

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

CRICOS code (International applicants): 067687K

	On-campus	Distance education
Semester intake:	Semester 1 (March) Semester 2 (July)	Semester 1 (March) Semester 2 (July)
Campus:	Toowoomba	-
Fees:	Commonwealth supported place Domestic full fee paying place International full fee paying place	Commonwealth supported place Domestic full fee paying place International full fee paying place
Standard duration:	0.5 years full-time or 1 year part-time or by distance education	
Program articulation:	To: Graduate Diploma of Engineering Science	

Contact us

Future Australian and New Zealand students	Future International students	Current students
Ask a question Freecall (within Australia): 1800 269 500 Phone (from outside Australia): +61 7 4631 5315 Email: study@usq.edu.au	Ask a question Phone: +61 7 4631 5543 Email: international@usq.edu.au	Ask a question Freecall (within Australia): 1800 007 252 Phone (from outside Australia): +61 7 4631 2285 Email usq.support@usq.edu.au

Professional accreditation

The [Graduate Certificate of Engineering Science](#) is not accredited by any professional bodies other than the University of Southern Queensland.

Program objectives

Students who successfully complete the [Graduate Certificate of Engineering Science](#) will be able to demonstrate their ability to:

- to enable students, who hold appropriate three year engineering qualifications or equivalent in the relevant specialisation (major field), to complete a postgraduate program that will lead to an advanced level of knowledge in an engineering discipline; and
- to enable students who hold appropriate three or four year engineering qualifications or equivalent in a particular specialisation (major field) to change to another area of specialisation by completing a postgraduate program that will lead to an advanced level of knowledge in an engineering discipline.
- 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

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 or overseas institution.*

* Entrants may need to undertake courses in addition to the recommended structure, which will involve study longer than the normal duration.

The standing of degrees awarded by an overseas institution will be determined by reference to the Sydney Accord, and Washington Accord, of which Engineers Australia (EA) is a signatory, and Australia Education International (AEI) which is a federal government agency.

Domestic and International Applicants from a non-English speaking background are required to satisfy [English language requirements](#).

If you do not meet the English language requirements you may apply to study a University-approved [English language program](#). On successful completion of the English language program, Applicants may be admitted to an Award Program.

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 of 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 of Engineering Science](#) are:

Agricultural Engineering
Civil Engineering
Electrical and Electronic Engineering
Environmental Engineering
Geographic Information Systems
Mechanical Engineering
Power Engineering
Structural Engineering
Surveying

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 of 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 of 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 \(Honours\)](#) or the [Bachelor of Spatial Science \(Honours\)](#) as appropriate. They may also apply to have the courses completed in the [Graduate Certificate of Engineering Science](#) credited to their new program.

Credit

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 Faculty of Health, Engineering and Surveying, 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 the Faculty of Health, Engineering and Surveying if they encounter problems while enrolling in courses with requisites.

Agricultural Engineering Major recommended enrolment pattern

Students are able to enrol in any offered mode of a course (on-campus, distance education or online), regardless of the program mode of study they enrolled in.

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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.						
ENG3104 Engineering Simulations and Computations	1	2	1	2		Pre-requisite: (ENG2102 and (MAT1502 or MAT1102 or ENM2600)) or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MEPR or GCNS or GDNS or MENS
ENV3104 Hydraulics II	1	1	1	1		Pre-requisite: ENV1101 or ENV2103 or Students must be enrolled in one of the following 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 Mater	2	1	3	1		

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	Vb^o	Pb j	Vb^o	Pb j	Vb^o	Pb j	
ELE3305 Computer Systems and Communications Protocols	2	1	1	1			
ELE4606 Communication Systems	2	2	4	2			Pre-requisite: (ELE2504 and ELE2601) or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MEPR or MENS

Environmental Engineering Major recommended enrolment pattern

Students are able to enrol in any offered mode of a course (on-campus, distance education or online), regardless of the program mode of study they enrolled in.

