professional Practice for Interior Designers Setting the Scene	12 10	4 3		
Year 2, Sei	nester 2				
ARP604 ARP606	Conservation of Historic Interiors Elective Unit	14 8	6 2		

#### **Elective Units**

All electives undertaken must have the prior approval of the course coordinator.

# Graduate Diploma in Landscape Architecture (PS66)

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: Mr George Williams



# BUILT ENVIRONMENT ENGINEERING

#### **Entry Requirements**

To be eligible for normal admission, an applicant must:

- (i) hold a degree or diploma from a recognised tertiary institution, or
- (ii) have attained professional recognition by a course of study or examination.

Special entry provisions also apply. Prior to beginning studies in the course (but not necessarily prior to application for admission) applicants are required to have appropriate skills and knowledge in basic design/perception, free-hand graphics, and technical drawing.

Graduates of the Bachelor of Built Environment (Landscape Architecture) are credited with Year 1 (full-time) or Years 1 and 2 (part-time). Students from other backgrounds may be granted credit as appropriate to their education and experience.

#### **Professional Recognition**

The Graduate Diploma in Landscape Architecture is accredited by the Australian Institute of Landscape Architects.

Full-Time	Course Structure	Credit Points	Contact Hrs/Wk
Year 1, Se	mester 1		
PSP011 PSP210 PSP212 PSP220 PSP230	Conservation Theory History of Landscape Design User & Character Design Studies Introduction to Practice 1 Landscape Ecology 1	3 3 12 6 6 6 3 9	1 6 3 4 3 1 4
PSP240 PSP250 PSP251	Landscape Graphics 1 Map & Air Photo Interpretation Landscape Construction 1	8 3 9	3 1 4
Year 1, Se	mester 2		
PSP019 PSP213 PSP221 PSP232 PSP233 PSP241 PSP252	Planting Design Site Planning Introduction to Practice 2 Landscape Ecology 2 Impacts & Assessment Landscape Graphics 2 Landscape Construction 2	3 12 6 9 3 6 9	1 4 3 2 2 3
Year 2, Se	mester 1		
PSP214 PSP215 PSP222 PSP234 PSP242 PSP253	Residential Landscape Design Urban Landscape Design Landscape Practice 1 Landscape Management A Advanced Landscape Graphics Advanced Landscape Construction 1	12 12 6 6 6 6	3 3 2 4 2 3
Year 2, Se	mester 2		
PSP216 PSP217 PSP223 PSP235 PSP254 PSP260	Landscape Planning Landscape Design Landscape Practice 2 Landscape Management B Advanced Landscape Construction 2 School Field Trip	12 18 3 6 6 3	4 5 2 4 3 7-10 days

#### **Part-Time Course Structure**

Year 1, Ser	nester 1		
PSP210	History of Landscape Design	3	2
PSP220	Introduction to Practice 1	3 6 6 3	2 3 4 3
PSP230	Landscape Ecology 1	6	4
PSP240 PSP250	Landscape Graphics 1 Map & Air Photo Interpretation	3	3 1
		5	L
Year 1, Ser			
PSB019	Planting Design	3 6 9	1 3 3 2
PSP221 PSP232	Introduction to Practice 2 Landscape Ecology 2	0	3
PSP241	Landscape Graphics 2	6	2
Year 2, Ser	• •		
PSP011	Conservation Theory	3	1
PSP212	User & Character Design Studies	12	1 6
PSP251	Landscape Construction 1	-9	4
Year 2, Ser	nester 2		
PSP213	Site Planning	12	4
PSP233	Impacts & Assessment	3	4 2 3
PSP252	Landscape Construction 2	9	3
Year 3, Ser	nester 1		
PSP214	Residential Landscape Design	12	3
PSP242	Advanced Landscape Graphics	6	3 2 3
PSP253	Advanced Landscape Construction 1	6	3
Year 3, Ser	nester 2		
PSP216	Landscape Planning	12	4
PSP235	Landscape Management B	6	4 3
PSP254	Advanced Landscape Construction 2	6	3
Year 4, Ser	nester 1		
PSP215	Urban Landscape Design	12	3 2
PSP222	Landscape Practice 1	6	2 4
PSP234	Landscape Management A	6	4
Year 4, Ser	nester 2		
PSP217	Landscape Design	18	5
PSP223	Landscape Practice 2	3 3	2
PSP260	School Field Trip	3	7-10 days

Graduate Diploma in Municipal Engineering (CE63)

Location: Gardens Point campus

Course Duration: 2 years part-time

**Total Credit Points: 96** 

### Standard Credit Points/Part-Time Semester: 24

Course Coordinator: Mr Robin Black

#### **Entry Requirements**

#### NORMAL ENTRY

To be eligible for admission an applicant must hold an acceptable degree or diploma in engineering from a recognised institution.

#### QUALIFYING ENTRY

Applicants who do not meet the requirements for normal entry but who hold a degree or diploma in a technological field or other equivalent qualifications or hold professional engineering recognition may be required to complete such prerequisite engineering units as may be determined by the Head of the School of Civil Engineering prior to enrolment in the course.

#### **Course Structure**

The course has four majors. It consists of 40 credit points (10 semester hours) of core material common to all majors and a minimum of 56 credit points (14 semester hours) of material prescribed for majors. The majority of the units are common with the Master of Engineering Science (Civil) (CE74).

Students may transfer from the Graduate Diploma in Municipal Engineering to the Master of Engineering Science (Civil) providing they have obtained a grade point average of at least 5.0 after completion of 50 per cent of the coursework of the graduate diploma.

**Note:** In so doing, students must comply with rule 4.1.1 of the Student Rules which states 'for courses of up to and including one year of equivalent full-time study, credit may be given for a maximum of one half of the credit points required for course completion'.

Students who do not wish to undertake a major must complete the core units plus any combination of units from the majors totalling at least 56 credit points. Programs should be devised in consultation with the course coordinator.

Graduates who have completed the prescribed units for a major will have their award certificates and academic transcripts endorsed "Majoring in...".

Course St	ructure – All Majors	C <b>redit</b> Points	Contact Hrs/Wk
Year 1, Se CEP128	mester 1 Municipal Engineering Planning (offered even years)	12	3
CEP131	Engineering Management & Administration	12	3
Year 1, Se	mester 2		
CEP200 CEP361	Process Modelling	8 8	2 2 2
CEFJOI	Drainage Engineering (offered odd years) Unit chosen from major	8 8	2
Year 2, Se	mester 1		
	Units chosen from major	24	6
Year 2, Se	mester 2		
	Units chosen from major	24	6

		Year/ Semester of Offer	Credit Points	Contact Hrs/Wk
ENVIRON	MENTAL ENGINEERING MAJO	R (EVN)		
CEP172	Water Quality Engineering	even, 1	8	2
CEP174	Public Health Engineering Practice	odd, l	12	2 3 2 3 2 2
CEP276	Advanced Treatment Processes	odd, 2	8	2
CEP277	Waste Management	even, 2	12	3
CEP290	Environmental Law & Assessment	odd, 2	8 8	2
CHP691	Environmental Chemistry	even, 2	8	2
LOCAL GO	<b>OVERNMENT ENGINEERING M</b>	IAJOR (LGN)		
CEP107	Construction Management &	. ,		
	Economics	odd, 1	8	2
CEP109	Municipal Law & Regulations	even, 2	8	2 2 3 3
CEP127	Road & Traffic Engineering	odd, 1	12	3
CEP174	Public Health Engineering Practice	odd, l	12	3
Plus units to	otalling at least 16 credit points from	m any other ma	јог.*	
PUBLIC H	EALTH ENGINEERING MAJOR	(PHN)		
CEP172	Water Quality Engineering	even, 1	8	2
CEP174	Public Health Engineering Practice	odd, l	12	2 3 2 3
CEP276	Advanced Treatment Processes	oddd, 2	8	2
CEP277	Waste Management	even, 2	12	3
Plus units to	otalling at least 16 credit points from	m any other ma	jor.*	
TRANSPO	RTATION ENGINEERING MAJO	OR (TRN)		
CEP127	Road & Traffic Engineering	odd. 1	12	3
CEP215	Advanced Traffic Engineering	odd, 1 odd, 2	12	2
CEP218	Transportation Engineering	even, 1	12	3
CEP310	Urban Transportation Planning	even, 2	8	3 2 3 2
••			_	-

Plus units totalling at least 16 credit points from any other major.\*

# Graduate Diploma in Project Management (CN64)

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: Mr Andrew Leicester

#### **Entry Requirements**

To be eligible for admission an applicant must:

- (i) hold an approved degree or diploma from a recognised tertiary institution, or
- (ii) have attained professional recognition by an equivalent course of study or examination, and
- (iii) have a minimum of three years of relevant experience after graduation.

Where an equivalent course of study or examination cannot be readily established, an applicant, at the discretion of the Dean of Faculty, may be permitted to undertake a

\* Includes CEP491 Municipal Engineering Practice (16 credit points and 4 contact hours) which is available in any semester.

BUILT DNMENT

**Note:** It is strongly recommended that all graduate diploma students complete the unit IFN001 Advanced Information Retrieval Skills before commencing the course or early in Semester 1. The credit points of this unit will not be included in the total credit points which must be completed for the award of the graduate diploma.

#### PROJECT MANAGEMENT MAJOR

Full-Time	Course Structure	Credit Points	Contact Hrs/Wk
Semester 1			
CNP417 CNP426/1 CNP429/1 CNP430/1 CNP431/1 CNP433/1 CNP434	Design Management Project Development Cost Management & Economics Current Issues* Project Management* Project Management Law Time Management 1	6 6 9 6 6 6	2 2 3 2 2 2 2
Semester 2			
CNP426/2 CNP429/2 CNP430/2 CNP431/2 CNP433/2 CNP4337	Project Development Cost Management & Economics Current Issues* Project Management* Project Management Law Field Trip* Elective Unit	6 9 6 12 6	2 2 3 2 2 5 days
Part-Time	Course Structure		
Year 1, Se	mester 1		
CNP417 CNP429/1 CNP431/1 CNP434	Design Management Cost Management & Economics Project Management* Time Management 1	6 6 6 6	2 2 2 2
Year 1, Se	mester 2		
CNP429/2 CNP431/2 CNP437	Cost Management & Economics Project Management* Field Trip* Elective Unit	6 6 12 6	2 2 5 days
Year 2, Se	mester 1		
CNP426/1 CNP430/1 CNP433/1	Project Development Current Issues* Project Management Law	6 9 6	2 3 2
Year 2, Se	mester 2		
CNP426/2 CNP430/2 CNP433/2	Project Development Current Issues* Project Management Law	6 9 6	2 3 2
PROPERT	Y DEVELOPMENT MAJOR		
Full-Time	Course Structure		
Year 1, Sei	mester 1		
CNP422 CNP426/1 CNP430/1 * Compulso.	Specialist Valuation Project Development Current Issues* ry core unit.	6 6 9	2 2 3



CNP431/1 CNP433/1 CNP438/1 CNP439	Project Management* Project Management Law Real Estate Investment Analysis Property Management	6 6 6	2 2 2 2
Year 1, Sei	nester 2		
CNP426/2 CNP430/2 CNP431/2 CNP433/2 CNP437 CNP438/2 CNP667	Project Development Current Issues* Project Management* Project Management Law Field Trip* Real Estate Investment Analysis Applied Computing	6 9 6 12 6 6	2 3 2 5 days 2 2
Part-Time	Course Structure		
Year 1, Sei	nester 1		
CNP426/1 CNP431/1 CNP438/1	Project Development Project Management* Real Estate Investment Analysis	6 6 6	2 2 2
Year 1, Sei	nester 2		
CNP426/2 CNP431/2 CNP437 CNP438/2	Project Development Project Management* Field Trip* Real Estate Investment Analysis	6 6 12 6	2 2 5 days 2
Year 2, Sei	nester 1		
CNP422 CNP430/1 CNP433/1	Specialist Valuation Current Issues* Project Management Law	6 9 6	2 3 2
Year 2, Sei	nester 2		
CNP430/2 CNP433/2 CNP667	Current Issues* Project Management Law Applied Computing	9 6 6	3 2 2

# Graduate Diploma in Surveying Practice (PS68)

Location: Gardens Point campus

Course Duration: 1 year full-time (34 weeks)

**Total Credit Points: 96** 

Standard Credit Points/Full-Time Semester: 48

Course Coordinator: Mr Ian McGhie

#### **Professional Recognition**

Successful completion of the course leads to the award of Graduate Diploma in Surveying Practice, and licensing by the Surveyors Board of Queensland.

\* Compulsory core unit.

## **Entry Requirements**

#### NORMAL ENTRY

To be eligible for admission an applicant must hold the following:

- (i) a Bachelor of Applied Science (Surveying) degree from the Queensland University of Technology, or
- (ii) a Bachelor of Surveying degree from the University of Queensland, or
- (iii) from another tertiary institution a degree acceptable to the Surveyors Board of Queensland and considered by the Head of the School of Planning, Landscape Architecture and Surveying to be at least equivalent to QUT's Bachelor of Applied Science (Surveying) degree.

#### QUALIFYING ENTRY

Applicants who do not meet the requirements for normal entry but who hold a tertiary qualification in a technological field or other equivalent qualification may be required to complete such prerequisite surveying and other units as may be determined by the Head of School prior to enrolment in the course.

#### PRIOR PRACTICAL EXPERIENCE

It is desirable though not essential that applicants for admission have at least one year of practical experience in the practice of surveying following graduation.

Course Str	ucture	Credit Points	Contact Hrs/Wk
Semester 1			
PSP311 PSP312 PSP313 PSP314 PSP315	Professional Practice Management Survey Computing & Processing Survey Project Management Boundary Definition Surveys 1 Property Development Surveys	12 8 8 12 8	9 6 6 9 6
<b>Semester 2</b> PSP321 PSP322 PSP323 PSP324 PSP325	Spatial Information Systems Engineering Surveying Project Site Surveys Boundary Definition Surveys 2 Property Management Surveys	8 12 8 12 8	6 9 6 9 6

# Graduate Diploma in Urban and Regional Planning (PS67)

#### Location: Gardens Point campus

Course Duration: 2 years full-time, 3.5 years part-time

Total Credit Points: 192

#### Standard Credit Points/Full-Time Semester: 48

Course Coordinator: Dr Brian Hudson

#### **Entry Requirements**

To be eligible for admission, an applicant must:

- (i) hold a degree or diploma from a recongised tertiary institution, or
- (ii) have attained professional recognition by an equivalent course of study or examination.

#### Notes

Graduates of the Bachelor of Built Environment (Urban and Regional Planning) shall be credited with Year 1 (full-time) or Years 1 and 2 (part-time) of the course. Students from other backgrounds will be granted credit as appropriate to their education and experience.

Students who do not have basic graphics skills are required to attend a QUT graphics workshop/summer school before being permitted to enter the Graduate Diploma in Urban and Regional Planning program. Students must demonstrate competency in environmental studies prior to undertaking PSB001 Environmental Impacts.

Full-Time	Course Structure	Credit Points	Contact Hrs/Wk
Year 1, Se	mester 1		
COP115 PSB077 PSP003 PSP110 PSP112	Professional Communication Transport Planning Economics of Town Planning Site Planning Practice & Law Site Planning Methods	4 6 6 12 4	2 2 2 4 1
PSP113 PSP114 PSP115 Year 1, Se	Theory of Site Planning Introduction to Maps & Air Photos Planning Processes	4 4 8	1 1 2
ISB183 PSB059 PSB078 PSP001 PSP002 PSP063 PSP120 PSP126	Introduction to Computers in Planning Population & Urban Studies Urban Land Development Environmental Impacts History of Planning Housing & Community Services Urban Design Practice Urban Design Methods	4 6 6 4 6 12 4	 2 2 1 2 3 1
Year 2, Se	mester 1		
PSP130 PSP133 PSP134 PSP136 PSP137 PSP138	Planning Practice & Law (Urban) Rural Land Use & Planning Theories for Planning Regional Planning Methods Resource Management Computer Applications in Planning	12 4 12 6 8 6	4 1 3 2 2 2
Year 2, Se			
PSP060 PSP140 PSP144 PSP145 PSP146 PSP147 PSP150	School Field Trip Planning Practice & Law (Regional & Strategic) Urban Policy Implementation Social Planning Procedural Planning Theory Professional Procedures & Ethics Research Methods & Individual Project	4 12 4 4 4 16	7-10 days 4 1 1 1 1 2
Part-Time	Course Structure		
Year 1, Se	mester 1		
COP115 PSP110 PSP112 PSP113 PSP115	Professional Communication Site Planning Practice & Law Site Planning Methods Theory of Site Planning Planning Processes	4 12 4 4 8	2 4 1 2
Year 1, Se	mester 2		
ISB183 PSB059	Introduction to Computers in Planning Population & Urban Studies	4 6	1 2

PSP002 PSP120 PSP126	History of Planning Urban Design Practice Urban Design Methods	4 12 4	1 3 1
Year 2, Se	mester 1		
PSP003 PSP114 PSP134 PSP138	Economics of Town Planning Introduction to Maps & Air Photos Theories for Planning Computer Applications in Planning	6 4 12 6	2 1 3 2
Year 2, Se			
PSB078 PSP001 PSP060 PSP063 PSP145 PSP146	Urban Land Development Environmental Impacts School Field Trip Housing & Community Services Social Planning Procedural Planning Theory	6 6 4 6 4 4	2 2 7-10 days 2 1 1
Year 3, Se	mester 1		
PSB077 PSP130 PSP133 PSP136	Transport Planning Planning Practice & Law (Urban) Rural Land Use & Planning Regional Planning Methods	6 12 4 6	2 4 1 2
Year 3, Se	mester 2		
PSP140 PSP144 PSP147 PSP150	Planning Practice & Law (Regional & Strategic) Urban Policy Implementation Professional Procedures & Ethics Research Methods & Individual Project*	12 4 4	4 1 1
Year 4, Se	mester 1		
PSP137 PSP150	Resource Management Research Methods & Individual Project	<b>8</b> 16	2 2

# Graduate Diploma in Urban Design (PS69)

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

**Total Credit Points: 96** 

#### Standard Credit Points/Full-Time Semester: 48

Course Coordinator: Mr Danny O'Hare

#### **Entry Requirements**

#### NORMAL ENTRY

To be eligible for admission an applicant must hold a bachelor degree with a grade point average of 5.0 or better and demonstrated potential in a relevant professional activity, or a relevant graduate diploma with a grade point average of 5.0 or better, or a qualifying program with a grade point average of 5.0 or better.

#### GRADUATE DIPLOMA - MASTERS LEVEL ARTICULATION

Applicants are considered initially for acceptance in the Graduate Diploma in Urban Design. At the completion of one semester for full-time students and two semesters for those studying part-time, students will be considered for enrolment in the Master of Built Environment (Urban Design). A grade point average of 5.0 or better in the course is normally required for progression to the masters level.

\* Students attend classes but do not enrol in this semester. Individual Project is prepared and submitted in the next semester.



# Graduate Certificate in Electricity Supply Engineering (EE82)\*

Location: Gardens Point campus

Course Duration: 1 semester full-time, 1 year part-time

**Total Credit Points: 48** 

#### Standard Credit Points/Full-Time Semester: 48

Course Coordinator: Mr Ian Vosper

#### **Entry Requirements**

A Bachelor degree in Electrical Engineering with a study of power subjects to third year level.

Full-Time	Course Structure		Credit Points	Contact Hrs/Wk
Year 1, Sei	nester 1 Modules (12 of)		48	12
Part-Time	Course Structure			
Year 1, Sei	<b>nester 1</b> Modules (6 of)		24	6
Year 1, Sei	<b>mester 2</b> Modules (6 of)		24	6
Modules		Weeks	Credit Points	Contact Hrs/Wk
Semester 1				
EEP201 EEP202 EEP204 EEP213	Fundamentals of Power System Earthing Thermal Ratings & Heat Transfer Power System Load Flow Analysis Statistics	1-5 1-5 1-5 1-5	4 4 4 4	3 3 3 3
EEP203 EEP205 EEP208	Testing & Condition Monitoring Power System Fault Calculations Economic Analysis for Power Systems Engineers	6-10 6-10 6-10	4 4 4	3 3 3 3
EEP210	Abnormal Systems Voltages	6-10	4	
EEP206 EEP209 EEP218	Project Management Power System Harmonics Introduction to Automated System	11-15 11-15	4 4	33
EEP219	Control & Supervisory Systems High Voltage Substation Equipment, Power Transformers & Reactive	11-15	4	3

	Power Plant	11-15	4	3
Semester 2				
EEP207	Overhead Transmission Line Route			
	Selection	1-5	4	3
EEP211 EEP214	Basic Power System Protection Risk Assessment in the Electricity	1-5	4	3
	Supply Industry	1-5	4	3

\* Subject to final University approval.

EEP221	Limits to Power System Stability	1-5	4	3
EEP212 EEP215 EEP216 EEP223	Advanced Power System Protection Reliability Transmission Line Design-Electrical Load Forecasting	6-10 6-10 6-10 6-10	4 4 4 4	3 3 3 3
EEP217 EEP220 EEP222	Transmission Line Design-Mechanical Distribution Planning Maintenance of Electricity Supply	11-15 11-15	4 4	3 3
EEP224	Systems Power System Operation	11-15 11-15	4 4	3 3

# Graduate Certificate in Project Development (CN81)

With specialisations in: Construction Management, Project Management, Property Development, and Property Economics

Location: Gardens Point campus

Course Duration: 1 year part-time

**Total Credit Points: 48** 

Standard Credit Points/Part-Time Semester: 24

Course Coordinator: Mr Andrew Leicester

#### **Entry Requirements**

NORMAL ENTRY An applicant must:

- (i) hold a relevant degree or diploma from a recognised University, College of Advanced Education or approved tertiary institution, or
- (ii) hold degree-equivalent professional qualifications.

#### SPECIAL ENTRY

An applicant must:

- (i) have extensive, relevant, professional experience as determined by the course coordinator
- (ii) for the specialisations in Project Management and Property Development, have a minimum of three years relevant experience after graduation.

#### **Course Structure**

No exemptions are permitted. If a unit has been studied previously then an alternative should be selected.

If students have opted for the specialisations in Project Management or Property Development, after the successful completion of one graduate certificate, they may, on gaining admission to the Graduate Diploma in Project Management, complete a further 48 credit points in the same discipline with the guidance and approval of the course coordinator and be granted the graduate diploma in that discipline.

It should be noted that some units are available in concentrated format over a period of one, two or three days rather than in the standard format of two hours per week for one or two semesters. These will be run only if there is sufficient demand and will be self funding from fees charged. It is strongly recommended that all graduate certificate students complete the unit IFN001 Advanced Information Retrieval Skills prior to commencing the course or early in Semester 1. The credit point value of this unit is not included in the total credit points which must be completed to be awarded a graduate certificate.

CONSTRUCTION MANAGEMENT SPECIALISATION Students must complete a total of 48 credit points from the following units:

		Credit Points	Contact Hrs/Wk
Semester 1			
CNB601	Formwork Design & Construction	4	2
CNP426/1	Project Development	6	2
CNP429/1 CNP431/1	Cost Management & Economics	6 6 ·	22
CNP433/1	Project Management Project Management Law	6	2
CNP434	Time Management 1	6	2
	(Foreshadowed) Legal Studies	6	2
	Eegu Billoios	0	2
Semester 2			
CNP426/2	Project Development	6	2
CNP429/2	Cost Management & Economics	6	2 2 2
CNP431/2	Project Management	6	2
CNP433/2	Project Management Law	6	2
CNP667	Applied Computing	6	2
	(Foreshadowed)		
	Financial Management	6	2
	MANAGEMENT SPECIALISATION ust complete a total of 48 credit points from the f	following units	:
CNP417	Design Management	6	2
CNP426/1	Project Development	6	2
CNP429/1	Cost Management & Economics	6	2
CNP430/1	Current Issues	9	3
CNP431/1	Project Management	6	2
CNP433/1	Project Management Law	6	2 2 3 2 2 2 2
CNP434	Time Management 1	6	2
Semester 2			
CNP426/2	Project Development	6	2 2 3 2
CNP429/2	Cost Management & Economics	6	2
CNP430/2	Current Issues	9	3
CNP431/2	Project Management	6	2
CNP433/2	Project Management Law	6	2
CNP437	Field Trip	12	5 days
CNP667 PROPERT	Applied Computing Y DEVELOPMENT SPECIALISATION	6	2
Students m Semester 1	ust complete a total of 48 credit points from the t	following units	:
		6	2
CNP422	Specialist Valuations	6	2 2
CNP426/1	Project Development	6 9	2
CNP430/1	Current Issues Project Management	6	2 7
CNP431/1 CNP433/1	Project Management Project Management Law	6	2
CNP435/1 CNP438/1	Real Estate Investment Analysis	6	2
CNP439	Property Management	6	3 2 2 2 2
5414 157	- open / Bonnone	v	-

Semester 2			
CNP426/2 CNP430/2 CNP431/2 CNP433/2 CNP433/2	Project Development Current Issues Project Management Project Management Law Field Trip	6 9 6 6 12	2 3 2 2 5 days
CNP438/2 CNP667	Real Estate Investment Analysis Applied Computing	6 6	22
	Y ECONOMICS SPECIALISATION ist complete a total of 48 credit points from the fol	lowing units:	
CNP422 CNP426/1 CNP430/1 CNP431/1 CNP438/1 CNP439	Specialist Valuations Project Development Current Issues Project Management Real Estate Investment Analysis Property Management	6 6 9 6 6 6	2 2 3 2 2 2
Semester 2			
CNB471 CNB472 CNB564 CNB626 CNP426/2 CNP430/2 CNP431/2 CNP438/2 CNP667	Property Practice Law Property Taxation Issues Valuation 7 Land Development Studies Project Development Current Issues Project Management Real Estate Investment Analysis Applied Computing	8 8 4 6 9 6 6 6	2.5 2 3 2 2 3 2 2 2 2 2

Note: A Graduate Certificate in Project Development with no specialisation can also be taken by enrolling in 48 credit points from the following list:

#### Semester 1

CNB601	Formwork Design & Construction	4	2
CNP417	Design Management	6	2
CNP422	Specialist Valuations	6	2
CNP426/1	Project Development	6	2 2 2 2 2 3 2 2 2 2 2 2 2 2 2
CNP429/1	Cost Management & Economics	6	2
CNP430/1	Current Issues	9	3
CNP431/1	Project Management	6	2
CNP433/1	Project Management Law	6	2
CNP434	Time Management 1	6	2
CNP438/1	Real Estate Investment Analysis	6	2
CNP439	Property Management	6	2
Semester 2			
CNB471	Property Practice Law	8	2.5
CNB472	Property Taxation Issues	8	
CNB564	Valuation 7	8	3
CNB626	Land Development Studies	4	2
CNP426/2	Project Development	6	2
CNP429/2	Cost Management & Economics	6	2
CNP430/2	Current Issues	9	3
CNP431	Project Management	6	2 3 2 2 2 3 2 2 2 3 2 2
CNP433/2	Project Management Law	6	2
CNP437	Field Trip	12	5 days
CNP438/2	Real Estate Investment Analysis	Ĩ	2 ,2
CNP667	Applied Computing	ő	2 2
0,,,,,00,		0	

It is possible for other units to be taken with the prior approval of the course coordinator, in order that the specific needs of individual students are met.

# □ Course Requirements and Notes Relating to Undergraduate Courses

#### **Course Progression**

It is important that students follow as normal a progression through their courses as possible. Units should be taken in an orderly sequence as set out in published course structures. Units failed should be picked up in the next semester that they are offered. In order to maintain orderly progression through a course, a prerequisite requirement **may** be waived, if a student has attempted but not passed the prerequisite and the approval of the course coordinator has been obtained. This is considered to be a major concession. Students who have failed units or have doubts about having the necessary background to proceed, should seek the advice of the course coordinator.

#### Supplementary Assessment

It is not normally faculty policy to grant supplementary examinations. However, at the discretion of the Dean of the Faculty, supplementary or further assessment may be permitted in cases where a student is near to the completion of their course.

In such cases it is normal policy to award an 'A' (Result Unfinalised) and to give the student further assessment. Following satisfactory completion of this further assessment the highest grade which may normally be awarded is a grade of 3 (Pass Conceded).

#### **Field Trips**

Attendance at field trips or field projects in engineering courses is compulsory.

#### School of Civil Engineering Safety Shoes Policy

Students enrolled in units specified by the School of Civil Engineering will be required to wear safety shoes for some laboratory practicals and/or field trips. Students not wearing appropriate safety shoes on these occasions will be barred from (i) participating in activities in these units, and (ii) submitting any assessment associated with these activities. Hard hats and safety glasses/goggles will be supplied by the School of Civil Engineering if required.

#### Industrial Experience for Engineering and Surveying Courses

Industrial employment/practice forms part of the requirements of engineering and surveying degree courses, in order to provide a realistic background for formal academic studies and to ensure that students become effectively balanced in their professional development. For engineering students, it is a requirement of the Institution of Engineers, Australia, for graduate membership. Industrial employment/practice is undertaken during the long vacation or the mid-semester recess as an employee of a private firm, government agency or local authority.

Candidates must, not later than the fourth week of semester immediately following each period of industrial employment/practice, submit to the course coordinator (through the Faculty Office), a report in the required format describing the work carried out during the period of employment/practice and including an Industrial Experience Record Form signed by the employer. Industrial Experience Record Forms are available from the Faculty Industrial Employment Officer in Room 602 O Block, Gardens Point campus and also from the Faculty Office.

A candidate for the degree of **Bachelor of Engineering** must obtain at least 60 days of industrial employment/practice in an engineering environment approved by the course coordinator.

A candidate for the degree of **Bachelor of Applied Science** (Surveying) must obtain at least 90 days of industrial employment/practice in a surveying environment approved by the course coordinator.

Candidates in the **Bachelor of Engineering** (Aerospace Avionics) degree are required to obtain 10 days specialist experience in the avionics industry during the first year of their course as part of the industrial employment/practice requirement.

A candidate for an **Associate Diploma of Engineering** should refer to the relevant course structure for specific industrial employment/practice requirements for these courses.

#### ENROLMENT IN INDUSTRIAL EMPLOYMENT/PRACTICE

Students in the **Bachelor of Applied Science (Surveying)** and **Bachelor of Engineering** courses **should not formally enrol** in industrial employment/practice.

However students in Associate Diploma of Engineering courses must enrol in industrial experience units as these units carry credit points. For these students, the enrolment must be in the semester in which students expect to submit an Industrial Experience Record Form which will fulfil the minimum requirement of five weeks for the unit.

#### Industrial Experience for the Bachelor of Architecture Course

A candidate for the **Bachelor of Architecture** degree must be engaged in approved employment for at least 48 recognised weeks within the first 3 years (Approved employment A), and for at least 72 recognised weeks within the second 3 years (Approved Employment B).

- Approved employment' is defined as working under the direction of an architect who is registered within the place of practice where the experience is obtained. Experience in related areas, not exceeding 12 weeks in Approved Employment A, and 18 weeks in Approved Employment B may be granted. Periods of work experience of less than 8 recognised weeks continuous duration cannot be accredited.
- □ A 'recognised week' is a week of 5 days employment. During semester, when students normally work for 4 days per week, the 18 week semester (14 weeks in class and 4 weeks in examination), translates to 14.4 'recognised weeks'. This figure is rounded off to 14 weeks to take account of public holidays. Students in full employment would normally accumulate 40 recognised weeks in a calendar year.
- □ Candidates who are admitted directly into the course after the end of the third year must satisfy Approved Employment B only.
- □ Approved Employment A is normally a prerequisite for Approved Employment B.
- □ Candidates may accumulate up to 24 recognised weeks in Approved Employment A and 36 recognised weeks in Approved Employment B during periods of approved leave of absence from formal classes.
- □ Candidates must enrol in Approved Employment A in the second semester of third year and then cannot proceed to fourth year until this unit of employment is satisfied, unless a special dispensation is granted. Candidates must enrol in Approved Employment B in the second semester of sixth year and will not be eligible to graduate until this unit of employment is satisfied.
- Update reports on progress are required from candidates at the end of each semester and examination results may not be issued until they are submitted.

# Bachelor of Applied Science (Construction Management) (CN31)\*

Location: Gardens Point campus

Course Duration: 2 years full-time plus 2 years part-time, 6 years part-time

**Total Credit Points: 287** 

#### Standard Credit Points/Full-Time Semester: 48

Course Coordinator: Mr Gary Thomas

#### **Special Course Requirements**

A student registered in the part-time study program must be employed full-time by an approved building organisation or other approved body for three of the final four years of the course.

A student registered in the full-time study program must be similarly employed during the final two years part-time segment of the course.

Part-time study generally involves 11 to 12 hours per week and comprises a half-day release from employment with the remaining time spread over two or three nights between 5pm and 9.30pm.

For the first three years of the part-time course, a whole day release from employment is required.

Units are offered only once each year. This means that full-time students are required to attend part of their program in the evening.

Full-Time/	Full-Time/Part-Time Course Structure		Contact Hrs/Wk
Year 1, Sei	mester 1		
BNB001 CNB103 CNB145 CNB151 CNB342 COB163 MAB297 PSB904	Learning at University Material Science 1 Structures 1 Construction 1 Law 2 - Principles & Property Professional Writing Mathematics for Construction Surveying & Measuring	2 4 12 3 6 4 4	1.5 2 6 1.5 1.5 2 2 3
SSB908 Year 1, Sei	Behavioural Science mester 2	6	3
CNB104 CNB131 CNB146 CNB154 CNB343 CNB347 ISB180 PSB905	Material Science 2 Measurement of Construction 1A Structures 2 Construction 2 Economics of the Construction Industry Hygiene & Sanitation Computer Applications Project Survey	4 6 4 14 4 4 4 4 4	2 3 7 2 2 2 2 2
Year 2, Ser CNB013 CNB245 CNB247 CNB253	mester 1 Building Services 1 - HVAC Measurement of Construction 1B Material Science 3 Construction 3	4 6 4 10	2 3 2 5

\* See course requirements and notes relating to undergraduate courses.

CNB259 CNB403 CNB440/1 CNB442/1 CNB443 CNB601	Structures 3 Building Management 1 Law 3 - Building Contracts Valuation & Dilapidations Building Services 3 Formwork Design & Construction	4 3 4 5 4	2 2 1 2.5 2
Year 2, Ser	nester 2		
CNB014 CNB243 CNB246 CNB254 CNB404 CNB405 CNB440/2 CNB442/2 CNB446	Building Services 2 - Electrical Law 1 - Building Acts & Regulations Measurement of Construction 2B Construction 4 Building Management 2 Project Equipment & Safety Law 3 - Building Contracts Valuation & Dilapidations Estimating 1	4 5 8 12 4 4 3 2 5	2 2 4 6 2 2 1 1 2.5
		5	2.5
<b>Year 3, Sei</b> CNB341 CNB444	Building & Civil Engineering Construction Mechanical & Electrical Estimating OR	4 4	2 2
CNB501 CNB527 CNB540 CNB545	Elective Unit Building Management 3 PM2 - Quantitative Techniques Estimating 2 PM3 - Construction Planning Techniques 1	4 3 5 7	2 1.5 2.5 3.5
Year 3, Sei	mester 2		
CNB301 CNB502 CNB543 CNB548 CNB550	PM1 - Advanced Construction Methods Building Management 4 Law 4 - Torts & Arbitrations PM4 - Construction Planning Techniques 2 PM5 - Project Cost Control	4 4 3 8 6	2 2 1.5 4 3
Year 4, Se	mester 1		
CEB701	Civil Engineering Quantities 1 OR	4	2
CNB603 CNB623 CNB642 CNB656/1	Elective Unit Building Management 5 PM6 - Building Development Techniques 1 Applied Computer Techniques Building Research	4 4 4 6 8	2 2 3 4
Year 4, Se	mester 2		
CNB401 CNB606 CNB624 CNB643	Building Economics & Cost Planning PM8 - Land Development Studies PM7 - Building Development Techniques 2 Law 5 - Commercial Law OR	4 4 3	2 2 2 1.5
CNB656/2	Elective Unit Building Research	3 10	5
Part-Time	Course Structure		
Year 1, Se	mester 1		
BNB001 CNB103 CNB145 CNB151 MAB297	Learning at University Material Science 1 Structures 1 Construction 1 Mathematics for Construction	2 4 4 12 4	1.5 2 2 6 2

BUILT ENVIRONMENT & ENGINEERING

Year 1, Sen	nester 2		
CNB104	Material Science 2	4	2
CNB146	Structures 2	4	2
CNB154	Construction 2	14	7
COB163	Professional Writing	6	1.5
Year 2, Ser			
CNB005	Measurement of Construction 1	6	3
CNB247	Material Science 3	4	2
CNB253 CNB259	Construction 3	10	5 2
ISB180	Structures 3 Computer Applications	4	2
Year 2, Sen CNB006	Measurement of Construction 2	6	3
CNB243	Law 1 - Building Acts & Regulations	5	2
CNB254	Construction 4	12	6
Year 3, Ser	nastar 1		
CNB009	Measurement of Construction 3	4	2
CNB013	Building Services 1 - HVAC	4	$\overline{2}$
CNB341	Building & Civil Engineering Construction	4	2
CNB342	Law 2 - Principles & Property	3	1.5
PSB904	Surveying & Measuring	4	2
SSB908	Behavioural Science	6	3
Year 3, Sen	nester 2		
CNB010	Measurement of Construction 4	4	2
CNB014	Building Services 2 - Electrical	4	2
CNB347	Hygiene & Sanitation	4	2 2 2 2
CNB405 PSB905	Project Equipment & Safety Project Survey	4	2
	. ,	т	2
Year 4, Sen		,	2
CNB403 CNB440/1	Building Management 1	4	2 1
CNB440/1 CNB442/1	Law 3 - Building Contracts Valuation & Dilapidations	3 2	1
CNB443	Building Services 3	5	2.5
CNB444	Mechanical & Electrical Estimating	4	2
	OR	4	
CNB601	Elective Unit Formwork Design & Construction	4 4	2
	-	7	2
Year 4, Ser		,	2
CNB301 CNB343	PM1 - Advanced Construction Methods	4 4	2 2
CIADJ45	Economics of the Construction Industry OR	4	2
	Elective Unit	4	
CNB404	Building Management 2	4	2
CNB440/2	Law 3 - Building Contracts	3	1
CNB442/2	Valuation & Dilapidations	2 5	1
CNB446	Estimating 1	C	2.5
Year 5, Ser	nester 1		
CEB701	Civil Engineering Quantities 1	4	2
	OR Elective Unit	4	
CNB501	Building Management 3	4	2
CNB527	PM2 - Quantitative Techniques	3 5	1.5
CNB540	Estimating 2		2.5
CNB545	PM3 - Construction Planning Techniques 1	7	3.5

#### Year 5, Semester 2

1 car 5, 5 ci	nester 2		
CNB401 CNB502 CNB543	Building Economics & Cost Planning Building Management 4 Law 4 - Torts & Arbitrations	4 4 3	2 2 1.5
CNB548	PM4 - Construction Planning Techniques 2	8	4 3
CNB550	PM5 - Project Cost Control	6	3
Year 6, Ser	nester 1		
CNB603	Building Management 5	4	2
CNB623	PM6 - Building Development Techniques 1	4	2 2 3
CNB642	Applied Computer Techniques	6	3
CNB656/1	Building Research	8	4
Year 6, Ser	nester 2		
CNB606	PM8 - Land Development Studies	4	2
CNB624	PM7 - Building Development Techniques 2	4	2 2
CNB643	Law 5 - Commercial Law	3	1.5
	OR		
	Elective Unit	3	
CNB656/2	Building Research	10	5
	<b>e</b>		

#### **Elective Units**

Elective units may be taken from any other course offered by the University in consultation with the course coordinator.

# Bachelor of Applied Science (Property Economics) (CN32)\*

Location: Gardens Point campus

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

**Total Credit Points: 288** 

Standard Credit Points/Full-Time Semester: 50

Course Coordinator: Ms Lynne Armitage

#### **Professional Recognition**

Completion of the undergraduate course together with the related experience requirements make a graduate eligible for membership of the Australian Institute of Valuers and Land Economists, registration by the Valuers Registration Board of Queensland, and licensing as a real estate agent.

#### **Special Course Requirements**

A student registered in the part-time study program must be employed full-time in an approved organisation for three of the final four years of the course.

Part-time study generally involves 11 hours per week and comprises a half-day release from employment with the remaining time spread over two or three nights between 5pm and 9.30pm.

\* See course requirements and notes relating to undergraduate courses.

Full-Time Course Structure		Credit Points	Contact Hrs/Wk
Year 1, Se	mester 1		
BNB001	Learning at University	2	1.5
CNB161	Building Studies 1	14	5.5
CNB263	Valuation 1	7	3
CNB342	Law 2 - Principles & Property	3	1.5
COB163	Professional Writing	6	1,5
MAB298	Mathematics & Statistics	4	2
PSB060	Introduction to Economics	2	1
PSB902	Urban Planning 1	4	2
SSB908	Behavioural Science	6	3
Year 1, Se	mester 2		
CNB162	Building Studies 2	9	3.5
CNB166	Urban Economics	4	2
CNB268	Valuation 2	8	3
CNB362	Property Agency	8	3
CNB565	Land Management	8	3
CNB643	Law 5 - Commercial Law	3	1.5
ISB180	Computer Applications	4	2
PSB903	Urban Planning 2	4	2
Year 2, Se	mester 1		
CNB261	Building Studies 3	9	3
CNB363	Valuation 3	9	3
CNB367	Real Estate Accounting 1	9	3
CNB471	Property Practice Law	8	2.5
CNB665	Property Management 1	9 4	3
PSB904	Surveying & Measuring	4	2
Year 2, Se			
CNB262	Building Studies 4	8	3
CNB364	Valuation 4	8	3
CNB368	Real Estate Accounting 2	8	3
CNB567	Real Estate Market Analysis	4	2 2
CNB626	Land Development Studies	4	2
CNB666 CNB667	Property Management 2	8 8	3 3
	Applied Computer Techniques	0	3
Year 3, Sei		0	2
CNB464	Valuation 5 - Rural	8	3
CNB465 CNB561	Property Investment Analysis 1 Property Maintenance	8	3 3
CNB563	Statutory Valuation	8 8 5	3
CNB568	Real Estate Practice	5	2.5
CNB661	Research Dissertation 1	8	4
CNB663	Property Development 1	5	2
Year 3, Se	mester 2		
CNB466	Property Investment Analysis 2	8	3
CNB470	Valuation 6 - Rural	8	3
CNB472	Property Taxation Issues	8	2
CNB564	Valuation 7	8	3
CNB662	Research Dissertation 2	8	4
CNB664	Property Development 2	6	2
Part-Time	Course Structure		
Year 1, Ser	mester 1		
BNB001	Learning at University	2	1.5
CNB161	Building Studies 1	14	5.5

MAB298 PSB060	Mathematics & Statistics Introduction to Economics	4 2	2 1		
Year 1, Se	Year 1, Semester 2				
CNB162	Building Studies 2	9	3.5		
CNB166	Urban Economics	4			
CNB565	Land Management	8	2 3		
ISB180	Computer Applications	4	2		
Year 2, Se		_			
CNB261 CNB263	Building Studies 3	9 7	3 3		
CNB203 CNB342	Valuation 1 Law 2 - Principles & Property	3	1.5		
COB163	Professional Writing	6	1.5		
Vern 2 Ce	-				
Year 2, Se		0	2		
CNB262 CNB268	Building Studies 4 Valuation 2	8 8	3 3 3		
CNB362	Property Agency	8	3		
CNB626	Land Development Studies	4	2		
Year 3, Se	mester 1				
CNB363	Valuation 3	9	3		
CNB367	Real Estate Accounting 1	9	3		
PSB902	Urban Planning 1	4	2		
Year 3, Se	emester 2				
CNB364	Valuation 4	8	3		
CNB368	Real Estate Accounting 2	8	3		
CNB643	Law 5 - Commercial Law	3 4	1.5		
PSB903	Urban Planning 2	4	2		
Year 4, Se	mester 1				
CNB464	Valuation 5 - Rural	8	3		
CNB465	Property Investment Analysis 1	8	3 3		
SSB908 PSB904	Behavioural Science Surveying & Measuring	6 4	3 2		
		-	2		
Year 4, Se		_			
CNB466	Property Investment Analysis 2	8	3		
CNB470 CNB472	Valuation 6 - Rural Property Taxation Issues	8 8	3 2		
CIND472	Toporty Taxadon Issues	0	2		
Year 5, Se	mester 1				
CNB561	Property Maintenance	8 8	3 3		
CNB563 CNB568	Statutory Valuation Real Estate Practice	8 5	3 2.5		
		2	2.2		
Year 5, Se		_			
CNB564	Valuation 7	8	3		
CNB567 CNB667	Real Estate Market Analysis Applied Computer Techniques	4 8	2 3		
Year 6, Se		U	5		
CNB471	Property Practice Law	8	2.5		
CNB661	Research Dissertation 1	8			
CNB663	Property Development 1	5	4 2 3		
CNB665	Property Management 1	9	3		
Year 6, Se	mostor 7				
CNB662	Research Dissertation 2	8	4		
CNB664	Property Development 2	°	$\frac{1}{2}$		
CNB666	Property Management 2	8	2 3		

# BUILT ENVIRONMENT & ENCINFERING

# Bachelor of Applied Science (Quantity Surveying) (CN33)\*

Location: Gardens Point campus

Course Duration: 2 years full-time plus 2 years part-time, 6 years part-time

**Total Credit Points: 286** 

#### Standard Credit Points/Full-Time Semester: 48

Course Coordinator: Mr Don Campbell-Stewart

#### **Professional Recognition**

Completion of the Bachelor of Applied Science (Quantity Surveying) together with the related experience requirements enables a graduate to be eligible for membership of the Australian Institute of Quantity Surveying.

#### **Special Course Requirements**

A student registered in the part-time study program must be employed in a building or quantity surveying office under the direction of a qualified quantity surveyor for three of the final four years of the course.

A student registered in the full-time study program must be similarly employed during the final two year part-time segment of the course.

Part-time study generally involves 11-12 hours per week and comprises a half-day release from employment with the remaining time spread over two or three nights between 5pm and 9.30pm.

For the first three years of the part-time course, a whole day release from employment is required.

Units are offered only once each year. This means that full-time students are required to attend part of their program in the evening.

Full-Time/	Part-Time Course Structure	Credit Points	Contact Hrs/Wk
Year 1, Sei	mester 1		
BNB001 CNB103 CNB145 CNB151 CNB342 CNB442/1 CNB501 COB163 MAB297 PSB904	Learning at University Material Science 1 Structures 1 Construction 1 Law 2 - Principles & Property Valuation & Dilapidations Building Management 3 Professional Writing Mathematics for Construction Surveying & Measuring	2 4 12 3 4 4 6 4 4	1.5 2 6 1.5 2 1.5 2 2 2
Year 1, Sei	nester 2		
CNB104 CNB131 CNB146 CNB154 CNB343 CNB347 CNB442/2 ISB180	Material Science 2 Measurement of Construction 1A Structures 2 Construction 2 Economics of the Construction Industry Hygiene & Sanitation Valuation & Dilapidations Computer Applications	4 6 4 14 4 4 2 4	2 3 7 2 2 1 2

\* See course requirements and notes relating to undergraduate courses.



Year 2, Se	mester 1		
CNB013	Building Services 1 - HVAC	4	2
CNB245	Measurement of Construction 1B	6	3 2 5 2 2
CNB247	Material Science 3	4	2
CNB253 CNB259	Construction 3 Structures 3	10 4	2
CNB403	Building Management 1	4	$\frac{1}{2}$
CNB440/1	Law 3 - Building Contracts	3	1
CNB443	Building Services 3	5	2.5
CNB527	PM2 - Quantitative Techniques	3	1.5
Year 2, Se	mester 2		
CNB014	Building Services 2 - Electrical	4	2
CNB243	Law 1 - Building Acts & Regulations	5	2
CNB246	Measurement of Construction 2B	8	4
CNB254 CNB404	Construction 4 Building Management 2	12 4	6 2
CNB440/2	Law 3 - Building Contracts	3	1
CNB446	Estimating 1	3 5	2.5
CNB543	Law 4 - Torts & Arbitrations	3	1.5
CNB643	Law 5 - Commercial Law	3	1.5
	OR Elective Unit	3	
	Elective Onit	5	
Year 3, Sei			
CNB341	Building & Civil Engineering Construction	4	2
CNB444	Mechanical & Electrical Estimating OR	4	2
	Elective Unit	4	
CNB451	Computer Software Applications 1	4	2
CNB461	Measurement of Construction 5	3	1.5
CNB540	Estimating 2	5	2.5
CNB545	PM3 - Construction Planning Techniques 1	7	3.5
Year 3, Se	mester 2		
CNB301	PM1 - Advanced Construction Methods	4	2
CNB462	Measurement of Construction 6	3	1.5
CNB502 CNB520	Building Management 4 Specifications	4 3	2 1.5
CNB524	Measurement of Construction 7	4	2
CNB526	Post Contract Services 1	5	2.5
CNB552	Office Management	2	1
Year 4, Se	mester 1		
CNB603	Building Management 5	4	2
CEB701	Civil Engineering Quantities 1	4	2
CNB623	PM6 - Building Development Techniques 1	4	2
CNB647	Cost Planning & Cost Control 1	4	2
CNB653 CNB656/1	Post Contract Services 2 Building Research	5 8	2.5 4
	-	0	+
Year 4, Sei			
CEB901	Civil Engineering Quantities 2	4	2
CNB452 CNB624	Computer Software Applications 2 PM7 - Building Development Techniques 2	4 4	2
CNB624 CNB648	Cost Planning & Cost Control 2	4	2 2 2 5
CNB656/2	Building Research	10	5
	-		

BUILT ENVIRONMENT & ENGINEERING

## **Part-Time Course Structure**

Year 1, Ser	nester 1		
BNB001	Learning at University	2	1.5
CNB103	Material Science 1	4	2
CNB145 CNB151	Structures 1 Construction 1	4 12	2 6
MAB297	Mathematics for Construction	4	2
Year 1, Ser	nester 2		
CNB104	Material Science 2	4	2
CNB146	Structures 2	4	2
CNB154 COB163	Construction 2 Professional Writing	14 6	7 1.5
	U	0	1.3
Year 2, Ser		<i>(</i>	2
CNB005 CNB247	Measurement of Construction 1 Material Science 3	6 4	3 2
CNB253	Construction 3	10	5
CNB259	Structures 3	4	5 2
ISB180	Computer Applications	4	2
Year 2, Ser	nester 2		
CNB006	Measurement of Construction 2	6	3
CNB243	Law 1 - Building Acts & Regulations	5	2
CNB254	Construction 4	12	6
Year 3, Ser			
CNB009	Measurement of Construction 3	4	2
CNB013 CNB341	Building Services 1 - HVAC	4 4	2 2
CNB342	Building & Civil Engineering Construction Law 2 - Principles & Property	3	1.5
CNB442/1	Valuation & Dilapidations	4	2
PSB904	Surveying & Measuring	4	2
Year 3, Ser	nester 2		
CNB010	Measurement of Construction 4	4	2
CNB014	Building Services 2 - Electrical	4	2
CNB343	Economics of the Construction Industry OR	4	2
	Elective Unit	4	
CNB347	Hygiene & Sanitation	4	2
CNB442/2	Valuation & Dilapidations	2	1
CNB520	Specification	3	1.5
Year 4, Ser	nester 1		
CEB701	Civil Engineering Quantities 1	4	2
CNB403	Building Management 1	4	2
CNB440/1 CNB443	Law 3 - Building Contracts Building Services 3	3	1 2.5
CNB451	Computer Software Applications 1	4	2.5
CNB461	Measurement of Construction 5	3	1.5
Year 4, Ser	nester 2		
CEB901	Civil Engineering Quantities 2	4	2
CNB301	PM1 - Advanced Construction Methods	4	2 2
CNB404 CNB440/2	Building Management 2	4	2
CNB440/2 CNB446	Law 3 - Building Contracts Estimating 1	3 5	$\frac{1}{2.5}$
CNB462	Measurement of Construction 6	3	1.5

Year 5, Semester 1			
CNB444	Mechanical & Electrical Estimating	4	2
CNB501 CNB527 CNB540 CNB545	OR Elective Unit Building Management 3 PM2 - Quantitative Techniques Estimating 2 PM3 - Construction Planning Techniques 1	4 4 3 5 7	2 1.5 2.5 3.5
Year 5, Se	mester 2		
CNB502 CNB524 CNB526 CNB543 CNB552 CNB643	Building Management 4 Measurement of Construction 7 Post Contract Services 1 Law 4 - Torts & Arbitrations Office Management Law 5 - Commercial Law OR Elective Unit	4 4 5 3 2 3 3	2 2.5 1.5 1 1.5
Year 6, Se	mester 1		
CNB603 CNB623 CNB647 CNB653 CNB656/1	Building Management 5 PM6 - Building Development Techniques 1 Cost Planning & Cost Control 1 Post Contract Services 2 Building Research	4 4 4 5 8	2 2 2.5 4
Year 6, Semester 2			
CNB452 CNB624 CNB648 CNB656/2	Computer Software Applications 2 PM7 - Building Development Techniques 2 Cost Planning & Cost Control 2 Building Research	4 4 4 10	2 2 2 5

### **Elective Units**

Elective units may be taken from any other course offered by the University in consultation with the course coordinator.

# Bachelor of Applied Science (Surveying) (SV34)\*

**Course Discontinued:** This course has been replaced by the Bachelor of Surveying (PS47). There will be no intake into the Bachelor of Applied Science (Surveying) (SV34) in 1994. Years 2 and 3 are offered to continuing students only.

Location: Gardens Point campus

Course Duration: 3 years full-time

**Total Credit Points: 290** 

Standard Credit Points/Full-Time Semester: 48

Course Coordinator: Mr Jim Glasscock

#### **Professional Recognition**

This degree meets the educational requirements for registration and licensing by the Surveyors Board of Queensland and also satisfies the academic requirements for admission as a member of both the Institution of Surveyors (Australia) and the Australian Institute of Cartographers.

\* See course requirements and notes relating to undergraduate courses.

#### **Special Course Requirements**

Students must obtain at least 90 days of industrial employment/practice in a surveying environment approved by the course coordinator.

Students must, not later than the fourth week of semester immediately following each period of industrial employment/practice, submit to the course coordinator a report or diary in the required format, describing the work carried out during the period of employment/practice and including an Industrial Experience Record Form signed by the employer. Industrial Experience Record Forms are available from the School Office, Faculty Industrial Employment Officer in Room 602 O Block, Gardens Point campus and also from the Faculty Office. Should employment exceed the minimum required, it is strongly recommended that these details also be recorded in the report or diaries and certified by the employer as a record of experience which may be used when seeking registration or licensing by the Surveyors Board.

Students should not formally enrol in industrial employment/practice.

Students may be required to attend camps off-campus and/or practical sessions in the Moreton region.

Full-Time	Course Structure	Credit Points	Contact Hrs/Wk
Cartograph	At the end of Year 1 students must select either the Cartography or Surveying Major and must obtain vacation practice in that area.		
SURVEYI Year 2, Ser	NG MAJOR nester 1		
MAB795 PHB170 SVB311 SVB331 SVB393 SVB473 SVB573	Survey Mathematics 3 Physics for Surveyors Data Presentation 3 Observations & Adjustments 1 Land Surveying 3 Land Information Systems 1 Land Administration 3	6 12 5 4 10 5 6	3 6 3 2 5 3 3
Year 2, Se	nester 2		
CEB364 SVB343 SVB412 SVB430 SVB431 SVB431 SVB442 SVB451 SVB574	Engineering Science 2 Photogrammetry 1 Cartographic Practice Land Surveying 4 Observations & Adjustments 2 Geodetic Computations Land Studies B Land Administration 4	6 5 9 4 9 5 4	3 3 4 2 4 3 2
Year 3, Sei	nester 1		
PSB315 SVB443 SVB535 SVB551 SVB561 SVB563 SVB571 SVB683/1	Land Administration 1 Photogrammetry 2 Land Surveying 5 Land Valuation Land Development Practice 1 Land Information Systems 2 Cadastre Project	6 11 5 6 10 4 4 4	3 6 3 6 2 2 1
Year 3, Sei	nester 2		
SVB636 SVB639 SVB640	Land Surveying 6 Observations & Adjustments 3 Geodesy	6 4 6	3 2 3

SVB664 SVB680 SVB682 SVB683/2	Land Development Practice 2 Professional Practice Seminar 2 Project Two Elective Units	10 6 2 4 10	6 3 1 1 6
	APHY MAJOR		
Year 2, Set MAB795 PHB170 SVB311 SVB331 SVB473 SVB573 SVB573 SVB911	Survey Mathematics 3 Physics for Surveyors Data Presentation 3 Observations & Adjustments 1 Land Information Systems 1 Land Administration 3 Graphic Design 1	6 12 5 4 5 6 10	3 6 3 2 3 3 5
Year 2, Se	mester 2		
SVB343 SVB412 SVB431 SVB442 SVB451 SVB574 SVB912	Photogrammetry 1 Cartographic Practice Observations & Adjustments 2 Geodetic Computations Land Studies B Land Administration 4 Graphic Design 2	6 5 4 9 5 4 9	3 3 2 4 3 2 4
Year 3, Se	mester 1		
PSB315 SVB443 SVB561 SVB563 SVB571 SVB685/1	Land Administration 1 Photogrammetry 2 Land Development Practice 1 Land Information Systems 2 Cadastre Project	6 11 10 4 4 8	3 6 2 2 4
Year 3, Se	mester 2		
SVB639 SVB664 SVB680 SVB682 SVB685/2	Observations & Adjustments 3 Land Development Practice 2 Professional Practice Seminar 2 Project Two Elective Units	4 10 6 2 8 10	2 6 3 1 4 6
Elective U	nits		
CEB504 PSB347 SVB643 SVB645 SVB670 SVB684 SVB694	Engineering Science 3 Topics in Engineering Surveying Photogrammetry 3 Remote Sensing Land Administration 5 Map Production Planning Geodesy 2	5 5 5 5 5 5 5	3 3 3 3 3 3 3 3 3

# Bachelor of Architecture (AR48)\*

Location: Gardens Point campus

Course Duration: 6 years part-time

**Total Credit Points: 384** 

#### Standard Credit Points/Part-Time Semester: 32

#### Course Coordinator: Mr Dan Nutter

\* See course requirements and notes relating to undergraduate courses.

#### **Professional Recognition**

On completion of the course and one years' postgraduate practical experience, graduates are eligible to apply for associate membership of the Royal Australian Institute of Architects and are eligible to apply to sit for the registration examination conducted by the Board of Architects of Queensland.

#### **Special Course Requirements**

A Bachelor of Architecture student must be engaged in approved employment for at least 48 recognised weeks within the first 3 years (Approved Employment A) and for at least 72 recognised weeks within the second 3 years (Approved Employment B).

'Approved employment' is defined as working under the direction of an architect who is registered within the place of practice where the experience is obtained. Experience in related areas not exceeding 12 weeks in Approved Employment A and 18 weeks in Approved Employment B may be granted. Periods of work experience of less than 8 recognised weeks continuous duration cannot be accredited.

A 'recognised week' is a week of 5 days employment. During semester, when students normally work for 4 days per week, the 18 week semester (14 weeks in class and 4 weeks in examination) translates to 14.4 'recognised weeks'. This figure is rounded off to 14 weeks to take account of public holidays. Students in full employment would normally accumulate 40 recognised weeks in a calendar year.

Approved Employment A is normally a pre-requisite for Approved Employment B.

Students may accumulate up to 24 recognised weeks in Approved Employment A and 36 recognised weeks in Approved Employment B during periods of approved leave of absence from formal classes.

Students must enrol in Approved Employment A in the second semester of third year and then cannot proceed to fourth year until this unit of employment is satisfied, unless a special dispensation is granted. Students must enrol in Approved Employment B in the second semester of sixth year and will not be eligible to graduate until this unit of employment is satisfied.

Students who are admitted directly into the course after the end of the third year must satisfy Approved Employment B only.

Update reports on progress are required from students at the end of each semester and examination results may not be issued until they are submitted.

Part-Time Course Structure		Credit Points	Contact Hrs/Wk
Year 1, Se	mester 1		
ARB140 ARB191 ARB195 ARB197 COB163	Introductory Design 1 The Human Environment 1 Technology 1 History of Architecture & Art 1 Professional Writing	16 4 4 2 6	8 2 2.5 1 1.5
Year 1, Se	mester 2		
ARB192 ARB196 ARB198 ARB248	The Human Environment 2 Technology 2 History of Architecture & Art 2 Introductory Design 2	4 6 2 18	2 3 1 9

Year 2, Se	mester 1		
ARB289	Design Science 1	2	1
ARB291	The Human Environment 3	4	2
ARB295	Building Construction 1	4	2
ARB299	Introduction to Computing 1	2	1
ARB340	Architectural Design 1	18	7
CEB359	Principles of Structures 1	2	1
Year 2, Se			
ARB288	Design Science 2	2	1
ARB290	Introduction to Computing 2	2 2 4	1
ARB292 ARB296	The Human Environment 4 Building Construction 2	4	2
ARB440	Architectural Design 2	16	6
CEB459	Principles of Structures 2	4	ž
Year 3, Se	mester 1		
ARB389	Design Science 3	4	2
ARB391	Building Services 1	4	1.5
ARB395	Building Construction 3	3	1.5
ARB540	Architectural Design 3	18	6
CEB559	Principles of Structures 3	3	2
Year 3, Se	mester 2		
ARB388	Design Science 4	2	1
ARB392	Building Services 2	2 3	1.5
ARB396	Building Construction 4	3	1.5
ARB640	Architectural Design 4	18	6
ARB646 CEB659	Law of the Built Environment Principles of Structures 4	4	2 2
ARB795	Approved Employment A	4	2
Year 4, Se			
ARB480/1	Design 7	16	¢
ARB480/1 ARB481/1	Professional Studies 1	16 6	5 3 1
ARB491/1	History of Architecture & Art 3	2	1
ARB497/1	Advanced Technology	4	2
ARB590	Elective 1A	4	2
Year 4, Se	mester 2		
ARB480/2	Design 7	16	5
ARB481/2	Professional Studies 1	6	5 3
ARB491/2	History of Architecture & Art 3	2	1
ARB497/2 ARB598	Advanced Technology	4	2 2
AKDJ90	Elective 1B	4	2
Year 5, Sei			
ARB580/1	Design 8	18	6
ARB591/1 ARB595/1	History of Architecture & Art 4 Professional Studies 2	2 8	1
ARB663	Research Methods	8 4	4 2
Voor E Co	mostor 2		-
Year 5, Sei			
ARB580/2	Design 8 History of Architecture & Art 4	18	6
ARB591/2 ARB595/2	History of Architecture & Art 4 Professional Studies 2	2 8	1 4
ARB664	Architectural Research 1	8 4	2
Year 6, Se			-
		~ .	<i>r</i>
ARB647 ARB681/1	Architectural Research 2 Professional Studies 3	24 8	6 2
1000011	r rorossioliui oragios D	0	4

BUILT ENVIRONMENT

#### Year 6, Semester 2

ARB681/2	Professional Studies 3
ARB690	Architectural Project
ARB796	Approved Employment B

8	2
24	6

# **Bachelor of Architecture (AR41)**

**Course Discontinued:** No further intakes. Years 2 to 6 are offered to continuing students only.

Location: Gardens Point campus

Course Duration: 6 years part-time

**Total Credit Points: 288** 

#### Standard Credit Points/Part-Time Semester: 24

Course Coordinator: Mr Dan Nutter

#### **Professional Recognition**

On completion of the course and one years postgraduate practical experience graduates are eligible for associate membership of the Royal Australian Institute of Architects and are eligible to sit for the registration examination conducted by the Board of Architects of Queensland.

### **Special Course Requirements**

- (i) Except as provided in (ii) below, a student must be engaged in approved employment for 11 months per year for four of the six years of the course, including one of the two final years. Approved employment is defined as working under the direction of an architect or, for a period not exceeding six months, gaining experience in a related field approved by the Head of School. Students should work under the same employer for at least six months. Students **must enrol** in approved employment units in the semester (or summer school period) in which they expect to finalise the specific approved employment unit involved, so that they can be credited with a result for the unit. All necessary documentation must be forwarded to the course coordinator in time for the unit to be finalised by the end of the semester in which the student is enrolled.
- (ii) A student who is admitted with advanced standing and who is granted exemption from all units in the first three years of the course may be granted exemption from the unit ARB791 Approved Employment 1.

Part-Time Course Structure		Credit Points	Contact Hrs/Wk
Year 2, Se	mester 1		
ARB289	Design Science 1	2	1
ARB291	The Human Environment 3	4	2
ARB293	Design 3	10	5
ARB295	Building Construction 1	4	2
ARB299	Introduction to Computing 1	2	1
CEB359	Principles of Structures 1	2	1

## Year 2, Semester 2

Year 2, Sei	mester 2		
ARB288	Design Science 2	2	1
ARB290	Introduction to Computing 2	2	1
ARB292 ARB294	The Human Environment 4 Design 4	4 8	2 4
ARB296	Building Construction 2	o 4	2
CEB459	Principles of Structures 2	4	$\frac{2}{2}$
Year 3, Sei	mester 1		
ARB389	Design Science 3	4	2
ARB391	Building Services 1	4	1.5
ARB393	Design 5	8	4
ARB395 ARB544	Building Construction 3	3 2	1.5
CEB559	Landscape Architecture in the Built Environment Principles of Structures 3	3	1
Year 3, Sei	mester 2		
ARB388	Design Science 4	2	1
ARB392	Building Services 2	3	i.5
ARB394	Design 6	8	4
ARB396	Building Construction 4	3	1.5
ARB646	Law of the Built Environment	4	2
CEB659	Principles of Structures 4	4	2
Year 4, Se	mester 1		
ARB491/1	History of Architecture & Art 3	2	1
ARB493/1	Design 7	10	5
ARB495/1 ARB497/1	Professional Studies 1 Advanced Technology	8 4	4 2
	•;	4	Z
Year 4, Sei		-	
ARB491/2	History of Architecture & Art 3	2	1
ARB493/2 ARB495/2	Design 7 Professional Studies 1	10 8	5 4
ARB497/2	Advanced Technology	4	2
Year 5, Sei			_
ARB591/1	History of Architecture & Art 4	2	1
ARB593/1	Design 8	10	5
ARB595/1	Professional Studies 2	8	4
ARB590	Elective 1A	4	2
Year 5, Sei			
ARB591/2	History of Architecture & Art 4	2	1
ARB593/2	Design 8	10	5
ARB595/2 ARB598	Professional Studies 2 Elective 1B	8 4	4 2
		4	2
Year 6, Sei			
ARB693	Design 9 Destruction 2	16	5 2
ARB695/1 ARB697/1	Professional Studies 3 Elective 2	4 4	2
		7	2
Year 6, Sei			2
ARB695/2 ARB697/2	Professional Studies 3 Elective 2	4 20	2 5
110307112		20	J

## **Approved Employment Units**

ARB791	Approved Employment 1
ARB792	Approved Employment 2
ARB793	Approved Employment 3
ARB794	Approved Employment 4

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# Bachelor of Built Environment (BN30)\*

With majors in: Architectural Studies, Industrial Design, Interior Design, Landscape Architecture, and Urban and Regional Planning

Location: Gardens Point campus

Course Duration: 3 years full-time

**Total Credit Points: 288** 

#### Standard Credit Points/Full-Time Semester: 48

Course Coordinator: Professor Bill Lim

#### **Majors Coordinators:**

Architectural Studies – Mr Dan Nutter Industrial Design – Associate Professor Vesna Popovic Interior Design – Mr Peter Hedley Landscape Architecture – Ms Delwynn Poulton Urban and Regional Planning – Ms Janelle Brown

#### **Professional Recognition**

#### ARCHITECTURAL STUDIES MAJOR

The Bachelor of Built Environment (Architectural Studies) must be completed before students are eligible to apply for entry to the fourth year of the part-time Bachelor of Architecture course.

Upon completion of the final three years of the Bachelor of Architecture course, during which time students have been employed in an approved professional practice for a minimum of 72 recognised weeks, the academic requirements for membership of professional bodies are met.

#### INDUSTRIAL DESIGN MAJOR

Successful completion of the Bachelor of Built Environment (Industrial Design) satisfies the entry requirement for the Graduate Diploma in Industrial Design, graduates of which are eligible for Associate Membership of the Design Institute of Australia.

#### INTERIOR DESIGN MAJOR

Successful completion of the Bachelor of Built Environment (Interior Design) satisfies the requirements for entry into the Graduate Diploma in Interior Design, which is presently undergoing accreditation by the Design Institute of Australia.

#### LANDSCAPE ARCHITECTURE MAJOR

Successful performance in the Bachelor of Built Environment (Landscape Architecture) enables students to gain entry to the Graduate Diploma course. The Graduate Diploma in Landscape Architecture is the only course in Landscape Architecture in Queensland, and one of the courses in Landscape Architecture accredited by the Australian Institute of Landscape Architects.

#### URBAN AND REGIONAL PLANNING MAJOR

Successful completion of the Bachelor of Built Environment (Urban and Regional Planning) enables students to gain entry to the Graduate Diploma in Urban and Regional Planning, which is fully accredited by the Royal Australian Planning Institute.

\* See course requirements and notes relating to undergraduate courses.



Full-Time	Course Structure	Credit Points	Contact Hrs/Wk	
	CTURAL STUDIES MAJOR			
Year 1, Se				
ARB140	Introductory Design 1	16	8 2 3 4	
ARB141	The Human Environment 1 History of the Built Environment 1	4 6	2	
ARB147 ARB199	Technology 1	8	4	
BNB001	Learning at University	2	1.5	
COB163	Professional Writing	6	1.5	
MAB181	Applied Mathematics for Designers 1	6	3	
Year 1, Se				
ARB241	History of the Built Environment 2	6	3	
ARB242	Technology 2	14	5 9 2	
ARB248	Introductory Design 2 The Human Environment 2	18 6	9	
ARB249 PSB054	Environmental Science	4	$\frac{2}{2}$	<u></u> ∎ Man
		•	2	BUILI ENVIRONMENI
Year 2, Semester 1				
ARB289 ARB291	Design Science 1 The Human Environment 3	2 4	t 2	2
ARB299	Introduction to Computing 1	2	1	
ARB340	Architectural Design 1	18	ź	
ARB341	Building Construction 1	16	6	
ARB343	Visual Communication for Architects 1	4	2	
CEB359	Principles of Structures 1	2	1	
Year 2, Semester 2				
ARB288	Design Science 2	2	1	
ARB290	Introduction to Computing 2 The Human Environment 4	2 4	1 2	
ARB292 ARB440	Architectural Design 2	16	6	
ARB441	Building Construction 2	16	6	
ARB443	Visual Communication for Architects 2	4	2 2	
CEB459	Principles of Structures 2	4	2	
Year 3, Se				
ARB389	Design Science 3	4	2	
ARB391	Building Services 1	4	1.5	
ARB540	Architectural Design 3 Building Construction 3	18	6 6.5	
ARB541 ARB544	Building Construction 3 Landscape Architecture in the Built Environment	17 2	0.5 1	
CEB559	Principles of Structures 3	3	2	
Year 3, Se	mester 2			
	Design Science 4	2	1	
ARB392	Building Services 2	3	Î.5	
ARB640	Architectural Design 4	18	6	
ARB641	Building Construction 4	17	6.5	
ARB646 CEB659	Law of the Built Environment Principles of Structures 4	4 4	2 2	
	IAL DESIGN MAJOR	-	L	
ARB140	Introductory Design 1	16	8	
ARB140 ARB141	The Human Environment 1	4	2	
ARB147	History of the Built Environment 1	6	3	
ARB151	Design Technology & Society	2 2	1	
BNB001	Learning at University	2	1.5	
COB163 MAB181	Professional Writing Applied Mathematics for Designers 1	6 6	1.5 3	
PHB144	Applied Mathematics for Designers 1 Applied Science for Designers 1	6	3	

#### Year 1, Semester 2 ARB241 History of the Built Environment 2 6 **ARB248** Introductory Design 2 18 ARB249 The Human Environment 2 6 ARB251 Ergonomics for Industrial Designers 1 4 **CHB292** Applied Science for Designers 2 4 **MAB196** Quantitative Methods 2 6 **PSB054** Environmental Science 4 Year 2, Semester 1 ARB291 The Human Environment 3 4 ARB350 Industrial Design 1 18 ARB351 Ergonomics for Industrial Designers 2 4 **ARB352** Visual Communication for Industrial Designers 1 4 **ARB353** Manufacturing Technology 1 14 ARB354 Computer-aided Industrial Design 1 4 Year 2, Semester 2 **ARB292** The Human Environment 4 4 **ARB444** 2 Environmental Impact **ARB450** 20 Industrial Design 2 ARB452 Visual Communication for Industrial Designers 2 4 ARB453 Manufacturing Technology 2 10 Computer-aided Industrial Design 2 ARB454 4 **MEB010 Dynamics** 1 4 Year 3, Semester 1 ARB550 Industrial Design 3 20 **ARB552** Visual Communication for Industrial Designers 3 4 ARB553 Manufacturing Technology 3 8 ARB554 Computer-aided Industrial Design 3 4 ARB555 Economics of Industrial Production 4 ARB556 Product Analysis & Development 4 **MEB012** Dynamics 2 4 Year 3, Semester 2 ARB646 Law of the Built Environment 4 ARB650 Industrial Design 4 20 ARB652 Visual Communication for Industrial Designers 4 4 ARB653 Manufacturing Technology 4 14 ARB654 Computer-aided Industrial Design 4 6 INTERIOR DESIGN MAJOR Year 1, Semester 1 **ARB140** Introductory Design 1 16 ARB141 The Human Environment 1 4 **ARB146** Introduction to Interior Technology 1 6 ARB147 History of the Built Environment 1 6 ARB161 Light & Colour Studies 8 BNB001 Learning at University 2 COB163 **Professional Writing** 6 Year 1, Semester 2 ARB241 3 5 History of the Built Environment 2 6 ARB246 Introduction to Interior Technology 2 14 ARB248 Introductory Design 2 18 **ARB249** The Human Environment 2 6 **PSB054 Environmental Science** 4 Year 2, Semester 1 ARB291 The Human Environment 3 4 ARB360 Interior Design 1 18

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ARB362 ARB363	Furniture & Fittings 1 Visual Communication for Interior Designers 1	4 4	2 2
Year 2, Se	mester 2		
ARB292 ARB444 ARB460 ARB461 ARB462 ARB463	The Human Environment 4 Environmental Impact Interior Design 2 Interior Technology 2 Furniture & Fittings 2 Visual Communication for Interior Designers 2	4 2 16 16 6 4	2 1 7 6 2 2
Year 3, Se	mester 1		
ARB560 ARB561 ARB562 ARB563	Interior Design 3 Interior Technology 3 Furniture & Fittings 3 Visual Communication for Interior Designers 3	20 16 8 4	6 7 2 2
Year 3, Se	mester 2		
ARB646 ARB660 ARB661 ARB662 ARB663	Law of the Built Environment Interior Design 4 Interior Technology 4 Furniture & Fittings 4 Research Methods	4 18 14 8 4	2 6 2 2
LANDSCA	<b>PE ARCHITECTURE MAJOR</b>		
Year 1, Se			
BNB001 COB163 MAB195 PHB144 PSB010 PSB016 PSB050 PSB070	Learning at University Professional Writing Quantitative Methods 1 Applied Science for Designers 1 Introductory Design 1 History of the Built Environment 1 The Human Environment 1 Map & Air Photo Interpretation	2 6 6 12 6 4 2	1.5 1.5 3 6 3 2 1
Year 1, Se			
CHB292 MAB196 PSB011 PSB017 PSB051 PSB054 PSB056	Applied Science for Designers 2 Quantitative Methods 2 Introductory Design 2 History of the Built Environment 2 The Human Environment 2 Environmental Science Applied Land Science for Designers	4 6 20 8 6 4 4	2 3 10 3 2 2 1
Year 2, Se	mester 1		
PSB012 PSB030 PSB040 PSB052 PSB057 PSB071	Planning & Landscape Design 1 Introduction to the Professions Graphic Communication The Human Environment 3 Landscape Ecology 1 Site Measurement	21 3 6 6 8 4	9 1 3 4 1
Year 2, Se	mester 2		
PSB013 PSB053 PSB058 PSB059 PSB060 PSB072 PSB073	Planning & Landscape Design 2 The Human Environment 4 Landscape Ecology 2 Population & Urban Studies Introduction to Economics Design Science Computer Techniques	20 4 8 6 2 4 4	6 2 3 2 1 2 2

BUILT ENVIRONMENT & ENGINEERING

### Year 3, Semester 1

Year 3, Se	mester 1		
PSB014	Planning & Landscape Design 3	20	6
PSB018	Land Use Generation	4	2
PSB041	Report Preparation	2	1
PSB230	Quantities & Costs	2	1
PSB244	Landscape Graphics	6	2
PSB074	Land Development	8	2 3
PSB275	Landscape Construction 1	6	3
Year 3, Se	mester 2		
ARB646	Law of the Built Environment	4	2
PSB015	Planning & Landscape Design 4	20	6
PSB019	Planting Design	3	1
PSB020	Land Use Policies	4	2
PSB021	Conservation Theory	2	1
PSB032	Issues & Ethics	2	1
PSB061	Impacts & Assessment	5	2 2 2
PSB276	Landscape Construction 2	4	2
PSB280	Elective Unit (Landscape Architecture)	4	2
	ND REGIONAL PLANNING MAJOR		
Year 1, Se	mester 1		
BNB001	Learning at University	2	1.5
COB163	Professional Writing	6	1.5
MAB195	Quantitative Methods 1	6	3
PHB144	Applied Science for Designers 1	6	3
PSB010	Introductory Design 1	12	6
PSB016	History of the Built Environment 1	6	3 2
PSB050	The Human Environment 1	4	
PSB070	Map & Air Photo Interpretation	2	1
Year 1, Se			
CHB292	Applied Science for Designers 2	4	2
MAB196	Quantitative Methods 2	6	3
PSB011	Introductory Design 2	20	10
PSB017	History of the Built Environment 2	8	32
PSB051	The Human Environment 2	6	2
PSB054	Environmental Science	4	2
PSB056	Applied Land Science for Designers	4	1
Year 2, Se			0
PSB012	Planning & Landscape Design 1	21	9
PSB030	Introduction to the Professions	3	1
PSB040	Graphic Communication	6	3
PSB052 PSB057	The Human Environment 3	6 8	1 3 3 4
PSB057 PSB071	Landscape Ecology 1 Site Measurement	o 4	4
Year 2, Se	mester 2		
•	Planning & Landscape Design 2	20	6
PSB053	The Human Environment 4	4	2
PSB058	Landscape Ecology 2	8	2 3 2
PSB059	Population & Urban Studies	6	2
PSB060	Introduction to Economics	ž	ī
PSB072	Design Science	$\overline{4}$	$\hat{2}$
PSB073	Computer Techniques	4	$\overline{2}$
Year 3, Se	mester 1		
PSB014	Planning & Landscape Design 3	20	6
PSB018	Land Use Generation	4	ž
PSB041	Report Preparation	2	1
PSB062	Economics of Town Planning	5	2 1 2 3
PSB074	Land Development	8	3



PSB077 PSB190	Transport Planning Elective Unit (Planning)	6 3	2 2
Year 3, Sen	nester 2		
ARB646	Law of the Built Environment	4	2
PSB015	Planning & Landscape Design 4	20	6
PSB020	Land Use Policies	4	2
PSB021	Conservation Theory	2	1
PSB032	Issues & Ethics	2	1
PSB061	Impacts & Assessment	5	2
PSB063	Housing & Community Services	5	2
PSB078	Urban Land Development	6	2

# Bachelor of Engineering (Aerospace Avionics) (EE43)\*

Location: Gardens Point campus

Course Duration: 4 years full-time

**Total Credit Points: 384** 

#### Standard Credit Points/Full-Time Semester: 48

Course Coordinator: Associate Professor Farhan Faruqi

Course Str	ucture	Credit Points	Contact Hrs/Wk
Year 1, Ser	nester 1		
BNB001 CEB102 CEB184 CHB002 COB163 CSB191 EEB101 MAB187 MEB121 MEB121 PHB132	Learning at University Civil Engineering 1 Engineering Mechanics 1+ Introduction to Engineering Chemistry# Professional Writing Introduction to Computing Circuits & Measurements Engineering Mathematics 1A Engineering Graphics Introduction to Manufacturing Engineering Physics 1A	2 2 7 (2) 6 4 7 6 6 2 6	1.5 1 3 (1) 1.5 2 3 3 3 3 1 3
Year 1, Sei	nester 2		
CEB185 EEB202 EEB203 EEB371 MAB188 MEB111 MEB133 PHB232	Engineering Mechanics 2+ Electromagnetics Circuit Analysis Electronic Devices Engineering Mathematics 1B Dynamics Materials 1 Engineering Physics 2	7 6 5 5 6 7 6 6	3 3 3 3 3 3 3 3 3 3
Year 2, Sei	nester 1		
CSB490 EEB303 EEB362	Software Engineering Network Theory 1 Introduction to Communication Systems	6 8 6	3 3 3

\* See course requirements and notes relating to undergraduate courses.

+ Students who have not successfully completed CEB184 Engineering Mechanics 1 or CEB185 Engineering Mechanics 2 may enrol in the equivalent units CEB001 Engineering Mechanics A or CEB002 Engineering Mechanics B which will be offered during the summer vacation.

# CHB002 Introduction to Engineering Chemistry is to be taken by those students not obtaining a 'Sound Achievement' in Year 12 Chemistry. All other students must apply for an exemption from this unit.

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EEB373 EEB471 MAB493/1 MEB362	Digital Electronics Principles Electronics Engineering Mathematics 2 Thermo-Fluids	6 8 6 7	3 3 3 3
Year 2, Ser EEB401 EEB430 EEB473 EEB474 EEB520 EEB692 MAB493/2 MEB454	nester 2 Network Theory 2 Engineering Fields Integrated Circuits Microprocessors Control Engineering Space Technology Engineering Mathematics 2 Aerodynamics 1	6 6 6 6 6 6 6	3 3 3 3 3 3 3 3 3
Year 3, Ser	nester 1		
EEB562 EEB563 EEB580 EEB620 EEB661 MAB893 MEB553 MEB690	Transmission & Propagation Signals & Linear Systems Aerospace Design 1 Control Systems Analysis Information Theory & Noise Engineering Mathematics 3 Aerodynamics 2 Aircraft Systems	6 6 6 6 6 6 6 6	3 3 3 3 3 3 3 3 3
Year 3, Ser	nester 2		
EEB602 EEB662 EEB680 EEB691 EEB967 MAB894 MEB551 MEB611	Signal Processing Microwave & Antenna Technology Aerospace Design 2 Aeronautical Computing Digital Communications Engineering Mathematics 4 Propulsion & Engines Stability & Control of Aircraft	6 7 6 6 6 5 5 5	3 3 3 3 3 3 3 3 3
Year 4, Ser	nester 1		
EEB722 EEB780 EEB784/1 EEB947 MEB790 SVB645	Flight Control Systems Aerospace Design 3 Aerospace Project Radar & Radio Navigational Aids Spacecraft & Satellite Design Remote Sensing One Elective Unit	6 12 6 5 7	3 3 6 3 3 3 3
Year 4, Sei	nester 2		
EEB601 EEB784/2 EEB880 MEB740	Real-time Operating Systems Aerospace Project Aerospace Design 4 Maintenance Management & Technology Two Elective Units	6 15 7 6 14	3 6 3 3 6
Elective Ur	uits		
EEB932 EEB933 EEB934 EEB935 EEB968 EEB980 FNB116 HRB111 MEB774	Automatic Flight Control Combat Systems Advanced Communications & Navigation Systems Advanced Satellite Systems Digital Signal Processing Aerospace Law Financial Management for Engineers Industrial Management Operations Management Any approved unit offered for EE44 BEng(Electrical & Computer Engineering)	7 7 7 6 7 8 6 7 8 6 7	3 3 3 3 3 3 3 2 3 3 3 3 3

# **Bachelor of Engineering** (Civil) (CE42)\*

Location: Gardens Point campus

Course Duration: 4 years full-time, 6 years part-time

**Total Credit Points: 384** 

### Standard Credit Points/Full-Time Semester: 48

Course Coordinator: Mr Terry Piggott

### **Professional Recognition**

This degree meets the requirements for membership of the Institution of Engineers, Australia.

### **Environmental Engineering Stream**

Students may elect to enter the environmental stream of this course at the end of Year 2 full-time or at the end of Semester I in Year 4 part-time. This will involve the taking of two alternative core units and four prescribed elective units, in addition to some environmentally based topics in design units and project. Special conditions apply to students wishing to return to the main course from the environmental engineering stream.

### **Environmental Engineering Major**

Subject to University approval, a major in Environmental Engineering will be offered to students at the end of Year 1, Semester 1. This will involve taking over the length of the course 96 credit points of alternative core units, elective units, and some environmentally based topics in design units and project. Further information about the Environmental Engineering Major is available from the School of Civil Engineering.

Full-Time	Course Structure	Credit Points	Contact Hrs/Wk
Year 1, Sei	nester 1		
BNB001 CEB102 CEB184 CHB002 COB163 CSB191 EEB101 MAB187 MEB121 MEB121 MEB171 PHB132	Learning at University Civil Engineering 1 Engineering Mechanics 1+ Introduction to Engineering Chemistry# Professional Writing Introduction to Computing Circuits & Measurements Engineering Mathematics 1A Engineering Graphics Introduction to Manufacturing Engineering Physics 1A	2 2 7 (2) 6 4 7 6 6 6 2 6	1.5 1 3 (1) 1.5 2 3 3 3 1 3
Year 1, Sei	nester 2		
CEB185 CHB346 CSB291 MAB188 MEB111	Engineering Mechanics 2+ Engineering Chemistry C Introduction to FORTRAN Engineering Mathematics 1B Dynamics	7 4 4 6 7	3 2 2 3 3

\* See course requirements and notes relating to undergraduate courses.

+ Students who have not successfully completed CEB184 Engineering Mechanics 1 or CEB185 Engineering Mechanics 2 may enrol in the equivalent units CEB001 Engineering Mechanics A or CEB002 Engineering Mechanics B which will be offered during the summer vacation.

# CHB002 Introduction to Engineering Chemistry is to be taken only by those students not obtaining a 'Sound Achievement' in Year 12 Chemistry. All other students must apply for an exemption from this unit.

CEB305 CEB360 CHB346	Construction Planning & Economics 1 Hydraulic Engineering 1 Engineering Chemistry C		6 6 4	3 3 2
Year 4, Ser	nester 1			
CEB220 CEB241 CEB354 CEB460 EEB101	Civil Systems 1 Soil Mechanics 2 Structural Engineering 2 Hydraulic Engineering 2* Circuits & Measurements		6 7 7 7 7 7	3 3 3 3 3
Year 4, Ser	nester 2			
CEB312 CEB341 CEB355	Highway Engineering Geotechnical Engineering I Structural Engineering 3 OR		6 6 6	3 3 3
CHB491 CEB361 CEB370	Environmental Chemistry+ Hydrology Public Health Engineering 1		6 6 6	3 3 3
Year 5, Ser	nester 1			
CEB304/1 CEB306	Civil Engineering Design 1 Concrete Structures 2* OR		8 7	4 3
CEB375 CEB313 CEB393 CEB470 CEB492	Environmental Science & Technology Traffic Engineering Engineering Investigation & Reporting 1 Public Health Engineering 2 Engineering Investigation & Reporting 2		7 6 3 5 3	3 3 2 3 1
Year 5, Ser	nester 2			
CEB304/2 CEB308 CEB406 CEB422 CEB430	Civil Engineering Design 1 Construction Planning & Economics 2 Structural Applications* Civil Systems 2 Building Construction Elective Unit		8 4 6 5 2 6	4 2 3 2 1 3
Year 6, Ser	nester 1			
CEB401 CEB405/1 CEB491/1	Design Project Civil Engineering Design 2 Project (Civil)* Elective Units (2 of) OR		8 6 9 12	3 3 3 6
CEB543 CEB561	Environmental Geohydrology+, AND Coastal Engineering+	}	6 6	3 3
Year 6, Ser	nester 2			
CEB403 CEB405/2 CEB491/2	Professional Practice Civil Engineering Design 2 Project (Civil)* Elective Units (2 of) OR		7 6 9 12	2 3 3 6
CEB570 CEB575	Public Health Engineering 3+, AND Environmental Impact Assessment+	}	6 6	3 3
Elective Ur	nits			
FIRST SEM	ESTER			
CEB501 CEB505	Civil Engineering Practice 1 Project Management & Administration		6 6	3 3
* Safety book	ts must be worn for practical exercises and field t	rips.		
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+ Alternative unit compulsory for the Environmental Engineering Stream.



CEB512 CEB541 CEB543 CEB551 CEB551 CEB561	Transport Engineering 1 Geotechnical Engineering 2 Environmental Geohydrology* Advanced Structural Design Coastal Engineering*	6 6 6 6 6	3 3 3 3 3 3
SECOND SE	EMESTER		
CEB503	Advanced Construction Methods	6	3
CEB506	Civil Engineering Practice 2	6	3
CEB511	Transport Engineering 2	6	3
CEB520	Finite Element Methods	6	3
CEB531	Masonry Design+	6	3
CEB542	Geotechnical Engineering 3	6	3
CEB560	Hydraulic Engineering 3	6	3
CEB570	Public Health Engineering 3*	6	3
CEB575	Environmental Impact Assessment*	6	3

Note: Student's elective programs are subject to approval by the Head of School.

# Bachelor of Engineering (Electrical and Computer Engineering) (EE44)#

Location: Gardens Point campus

Course Duration: 4 years full-time, 6 years part-time

**Total Credit Points: 384** 

### Standard Credit Points/Full-Time Semester: 48

Course Coordinator: Dr Tee Tang

#### **Professional Recognition**

This degree meets the requirements for membership of the Institution of Engineers, Australia and of the Institution of Radio and Electronics Engineers.

Full-Time	Course Structure	Credit Points	Contact Hrs/Wk
Year 1, Sei	nester 1		
BNB001	Learning at University	2	1.5
CEB102	Civil Engineering 1	2	1
CEB184	Engineering Mechanics 1**	7	3
CHB002	Introduction to Engineering Chemistry++	(2)	(1)
COB163	Professional Writing	6	1.5
CSB191	Introduction to Computing	4	2
EEB101	Circuits & Measurements	7	3
MAB187	Engineering Mathematics 1A	6	3
MEB121	Engineering Graphics	6	3
MEB171	Introduction to Manufacturing	2	1
PHB132	Engineering Physics 1A	6	3

\* Alternative unit compulsory for the Environmental Engineering Stream.

+ Safety boots must be worn for practical exercises and field trips.

# See course requirements and notes relating to undergraduate courses.

- \*\* Students who have not successfully completed CEB184 Engineering Mechanics 1 may enrol in the equivalent unit CEB001 Engineering Mechanics A which will be offered during the summer vacation.
- ++ CHB002 Introduction to Engineering Chemistry is to be taken only by those students not obtaining a 'Sound Achievement' in Year 12 Chemistry. All other students must apply for an exemption from this unit.

### Year 1, Semester 2

Year I, Sei	nester 2		
CSB291	Introduction to FORTRAN	4	2
EEB202	Electromagnetics	6	3
EEB203	Circuit Analysis	6 5 3 5 6	3
EEB272	Digital Principles	3	1.5
EEB371	Electronic Devices	5	3
MAB188	Engineering Mathematics 1B	ő	ž
MEB111	Dynamics	7	3 3
MEB133	Materials 1	6	3
PHB232	Engineering Physics 2A	6	3
FIDZJZ	Engineering Physics 2A	0	5
Year 2, Ser	nester 1		
CSB490	Software Engineering	6	3
EEB302	Electrotechnology	6	3
EEB303	Network Theory 1	8	3 3 3 3 3 3 3
EEB362	Introduction to Communication Systems	6	3
EEB372	Sequential Logic	7	ž
EEB471	Electronics	8	3
MAB493/1	Engineering Mathematics 2	6	3
		0	5
Year 2, Ser		,	
EEB400	Electrical Power Systems	6	3 3 3 3 3 3 3 3 3 3 3
EEB401	Network Theory 2	6	3
EEB430	Engineering Fields	6	3
EEB473	Integrated Circuits	6	3
EEB474	Microprocessors	6	3
EEB520	Control Engineering	6	3
EEB587	Design 1	6	3
MAB493/2	Engineering Mathematics 2	6	3
Year 3, Ser	nester 1		
EEB404	Electrical Machines	6	3
EEB553	Electrical Power Equipment	6	3 3
	OR	0	5
EEB661	Information Theory & Noise	6	2
EEB562		6	2
	Transmission & Propagation		2
EEB563	Signals & Linear Systems	6	2
EEB573	Industrial Electronics	6	2
EEB591	Systems Programming Languages	6	3
EEB620	Control Systems Analysis	6	3 3 3 3 3 3 3 3 3
MAB893	Engineering Mathematics 3	6	3
Year 3, Sei	mester 2		
EEB531	Electrical Power Transmission	6	3
	OR		
EEB967	Digital Communications	6	3
EEB601	Real-time Operating Systems	6	3 3 3
EEB602	Signal Processing	6	3
EEB621	Advanced Control Systems	6	3
EEB788	Design 2	8	3
EEB971	Applied Electronics	6	3
MAB894	Engineering Mathematics 4	6	3
	General Elective Unit	4	2
Year 4, Sei	nester 1		
EEB652	Power Electronics	7	3
	OR	'	5
EEB662	Microwave & Antenna Technology	7	3
EEB742	Power Systems Engineering	6	3
	OR	Ŭ	2
EEB968	Digital Signal Processing	6	3
EEB908 EEB789/1		15	6
EEB 789/1 EEB 821	Project Production Technology & Quality	6	3
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EEB887	Design 3 Technical Elective Unit	6 7	3 3
Year 4, Sei	nester 2		
EEB741	Power Systems Analysis	8	3
	OR	0	
EEB891 EEB789/2	Signal Computing & Real Time DSP Project	8 15	3
EEB820	Engineering Management	8	3
EEB888	Design 4 Technical Elective Unit	10 7	6 3 3 3
	Jeennear Elective Offic	1	5
	Course Structure		
Year 1, Sei	nester 1		
CHB002	Introduction to Engineering Chemistry*	(2)	(1)
CSB191 EEB101	Introduction to Computing Circuits & Measurements	4 7	2 3 3 3 3
MAB187	Engineering Mathematics 1A	6	2
MEB121	Engineering Graphics	6	3
PHB132	Engineering Physics 1A	6	3
Year 1, Sei	nester 2		
CSB291	Introduction to FORTRAN	4	2
EEB203	Circuit Analysis	5	3
EEB272	Digital Principles	3	1.5
EEB371 MAB188	Electronic Devices	5 6	3 3
PHB232	Engineering Mathematics 1B Engineering Physics 2A	6	3
Year 2, Sei	nester 1		
COB163	Professional Writing	6	1.5
EEB303	Network Theory 1	8	3
EEB362	Introduction to Communication systems	6	3
EEB471	Electronics	8 6	3 3 3 3
MAB493/1	Engineering Mathematics 2	0	3
Year 2, Sei			_
EEB202 EEB401	Electromagnetics Network Theory 2	6 6	3
EEB401 EEB587	Design 1	6	3
MAB493/2	Engineering Mathematics 2	6	3 3 3 3 3
MEB133	Materials 1	6	3
Year 3, Sei	nester 1		
CEB184	Engineering Mechanics 1+	7	3
EEB302	Electrotechnology	6	3
EEB372	Sequential Logic	7	3
EEB563 MAB893	Signals & Linear Systems Engineering Mathematics 3	6 6	3 3 3 3 3
Year 3, Sei			
EEB400	Electrical Power Systems	6	3
EEB473	Integrated Circuits	ő	3
EEB474	Microprocessors	6	3
EEB520	Control Engineering	6	3 3 3 3 3
MAB894	Engineering Mathematics 4	6	3

CHB002 Introduction to Engineering Chemistry is to be taken only by those students not obtaining a 'Sound Achievement' in Year 12 Chemistry. All other students must apply for an exemption from this unit.

+ Students who have not successfully completed CEB184 Engineering Mechanics 1 may enrol in the equivalent unit CEB001 Engineering Mechanics A which will be offered during the summer vacation.



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### Year 4, Semester 1

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EEB922	Computer Controlled Systems	7
EEB951	High Voltage Equipment	7
EEB954	Electrical Energy Utilisation	7
EEB955	Power Electronics Applications	7
EEB956	Photovoltaic Engineering	7
EEB961	Communications Techniques	7
EEB962	Microwave Systems Engineering	7
EEB969	Digital Spectral Analysis	7
EEB972	Integrated Electronic Techniques	7
ITB548	Introduction to Cryptology	12
ITB560	Introduction to Cryptology	7
ITB561	Error Control & Data Compression	7
ITN546	Advanced Topics in Cryptology	12
	OR	
	Any alternative core unit not previously completed,	
	or advanced unit from Computing Science.	

# Bachelor of Engineering (Mechanical) (ME45)\*

Location: Gardens Point campus

Course Duration: 4 years full-time, 6 years part-time

**Total Credit Points: 384** 

Standard Credit Points/Full-Time Semester: 48

Course Coordinator: Dr Doug Hargreaves

#### **Professional Recognition**

This degree is recognised for the purpose of membership of the Institution of Engineers, Australia.

Full-Time	Course Structure	Credit Points	Contact Hrs/Wk	
Year 1, Se	mester 1			
BNB001	Learning at University	2 2	1.5	
CEB102	Civil Engineering 1	2	1	
CEB184	Engineering Mechanics 1+	7	3	
CHB002	Introduction to Engineering Chemistry#	(2)	(1)	
COB163	Professional Writing	6	1.5	
CSB191	Introduction to Computing	4	2	
EEB101	Circuits & Measurement	7	2 3 3	
MAB187	Engineering Mathematics 1A	6	3	
MEB121	Engineering Graphics	6	3	
MEB171	Introduction to Manufacturing	2	1	
PHB132	Engineering Physics 1A	6	3	
Year 1, Semester 2				
CEB185	Engineering Mechanics 2+	7	3	
CHB344	Engineering Chemistry M	4	2	
CSB291	Introduction to FORTRAN	4	2 2 3	
EEB202	Electromagnetics	6	3	

\* See course requirements and notes relating to undergraduate courses.

+ Students who have not successfully completed CEB184 Engineering Mechanics 1 or CEB185 Engineering Mechanics 2 may enrol in the equivalent units CEB001 Engineering Mechanics A or CEB002 Engineering Mechanics B which will be offered during the summer vacation.

# CHB002 Introduction to Engineering Chemistry is to be taken only by those students not obtaining a 'Sound Achievement' in Year 12 Chemistry. All other students must apply for an exemption in this unit.

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MAB188	Engineering Mathematics 1B	6	3
MEB101	Design 1	8	3
MEB111	Dynamics	7	3
MEB133	Materials 1	6	3
Year 2, Sei			
EEB209	Electrical Engineering 2M	6	3 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7
MAB493/1	Engineering Mathematics 2	6	3
MEB230	Materials 2	6	3
MEB250	Thermodynamics 1	6	3
MEB313	Mechanics 1	6	3
MEB361	Fluids 1	6	3
MEB370 MEB381	Manufacturing Systems 1	6 6	3
MED301	Design 2	0	3
Year 2, Sei	nester 2		
MAB493/2	Engineering Mathematics 2	6	3
MEB231	Materials 3	6	ž
MEB251	Thermodynamics 2	6	3
MEB411	Theory of Machines	7	3 3 3 3 3 3 3 3
MEB462	Fluids 2	6	3
MEB472	Manufacturing Systems 2	6	3
MEB483	Design 3	7	3
	Group A Elective Unit	4	2
Year 3, Sei	mostor 1		
		<i>.</i>	2
MAB893	Engineering Mathematics 3	6	3 4
MEB502 MEB510	Research Methods Noise & Vibrations	8 7	4
MEB510 MEB511	Stress Analysis	7	2
MEB550	Heat Transfer	6	3
MEB773	Design for Manufacturing 1	7	3
	Group B Elective Unit	7	3 3 3 3 3 3
	-	•	
Year 3, Sei	nester 2		
EEB273	Microcomputers in Engineering	4	2
MEB463	Tribology	6	3
MEB610	Mechanics 2	6	3 3 3 3 3 3 3 3 3 3
MEB640	Automation 1	7	3
MEB650	Thermodynamics 3	6	3
MEB660	Fluid Power	6	3
MEB670	Industrial Engineering 1	6 7	3
	Group C Elective Unit	/	3
Year 4, Sei	nester 1		
FNB116	Financial Management for Engineers	8	2
MEB464	Fluids 3	7	3
MEB489/1	Mechanical Design Project*	7	3
MEB710	Automation 2	6	3
MEB771	Industrial Engineering 2	6	3
MEB911	Finite Element Analysis	7	3
	Group D Elective Unit	7	3
Year 4, Sei	nestor I		
•		o	n
HRB111 MFB408	Industrial Management	8	2 6
MEB408 MEB489/2	Project 1* Mechanical Design Project*	14 7	2
MEB489/2 MEB772	Engineering Project Appraisal	6	2
MEB981	Design of Materials Handling Systems	6	3 3 3
	Group E Elective Unit	7	3
			-

\* All students must complete MEB489 Mechanical Design Project and MEB408 Project 1 (or MEB409 Project 2).



### **Part-Time Course Structure**

Year 1, Ser	Year 1, Semester 1			
CEB184	Engineering Mechanics 1*	7	3	
CHB002	Introduction to Engineering Chemistry+	(2) 6	(1) 1.5	
COB163 MAB187	Professional Writing Engineering Mathematics 1A	6	3	
MEB121	Engineering Graphics	6	3	
PHB132	Engineering Physics 1A	6	3	
Year 1, Ser	nester 2			
CEB185	Engineering Mechanics 2*	7	3	
CHB344	Engineering Chemistry M	4 6	2	
MAB188 MEB111	Engineering Mathematics 1B Dynamics	7	3 3	
MEB133	Materials 1	6	3	
Year 2, Ser	nester 1			
CEB102	Civil Engineering 1	2	1	
CSB191	Introduction to Computing	4	2 3	
EEB101 MAB493/1	Circuits & Measurements Engineering Mathematics 2	7 6	3 3	
MEB171	Introduction to Manufacturing	2	1	
MEB230	Materials 2	6	3	
Year 2, Sei	nester 2			
CSB291	Introduction to FORTRAN	4	2	
EEB202	Electromagnetics	6	3 2 3 3	
EEB273 MAB493/2	Microcomputers in Engineering Engineering Mathematics 2	4 6	23	
MEB101	Design 1	8	3 3	
	Group A Elective Unit	4	2	
Year 3, Sei	nester 1			
MAB893	Engineering Mathematics 3	6	3	
MEB250	Thermodynamics 1	6	3	
MEB313 MEB361	Mechanics 1 Fluids 1	6 6	3 3 3	
MEB773	Design for Manufacturing 1	7	3	
Year 3, Sei	nester 2			
MEB231	Materials 3	6	3 3	
MEB251	Thermodynamics 2	6	3	
MEB411 MEB462	Theory of Machines Fluids 2	7 6	3 3	
MEB463	Tribology	6	3	
Year 4, Sei	nester 1			
EEB209	Electrical Engineering 2M	6	3	
MEB370	Manufacturing Systems 1	6	3	
MEB381	Design 2 Stress Analysis	6 7	3	
MEB511 MEB550	Stress Analysis Heat Transfer	6	3	
Year 4, Se				
MEB472	Manufacturing Systems 2	6	3	
MEB483	Design 3	7	3	
MEB610	Mechanics 2	6	3	

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\* Students who have not successfully completed CEB184 Engineering Mechanics 1 or CEB185 Engineering Mechanics 2 may enrol in the equivalent units CEB001 Engineering Mechanics A or CEB002 Engineering Mechanics B which will be offered during the summer vacation.

+ CHB002 Introduction to Engineering Chemistry is to be taken only by those students not obtaining a 'Sound Achievement' in Year 12 Chemistry. All other students should apply for an exemption in this unit.



MEB640 MEB670	Automation I Industrial Engineering 1	7 6	3 3
Year 5, Ser	nester 1		
FNB116 MEB464 MEB510 MEB911	Financial Management for Engineers Fluids 3 Noise & Vibrations Finite Element Analysis Group B Elective Unit	8 7 7 7 7	2 3 3 3 3
Year 5, Ser	nester 2		
MEB502 MEB650 MEB660 MEB981	Research Methods Thermodynamics 3 Fluid Power Design of Materials Handling Systems Group C Elective Unit	8 6 6 7	4 3 3 3 3
Year 6, Ser	nester 1		
MEB409/1 MEB489/1 MEB710 MEB771	Project 2* Mechanical Design Project* Automation 2 Industrial Engineering 2 Group D Elective Unit	7 7 6 7	3 3 3 3 3
Year 6, Ser	nester 2		
HRB111 MEB409/2 MEB489/2 MEB772	Industrial Management Project 2* Mechanical Design Project* Engineering Project Appraisal Group E Elective Unit	8 7 7 6 7	2 3 3 3 3
Elective Ur	nits		
GROUP A BNB103 EEB600 ISB393 SSB907	General Elective Unit Starting a Technology Based Business Computer Based Information Systems Psychology for Engineers	4 4 4 4	2 2 2 2
GROUP B MEB450 MEB500 MEB531	Air Conditioning Special Topic 1 Advanced Materials	7 7 7	3 3 3
GROUP C MEB601 MEB680 MEB950 MEB976	Special Topic 2 Advanced Mechanical Design Process Plant Design Computer Integrated Manufacturing	7 7 7 7	3 3 3 3
GROUP D MEB701 MEB977 MEB980	Special Topic 3 Computer Control of Manufacturing Systems Design of Power Transmission Systems	7 7 7	3 3 3
GROUP E MEB800 MEB810 MEB960 MEB975	Special Topic 4 Industrial Noise & Vibration Fluid Systems Design Design of Manufacturing Systems	7 7 7 7	3 3 3 3

\* All students must complete MEB489 Mechanical Design Project and MEB408 Project 1 (or MEB409 Project 2).



# Bachelor of Engineering (Medical) (ME46)\*

Location: Gardens Point

Course Duration: 4 years full-time

**Total Credit Points: 384** 

### Standard Credit Points/Full-Time Semester: 48

Course Coordinator: To be advised

### **Professional Recognition**

Accreditation for the course is being sought from the Institution of Engineers, Australia. Graduates would be professionally recognised to practise as either biomedical or mechanical engineers.

Course Str	ucture	Credit Points	Contact Hrs/Wk
Year 1, Ser	nester 1		
CEB184 CSB191 EEB101 LSB131 MAB187 MEB190 PHB132	Engineering Mechanics 1 Introduction to Computing Circuits & Measurements Anatomy Engineering Mathematics 1A Engineering in the Medical Environment Engineering Physics 1A	7 4 7 12 6 6 6	3 2 3 6 3 3 3 3
Year 1, Ser	nester 2		
CEB185 EEB202 LSB231 MAB188 MEB111 MEB133 MEB191	Engineering Mechanics 2 Electromagnetics Physiology Engineering Mathematics 1B Dynamics Materials 1 Unix & C	7 6 12 6 7 6 4	3 6 3 3 3 2
Year 2, Ser	nester 1		
HMB274 LSB132 MAB493/1 MEB121 MEB250 MEB361	Functional Anatomy Cell Biology Engineering Mathematics 2 Engineering Graphics Thermodynamics 1 Fluids 1	12 8 6 6 6 6	4 3 3 3 3 3 3
Year 2, Ser	nester 2		
HMB272 MAB493/2 MEB313 MEB333 MEB465 MEB484	Biomechanics Engineering Mathematics 2 Mechanics 1 Biomaterials	12 6 8 8 8 8	4 3 3 3 3 3 3
Year 3, Sei	mester 1		
EEB371 MAB893 MEB370 MEB580	Electronic Devices Engineering Mathematics 3 Manufacturing Systems 1 Bioengineering Design 2	5 6 6 8	3 3 3 3

 Offered subject to final University approval. See course requirements and notes relating to undergraduate courses.

PHB504	Instrumentation Group A Elective Unit	8	3
Year 3, Ser COB136 MEB463 MEB511 MEB640 MEB681	mester 2 Professional Communication Tribology Stress Analysis Automation 1 Bioengineering Design 3 Group B Elective Unit	6 6 7 7 8	3 3 3 3 3 3 3
Year 4, Sei FNB116	Financial Management for Engineers	8	2
HMB610 MEB490/1 MEB701 PUB210	Clinical Measurement Project Special Topic 3 Occupational Health & Safety 1 Group C Elective Unit	8 8 7 8	2 3 3 4
Year 4, Se	mester 2		
HRB111 MEB490/2 MEB670 MEB891 PUB211	Industrial Management Project Industrial Engineering 1 Health Legislation & Medical Environment Occupational Health & Safety 2 Group D Elective Unit	6 8 6 8 8	3 3 3 4
Elective U	nits		
GROUP A HMB614 HMB615 MEB231	Biophysical Bases of Movement Rehabilitation Exercise Physiology Materials 3	8 8 6	3 3 3
GROUP B HMB616 HMB617 MEB680	Psychology of Rehabilitation Workplace Health Advanced Mechanical Design	8 8 7	3 3 3
GROUP C HMB611 MEB472 MEB780	Human Performance Manufacturing Systems 2 Rehabilitation Equipment Design & Evaluation	8 6 8	3 3 3
GROUP D MEB450 MEB800 MEB892	Air Conditioning Special Topic 4 Robotics in Health Care	7 7 8	3 3 3

# Bachelor of Surveying (PS47)\*

Location: Gardens Point campus

Course Duration: 4 years full-time

**Total Credit Points: 384** 

### Standard Credit Points/Full-Time Semester: 48

Course Coordinator: Mr Jim Glasscock

\* See course requirements and notes relating to undergraduate courses.

### **Professional Recognition**

This degree meets the educational requirements for registration and licensing by the Surveyors Board of Queensland and also satisfies the academic requirements for admission as a member of both the Institution of Surveyors (Australia) and the Australian Institute of Cartographers.

### **Special Course Requirements**

Students must obtain at least 90 days of industrial employment/practice in a surveying environment approved by the course coordinator.

Students must, not later than the fourth week of the semester immediately following each period of industrial employment/practice, submit to the course coordinator a report or diary in the required format, describing the work carried out during the period of employment/practice and including an Industrial Experience Record Form signed by the employer. Industrial Experience Record Forms are available from the School Office, Faculty Industrial Employment Officer in Room 602 O Block, Gardens Point campus and also from the Faculty Office. Should employment exceed the minimum required, it is strongly recommended that these details also be recorded in the report or diaries and certified by the employer as a record of experience which may be used when seeking registration or licensing by the Surveyors Board. Students **should not formally enrol** in industrial employment/practice.

Students may be required to attend camps off-campus and/or practical sessions in the Moreton region.

### Specialisations

There are two specialisations built into the course - Surveying and Mapping. Most units are common to both specialisations. However in specific semesters, specialised units are to be undertaken in either surveying or mapping and these are highlighted in the course structure.

Full-Time	Course Structure	Credit Points	Contact Hrs/Wk
Year 1, Se	mester 1		
BNB001 COB163 CSB191 ESB519 MAB187 MEB121 PHB132 PSB315 PSB325	Learning at University Professional Writing Introduction to Computing Geology for Engineers Engineering Mathematics 1A Engineering Graphics Engineering Physics 1A Land Administration 1 Land Snrveying 1	2 6 4 6 6 6 6 6 8	1.5 1.5 2 3 3 3 3 3 3 3 3 3 3
Year 1, Se	, ,		
CSB291 MAB188 PHB172 PSB306 PSB316 PSB323 PSB326	Introduction to FORTRAN Engineering Mathematics 1B Physics for Surveyors Cartography 1 Land Administration 2 Land Studies 1 Land Surveying 2	4 6 8 8 6 8	2 3 3 3 3 3 3 3 3
Year 2, Se	mester 1		
MAB494 MAB893 MEB221	Survey Mathematics 1 Engineering Mathematics 3 Engineering Science 1	6 6 6	3 3 3

PSB054 PSB307 PSB319 PSB327 PSB342 PSB902	Environmental Science Cartography 2 Land Administration 5* Land Surveying 3+ Spatial Information Science 1 Urban Planning 1*	4 8 6 10 8 4	2 3 3 3 2
Year 2, Sei	mester 2		
CEB364 MAB496 PSB303 PSB308 PSB317 PSB328 PSB334	Engineering Science 2 Survey Mathematics 2 Analysis of Spatial Measurement 1 Cartography 3 Land Administration 3 Land Surveying 4 Photogrammetry 1	6 6 8 8 8 8 6	3 3 3 3 3 3 3 3 3
Year 3, Sei	nester 1		
MAB795 PSB304 PSB309 PSB329 PSB333 PSB335 PSB346	Survey Mathematics 3 Analysis of Spatial Measurement 2 Cartography 4 Land Surveying 5 Map Projections Photogrammetry 2 Spheroidal Computations	6 6 8 8 6 8 6	3 3 3 3 3 3 3 3 3
Year 3, Sei		_	_
CEB464 PSB310 PSB318 PSB320 PSB324 PSB330 PSB336 PSB343 Year 4, Set	Engineering Science 3 Geodesy 1 Land Administration 4 Land Development Practice 1 Land Studies 2 Land Surveying 6+ Photogrammetry 3 Spatial Information Science 2* <b>nester 1</b>	6 6 8 6 8 8 8 8 8	3 3 3 3 3 3 3 3 3 3
PSB339/1	Project	8	3
CEB564 PSB321 PSB331 PSB340 PSB344	Engineering Science 4 Land Development Practice 2 Land Surveying 7 Remote Sensing 1 Spatial Information Science 3* Elective Units* Elective Units+	6 8 8 6 8 12 4	3 3 3 3 3 3 3 6 3
Year 4, Sei	nester 2		
PSB322 PSB332 PSB338 PSB339/2 PSB345	Land Development Practice 3 Land Surveying 8+ Professional Practice Project Spatial Information Science 4* Elective Units	16 8 6 8 8 10	6 3 3 3 3 6
ELECTIV			
Year 4, Sei CNB367		0	2
CNB367 CNB465 CNB565 CNB567 CNB665	Real Estate Accounting 1 Property Investment Analysis 1 Land Management Real Estate Market Analysis Property Management 1	9 8 8 4 9	3 3 2 3

\* This unit is to be undertaken by students in the Mapping strand only.

+ This unit is to be undertaken by students in the Surveying strand only.



PSB018	Land Use Generation	4
PSB021	Conservation Theory	2
PSB319	Land Administration 5	6
PSB337	Photogrammetry 4	6
PSB902	Urban Planning 1	4
Year 4, Se	emester 2	
CNB362	Property Agency	8
CNB368	Real Estate Accounting 2	8
CNB568	Real Estate Practice	5
CNB666	Property Management 2	8
PSB020	Land Use Policies	4
PSB032	Issues & Ethics	2
PSB059	Population & Urban Studies	6
PSB061	Impacts & Assessment	5
PSB063	Housing & Community Services	5
PSB311	Geodesy 2	6
PSB341	Remote Sensing 2	8
PSB347	Topics in Engineering Surveying	6

# Bachelor of Technology (Mechanical) (ME35)\* Conversion Program

Location: Gardens Point campus

Course Duration: 3 years part-time

Total Credit Points: 125 (minimum)

Course Coordinator: Dr Andy Tan

#### **Entry Requirements**

Applicants require an Associate Diploma in Mechanical or Manufacturing Engineering or a Bachelor of Science degree in a relevant discipline. Applicants holding an Associate Diploma in other engineering disciplines will also be considered. Such candidates may be required to complete additional units.

Course St	ructure	Credit Points	Contact Hrs/Wk	
Year 1, Se	emester 1			
MAB183	Mathematics 1+	(8)	(3)	
MEB230	Materials 2	6	3	
MEB773	Design for Manufacturing 1	7	3	
Year 1, Se	emester 2			
MAB184	Mathematics 2+	(8)	(3)	
MEB101	Design 1	` Ś	3	
MEB251	Thermodynamics 2	6	3	
Year 2, Semester 1				
HRB148	Managing People at Work	8	2	
MAB186	Mathematics 3	8	3	
MEB313	Mechanics I	6	3	

\* See course requirements and notes relating to undergraduate courses.

+ Students who do not have the equivalent of MAB183 Mathematics 1 and MAB184 Mathematics 2 are required to enrol in these additional units.

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Year 2, Sei	mester 2			
MAB185	Introduction to Statistics		8	3
MEB462	Fluids 2		6	3 3
MEB472	Manufacturing Systems 2	(	6	3
Year 3, Sei	mester 1			
MEB463	Tribology		6	3
MEB501/1	Project		8	333
MEB674	Industrial Engineering Group A Elective Unit	1	8	3
Year 3, Sei	mester 2			
HRB149	Human Resources & Industrial Relations		8	2
MEB501/2	Project		8	233
MEB740	Maintenance Management & Technology Group B Elective Unit	(	6	3
Elective Ur	nits			
GROUP A				
MEB450	Air Conditioning		7	3
MEB660	Fluid Power		6	333
MEB675	Plastics Technology		7	3
GROUP B				
MEB550	Heat Transfer		6	3
MEB612	Mechanical Measurements		8	333
MEB976	Computer Integrated Manufacturing	,	7	3

### Associate Diploma in Cartography (SV24)

Course Discontinued: No further intakes

Location: Gardens Point campus

Course Duration: 4 years part-time

**Total Credit Points: 192** 

### Standard Credit Points/Full-Time Semester: 48

### **Professional Recognition**

The course is recognised for Associate Membership of the Australian Institute of Cartographers.

Course Structure		Credit Points	Contact Hrs/Wk
Year 4, Ser	nester 1		
SVT742 SVT915 SVT992	Map Projections 2 Cartography 3 Computer Graphics 2	8 8 8	3 3 3
Year 4, Ser	nester 2		
SVT826 SVT916 SVT945	Cartographic Administration Cartography 4 Remote Sensing	8 8 8	3 3 3

# Associate Diploma in Civil Engineering (CE21)\*

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: Dr Frank Bullen

### **Professional Recognition**

This course is recognised for associate membership of the Institution of Engineers, Australia, and membership of the Society of Engineering Associates and of the Institute for Drafting and Design, Australia.

### **Course Requirements/Notes**

There are two majors in the course: a General Major and a Water and Wastewater Process Operation Major. The General Major is offered both full-time and part-time. The Water and Wastewater Process Operation Major will be offered in the part-time mode, subject to quotas.

The first four semesters of the part-time course are common to the General and Water and Wastewater Process Operation Majors.

Generally a full-time student will gain 24 credit points by successfully completing eight practical experience units designated by the suffix 'A' after the unit name, and a part-time student will gain 24 credit points for successfully completing 120 weeks of approved industrial employment, that is 15 weeks for each of the 8 industrial employment units, before being eligible for the Associate Diploma award. However a combination of practical experience units and industrial employment totalling 24 credit points will be accepted. Industrial employment units 4 to 8 must involve the student in civil engineering work. Forms for obtaining credit for industrial employment are available from the Faculty office. For the employment to be recognised, students must enrol in the industrial employment unit(s) in the semester in which they expect to submit their completed form for obtaining credit. The form must be completed by both the student and the employer. Details of acceptable industrial employment can be obtained from the course coordinator.

Full-Time	Course Structure	Credit Points	Contact Hrs/Wk
GENERAL	MAJOR (GEN)		
Year 1, Ser	nester 1		
CET120	Civil Systems 1	7	3
CET135	Engineering Mechanics	7	3
CET180	Civil Drafting Practice A	3	3 2 3 3
CET195	Civil Engineering	7	3
CET815	Road Location & Design	7	3
CET894	Computations A	3	2
MET120	Engineering Drawing 1	7	2 3
PST901	Engineering Surveying	7	3
Year 1, Ser	nester 2		
CET190	Civil Engineering Materials+	7	3
CET235	Laboratory Practice A	3	2
* See course requirements and notes relating to undergraduate courses.			

+ Safety boots must be worn for practical exercises and field trip.



CET255 CET286 CET287 CET365 CET435 CET645	Structural Mechanics Civil Office Practice Civil Office Practice A Hydraulic Engineering Concrete Practice* Soil Mechanics	7 7 3 7 7 7	3 2 3 3 3
Year 2, Ser	nester 1		
CET306 CET387 CET565 CET585 CET756 CET775	Field Practice 1A* Civil Engineering Drafting A Road & Drainage Engineering Civil Engineering Drafting Building Construction Practice Public Health Engineering List B1 Elective Unit List B2 Elective Unit	3 7 7 7 7 7 7 7	2 3 3 3 3 3 3 3 3
Year 2, Ser	nester 2		
CET405 CET495 CET704 CET708	Field Practice 2A* Project A* Civil Construction Practice Specifications & Estimates List B1 Elective Units (2 of) List B2 Elective Units (2 of)	3 7 7 14 14	2 2 3 6 6
Part-Time	Course Structure		
GENERAL Year 1, Sei	MAJOR (GEN) nester 1		
CET135 CET195 MET120	Engineering Mechanics Civil Engineering Engineering Drawing 1	7 7 7	3 3 3
Year 1, Ser	nester 2		
CET190 CET255 CET286	Civil Engineering Materials* Structural Mechanics Civil Office Practice	7 7 7	3 3 3
Year 2, Sei	nester 1		
CET120 CET815 PST901	Civil Systems 1 Road Location & Design Engineering Surveying	7 7 7	3 3 3
Year 2, Ser	nester 2		
CET365 CET435 CET645	Hydraulic Engineering Concrete Practice* Soil Mechanics	7 7 7	3 3 3
Year 3, Sei	nester 1		
CET565 CET585 CET775	Road & Drainage Engineering Civil Engineering Drafting Public Health Engineering	7 7 7 7	3 3 3
Year 3, Semester 2			
CET708 CET756	Specifications & Estimates Building Construction Practice List B1 Elective Unit	7 7 7	3 3 3
Year 4, Semester 1			
CET704	Civil Construction Practice List B1 Elective Unit List B2 Elective Unit	7 7 7	3 3 3
* Safety boots must be worn for practical exercises and field trins			



Year 4, Semester 2			
, – -	List B1 Elective Unit List B2 Elective Units (2 of)	7 14	3 6
WATER A Years 1 an	ND WASTEWATER PROCESS OPERATIC	ON MAJOR	
As for Gene	eral Major		
Year 3, Sei	nester 1		
CET565 CET585	Road & Drainage Engineering Civil Engineering Drafting	7 7	3
CET775	Public Health Engineering OR	7	3
CET598	Project 2	21	9
Year 3, Sei			
CET776	Equipment Operation & Maintenance	7	3
CHA145 CHA644	Introductory Chemistry Process Measurement & Monitoring 1	8 7	3 3
Year 4, Sei	-		
CET606	Construction Management	7	3
CET777	Process Operation & Control 1	, 7	3 3
CHA744	Process Measurement & Monitoring 2	7	3
Year 4, Sei	nester 2		
CET876	Plant Operation & Maintenance	7	3
CET877	Process Operation & Control 2	7	3
CHA844	Trade Waste Control	7	3
Industrial	Employment Units (Part-Time only)		
BNT100	Industrial Employment 1	3	15 weeks
BNT200	Industrial Employment 2	3	15 weeks
BNT300	Industrial Employment 3	3 3	15 weeks
BNT400	Industrial Employment 4	3	15 weeks
BNT500	Industrial Employment 5	3	15 weeks
BNT600	Industrial Employment 6	3	15 weeks
BNT700	Industrial Employment 7	3	15 weeks
BNT800	Industrial Employment 8	3	15 weeks
List A – Al	l Elective Units in the Course		
CET420	Civil Systems 2	7	3
CET606	Construction Management (Evening)	7	3 3 3 3 3 3 3
CET655	Concrete & Steel Design (Day & Evening)	7	3
CET703	Civil Engineering Practice 1	7	3
CET707	Municipal Engineering (Evening)	7	3
CET735	Advanced Laboratory Testing 1*	7	3
CET787	Structural Engineering Drawing (Day)	7	3
CE1797	Project 1*	7	3
CET802	Civil Engineering Practice 2	7 7	3
CET838 CET856	Advanced Laboratory Testing 2	7	2
CET836 CET887	Advanced Construction Techniques Computer Aided Drafting (Day & Evening)	7	3 3 3 3 3 3 3 3
CET888	Structural Drawing & Design (Day)	7	2
CHA145	Introductory Chemistry (Evening)	8	2
EST219	Engineering Geology	7	2
HRX111	Safety & Industrial Relations (Evening)	, 7	3 2
MET140	Engineering Materials 1	8	3
		-	2

\* Safety boots must be worn for practical exercises and field trips.

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#### List B1 Elective Units

FIRST SEMESTER			
CET606	Construction Management (Evening)	7	3
CET655	Concrete & Steel Design (Day)	7 7	3
CET887	Computer Aided Drafting (Evening)	7	3333
EST219	Engineering Geology	7	3
SECOND SE	EMESTER		
CET655	Concrete & Steel Design (Evening)	7	3
CET787	Structural Engineering Drawing (Day)	7	3 3 3 2
CET887	Computer Aided Drafting (Day & Evening)	7	3
HRX111	Safety & Industrial Relations (Evening)	7	2
List B2 Ele	ctive Units		
FIRST SEM	ESTER		
CET703	Civil Engineering Practice 1	7	3
CET707	Municipal Engineering (Evening)	7	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
CET735	Advanced Laboratory Testing 1*	7	3
CET797	Project 1*	7	3
CHA145	Introductory Chemistry (Evening)	8 7	3
EST219	Engineering Geology	7	3
MET140	Engineering Materials 1	8	3
SECOND SEMESTER			
CET420	Civil Systems 2	7	3
CET797	Project 1*	7	3
CET802	Civil Engineering Practice 2	7	3
CET838	Advanced Laboratory Testing 2	7	3
CET856	Advanced Construction Techniques	7	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
CET888	Structural Drawing & Design (Day)	7	3

Up to 21 credit points from other modes or strands of this course or from other QUT courses may be approved by the course coordinator as alternatives to the listed elective units. The number of elective units available depends on a sufficient number of students being enrolled.

Degree level units may be selected as electives with the approval of the course coordinator.

### Associate Diploma in Electrical Engineering (EE22)+

Course Discontinued: No further intakes

Location: Gardens Point campus

Course Duration: 1 year full-time plus 2 years part-time, 4 years part-time

**Total Credit Points: 192** 

Standard Credit Points/Full-Time Semester: 48

Course Coordinator: Mr Jim Lyall

#### **Professional Recognition**

This course is recognised for associate membership of the Institution of Engineers, Australia, and membership of the Society of Engineering Associates and of the Institute for Drafting and Design, Australia.

\* Safety boots must be worn for practical exercises and field trips.

+ See course requirements and notes relating to undergraduate courses.



#### **Course options**

Students are required to select two of the following four modules as their majors – Computer Systems, Industrial Systems, Power or Telecommunications.

		Unit No.	Credit Points	Contact Hrs/Wk
COMPUTE EET590 EET690 EET791 EET891	R SYSTEMS MODULE Microprocessor Systems Computer Organisation Computer Programming 2 Advanced Computing Techniques	(a) (b) (c) (d)	7 7 7 7	3 3 3 3
INDUSTRI EET522 EET678 EET720 EET870	AL SYSTEMS MODULE Control Systems 2 Applied Electronics Modern Control Technology Industrial Electronics	(a) (b) (c) (d)	7 7 7 7	3 3 3 3
POWER M EET642 EET650 EET753 EET840	ODULE Electrical Power Systems Electrical Equipment Testing & Commissioning Techniques Substations & Protection Systems	(a) (b) (c) (d)	7 7 7 7	3 3 3 3
TELECOM EET560 EET737 EET760 EET860	MUNICATIONS MODULE Communications Engineering 1 Transmission & Propagation Communications Engineering 2 Communications Technology	(a) (b) (c) (d)	7 7 7 7	3 3 3 3
Full-Time/	Part-Time Course Structure			
Year 3, Ser	<b>nester 1</b> Major 1 Unit Major 2 Unit Elective Unit	(c) (c)	7 7 7	3 3 3
Year 3, Ser EET880	<b>nester 2</b> Design Major 1 Unit Major 2 Unit	(d) (d)	7 7 7	3 3 3
<b>Industrial</b> BNT500 BNT600 BNT700 BNT800	Employment Units Industrial Employment 5 Industrial Employment 6 Industrial Employment 7 Industrial Employment 8		3 3 3 3	15 weeks 15 weeks 15 weeks 15 weeks

Students enrolled in the one year full-time/two years part-time Associate Diploma in Electrical Engineering must engage in at least 60 weeks of approved employment, ie. 15 weeks for each of the four industrial employment units, before being eligible for the Associate Diploma award. An industrial experience record form, as for part-time students, must be submitted. Students must enrol in the industrial employment units in the semester in which they expect to submit their completed form for obtaining credit.

### **Part-Time Course Structure**

Normally, part-time students must engage in at least 120 weeks of approved employment, ie. 15 weeks for each of the eight industrial employment units, before being eligible for the Associate Diploma award. For the employment to be recognised, students must enrol

in the industrial employment units, then submit an industrial experience record form, which has been completed by both the student and the employer. However, a combination of practical experience units and industrial experience totalling 24 credit points will be accepted. Forms are available from the Faculty office.

		Unit No.	Credit Points	Contact Hrs/Wk	
Year 3, Sei	nester 1				
EET570	Electronics 2 Major 1 Unit Major 2 Unit	(a) (a)	7 7 7	3 3 3	
Year 3, Sei	nester 2				
MET600 MET601	Materials for Electrical Engineers Mechanical Plant Major 1 Unit Major 2 Unit	(b) (b)	4 3 7 7	1.5 1.5 3 3	
Year 4, Sei	nester 1				
	Major 1 Unit Major 2 Unit Elective Unit	(c) (c)	7 7 7	3 3 3	
Year 4, Sei	nester 2				
EET880	Design Major 1 Unit Major 2 Unit	(d) (d)	7 7 7	3 3 3	
Industrial	Industrial Employment Units				
BNT100 BNT200 BNT300 BNT400 BNT500 BNT600 BNT700 BNT800	Industrial Employment 1 Industrial Employment 2 Industrial Employment 3 Industrial Employment 4 Industrial Employment 5 Industrial Employment 6 Industrial Employment 7 Industrial Employment 8		3 3 3 3 3 3 3 3 3 3 3 3	15 weeks 15 weeks 15 weeks 15 weeks 15 weeks 15 weeks 15 weeks 15 weeks	

#### Notes

1. Major 1 and Major 2 units refer to units taken from two of the four modules, viz., Computer Systems, Industrial Systems, Power or Telecommunications; (a), (b), (c) and (d) refer to units within each module.

2. For the elective, a unit may be chosen from any other module which runs in the same semester. Degree level units may be selected as elective units with the approval of the course coordinator.

# Associate Diploma in Mechanical Engineering (ME23)\*

Course Discontinued: No further intakes

Location: Gardens Point campus

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

**Total Credit Points: 192** 

\* See course requirements and notes relating to undergraduate courses.



### Standard Credit Points/Full-Time Semester: 48

### Course Coordinator: Mr Andy Tan

### **Professional Recognition**

This course is recognised for associate membership of the Institution of Engineers, Australia, and membership of the Society of Engineering Associates and of the Institute for Drafting and Design, Australia.

### Full-Time Course Structure: No longer offered

Part-Time Course Structure		Credit Points	Contact Hrs/Wk	
Year 3, Se	mester 1		1	
EET500 MET250 MET580	Electrical Technology Thermodynamics Machine Elements 1	6 6 6	3 3 3	
Year 3, Se	mester 2			
MET573 MET920 MET961	CAD/CAM Technology Computer Aided Design & Drafting Fluid Mechanics	7 6 7	3 3 3	
Year 4, Se	mester 1			
MET572 MET933	Production Planning & Control Industrial Tribology Elective Unit	6 6 6	3 3 3	
Year 4, Se	mester 2			
MET350 MET971	Process Engineering Industrial Practice Elective Unit	7 7 7	3 3 3	
<b>Elective U</b> FIRST SEM				
EEB101	Circuits & Measurements (degree level)	7	3	
MAB187 MET511	Engineering Mathematics 1A (degree level) Noise, Stress & Vibration Practice	6 6	3 3 3 3 3 3 3	
MET733	Industrial Metallurgy	6	3	
MET782 MET850	Jig & Tool Design Energy Management	6 6	3	
PHB132	Engineering Physics 1A (degree level)	6	3	
SECOND S	EMESTER			
MAA251	Statistics & Data Processing	8	3	
MAB188 MEB111	Engineering Mathematics 1B (degree level) Dynamics (degree level)	6 7	3	
MET352	Air Conditioning & Refrigeration	7	3 3 3 3 3	
MET680 MET960	Machine Elements 2 Fluid Power	7 7	3	
Industrial Experience				
BNT100	Industrial Employment 1	3	15 weeks	
BNT200	Industrial Employment 2	3	15 weeks	
BNT300 BNT400	Industrial Employment 3 Industrial Employment 4	3	15 weeks 15 weeks	
BNT500	Industrial Employment 5	ž	15 weeks	
BNT600 BNT700	Industrial Employment 6	3 3 3 3 3	15 weeks 15 weeks	
BNT800	Industrial Employment 7 Industrial Employment 8	3	15 weeks	

### Notes

1. From time to time a series of special elective units may be made available to meet industrial demand, provided both student numbers and staff resources can justify their inclusion in the course. Not all of the elective units listed will be available each semester.

2. Degree level units may be selected as elective units with the approval of the Head of School.

3. Generally, a student who has been full-time to this stage of the course will gain or have gained 24 credit points by successfully completing six practical experience units designated by the suffix 'A' after the unit name, while a part-time student will gain 24 credit points for successfully completing 120 weeks of industrial employment, that is 15 weeks for each of the eight industrial employment units, before being eligible for the Associate Diploma Award. However, a combination of practical experience units and industrial employment totalling 24 credit points will be accepted.

4. Students completing industrial employment units must enrol in the units in the semester in which they expect to submit an industrial experience record form for obtaining credit. The form must be completed by both the student and the employer. Forms are available from the Faculty office.