Graduate Certificate in Engineering Science (GCNS) - Grad Cert Eng Sci

CRICOS code (International applicants): 067687KEeduc54.771 0 0 1 59.222.8184624.318481 lOn-campusKFebruary)1 0

Program objectives

Students who successfully complete the Graduate Certificate in Engineering Science will be able to demonstrate their ability to:

- to enable students to acquire, and demonstrate that they possess, the specified graduate attributes and capabilities;
- to enable students to acquire in-depth technical competence in one of the following fields:
  Agricultural Engineering
  Civil Engineering
  Electrical and Electronic Engineering
  Environmental Engineering
  Geographic Information Systems
  Mechanical Engineering
  Power Engineering
  Structural Engineering
  Surveying
- to enable students from diverse and non-traditional backgrounds and locations to enrol in the program and to provide them with opportunities to acquire the skills necessary to complete the program in the normal time;
- to enable students to be empowered as learners through the provision of a wide range of teaching and learning styles and modes in their program;
- to ensure that all students, regardless of the mode of study, have equality of opportunity in acquiring the specified graduate attributes and capabilities.

Admission requirements

To be eligible for admission to the program, candidates must possess one of the following requirements:

- an appropriate three year engineering degree in the relevant (cognate) specialisation (major field) awarded by an Australian university, or an equivalent qualification awarded by an Australian or overseas institution;
- an appropriate three or four year engineering degree in non-cognate specialisation (major field) awarded by an Australian university, or an equivalent qualification awarded by an Australian yef(j/F)T2j1 0 0 1 244.462 355.219 Tr

Program fees

Commonwealth supported place
A Commonwealth supported place is where the Australian Government makes a contribution towards the cost of your higher education and you as a student pay a student contribution amount, which varies depending on the courses undertaken. You are able to calculate the fees for a particular course via the Course Fee Finder. Commonwealth Supported students may be eligible to defer their fees through a Government loan called HECS-HELP.

Domestic full fee paying place
Domestic full fee paying places are funded entirely through the full fees paid by the student. Full fees vary depending on the courses that are taken. You are able to calculate the fees for a particular course via the Course Fee Finder.

Domestic full fee paying students may be eligible to defer their fees through a Government loan called FEE-HELP provided they meet the residency and citizenship requirements.

Australian citizens, Permanent Humanitarian Visa holders, Permanent Resident visa holders and New Zealand citizens who will be resident outside Australia for the duration of their program pay full tuition fees and are not eligible for FEE-Help.

International full fee paying place
International students pay full fees. Full fees vary depending on the courses that are taken and whether they are studied on-campus, via distance education/online. You are able to calculate the fees for a particular course via the Course Fee Finder.

Program structure

The Graduate Certificate in Engineering Science comprises four single unit academic courses as follows:

Schedule A: One core course (One unit)

- ENG5001 Professional Skills in Engineering

Schedule B: A Three course major (Three units)

Required time limits

Full-time students have a maximum of one year to complete this program. Part-time students have a maximum of two years to complete this program.

A pro-rata adjustment of the maximum time period will apply for those students who transfer from one mode of study to another. A pro-rata reduction in the maximum time period will apply to students who are admitted to a program with advanced standing.

Major studies objectives

The major study provides students with knowledge and skills in a specific discipline. The nine major study areas in the Graduate Certificate in Engineering Science are:

Agricultural Engineering

IT requirements

Access to an up-to-date computer is necessary. On-campus students can access appropriately equipped laboratories, but should consider acquisition of their own computer. External students should be able to access a computer with the following minimum standards as advised by the University. All students should have access to email and the Internet via a computer running the latest versions of Internet web browsers such as Internet Explorer or Firefox. The University has a wireless network for on-campus students' computers. In order to take advantage of this facility and further enhance their on-campus learning environment, students should consider purchasing a notebook/laptop computer with wireless connectivity. A notebook/laptop may be required for some courses.

Articulation

The Graduate Certificate in Engineering Science, the Graduate Diploma of Engineering Science, and the Master of Engineering Science are a nested suite of programs. Students who have completed the Graduate Certificate in Engineering Science are able to apply to articulate with full credit to the Graduate Diploma of Engineering Science.

Exit points

Students who are unable to satisfactorily complete the program may apply to transfer to the Bachelor of Engineering or the Bachelor of Spatial Science as appropriate. They may also apply to have the courses completed in the Graduate Certificate in Engineering Science credited to their new program.

Exemptions

For the Graduate Certificate in Engineering Science no exemptions will be permitted. Candidates who have completed the same or similar courses at USQ or similar courses at another institution should, with the approval of the Program Coordinator, apply to vary their enrolment pattern on the basis of prior study.

Enrolment

Students should note that some of the courses specify enrolment requirements (prerequisites). Students should therefore refer to the Course Specification section of the USQ Web to determine the enrolment requirements for the courses they intend enrolling in. Students should avoid enrolling in courses for which they do not have sufficient pre-requisite knowledge. Students will be expected to rectify any deficiencies in their pre-requisite knowledge by private study, guided if necessary by the examiners of the relevant courses. Students should contact Faculty Administration if they encounter problems while enrolling in courses with requisites.
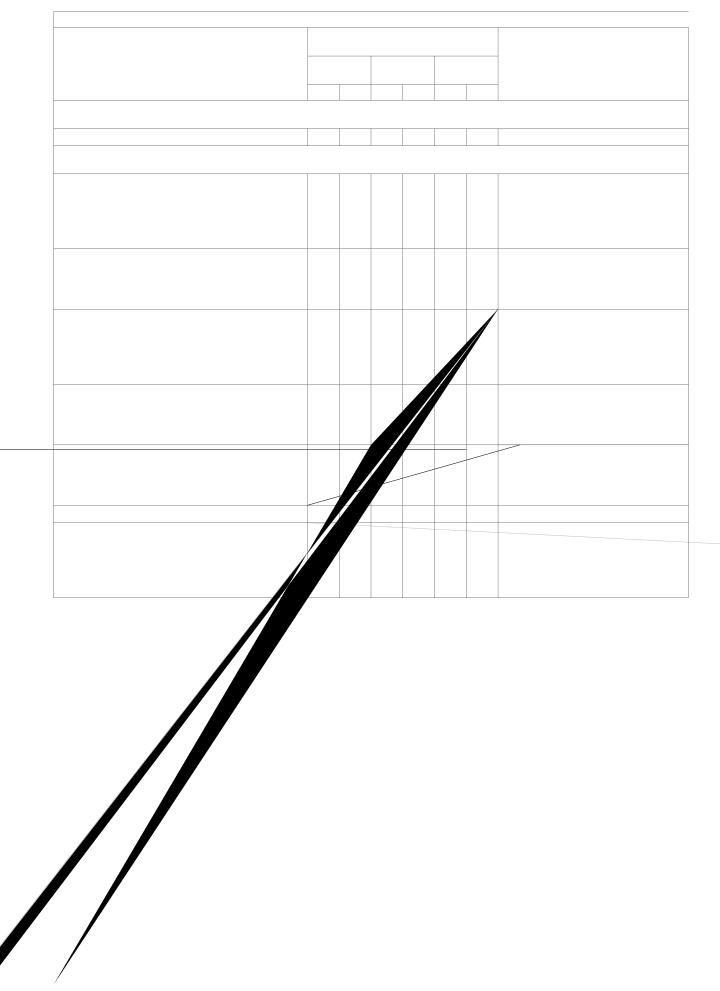
Agricultural Engineering Major recommended enrolment pattern

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							ing Programs: GCEN or GDET or METC or MEPR or GCNS or GDNS or MENS
AGR3305 Precision and Smart Technologies in Agriculture	1	1	2	1			
ENV5205 Solid and Liquid Waste Treatment	2	1		1			Pre-requisite: ENV4203 or ENV4204 or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MEPR or GCNS or GDNS or MENS
AGR4305 Agricultural Soil Mechanics	2	1	4				
AGR3303 Agricultural Materials and Post-Harvest Technologies	2	1	3	1			
ENV4106 Irrigation Science	2	2	3	2			Pre-requisite: AGR3304 or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MEPR or GCNS or GDNS or MENS

Civil Engineering Major recommended enrolment pattern

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Schedule A: Core Courses Students must complete the one course listed in Schedule A.							
ENG5001 Professional Skills in Engineering	1	1,2	1	1,2			
Schedule B: Major Courses Students must complete three of the courses listed in Schedule B.							
							Pre-requisite: (ENG2102 and (MAT1502 or MAsio

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Structural Engineering Major recommended enrolment pattern