

## Graduate Certificate of Advanced Engineering (GCAE) - GradCertAdvEng

	Online
<b>Semester intake:</b>	Semester 1 (February) Semester 2 (July)
<b>Fees:</b>	Domestic full fee paying place International full fee paying place
<b>Standard duration:</b>	1-2 years part-time
<b>Program articulation:</b>	From: <a href="#">Bachelor of Engineering (Honours)</a> To: <a href="#">Master of Advanced Engineering</a>

### Notes:

Some of the courses in the Engineering Management and Engineering Project Management specialisations may be available on-campus at Springfield.

### Contact us

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

### Professional accreditation

The Graduate Certificate of Advanced Engineering is not accredited by any professional bodies other than the University of Southern Queensland.

### Program objectives

Students who successfully complete the Graduate Certificate of Advanced Engineering will be able to demonstrate an ability to:

- enable students, who hold an appropriate four year engineering qualifications or equivalent to complete a postgraduate program that will lead to an advanced theoretical and technical knowledge in an engineering discipline or engineering management and practice.
- critically evaluate knowledge from professional journals and other information sources relevant to their specialisation to communicate complex ideas and theoretical concepts.
- enable students to acquire advanced and integrated understanding of a complex body of knowledge in one or more disciplines or areas of professional practice.

### Australian Qualifications Framework

The Australian Qualifications Framework (AQF) is a single national, comprehensive system of qualifications offered by higher education institutions (including universities), vocational education and training institutions and secondary schools. Each AQF qualification has a set of descriptors which define the type and complexity of knowledge, skills and application of knowledge and skills that a graduate who has been awarded that qualification has attained, and the typical volume of learning associated with that qualification type.

This program is at AQF Qualification Level 08. Graduates at this level will have advanced knowledge and skills for professional or highly skilled work and/or further learning.

The full set of levels criteria and qualification type descriptors can be found by visiting [www.aqf.edu.au](http://www.aqf.edu.au).

## Admission requirements

To be eligible for admission, applicants must satisfy the following requirements:

- Completion of an Australian university four year Bachelor degree in the area of engineering in a relevant cognate specialisation (major), or equivalent
- English Language Proficiency requirements for Category 3.

All students are required to satisfy the applicable [English language requirements](#).

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

## Program fees

### 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. Students 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. Students are able to calculate the fees for a particular course via the [Course Fee Finder](#).

## Program structure

The Graduate Certificate of Advanced Engineering comprises four single-unit courses.

## 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.

## Specialisation

The specialisation study provides students with knowledge and skills in a specific discipline. The four specialisation study areas in the Graduate Certificate of Advanced Engineering are:

- Advanced Structural Engineering Design
- Engineering Management
- Engineering Project Management
- Civil and Structural 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

## Engineering Management specialisation recommended enrolment pattern

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

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<b>Schedule A: Core Course</b> Students must complete at least two of the courses in this schedule								
ENG8103 Management of Technological Risk							2	
ENG8104 Asset Management in an Engineering Environment							1	
ENG8205 Technology Management Practice							2	
<b>Schedule B: Core Course</b> Students must complete at least two of the courses in this schedule								
ENG8101 Technological Impact and its Management							1	
ENG8207 Technological Innovation and Development							2	
ENG8208 Advanced Engineering Project Management							1	

**Notes:**

Some courses may be offered on-campus at Springfield.

## Engineering Project Management specialisation recommended enrolment pattern

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

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## Civil and Structural Engineering specialisation recommended enrolment pattern

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

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	L k*^ j m r p %LK@%		Buqbok^i %BUQ%		L kifkb %LKI%		
	Vb^o	Pb j	Vb^o	Pb j	Vb^o	Pb j	
<b>Schedule A: Core Course</b> Students must complete at least two of the courses in this schedule							
<a href="#">CIV5704 Road and Street Engineering</a>						2	
<a href="#">CIV5705 Pavement Design and Analysis</a>						1	Pre-requisite: <a href="#">CIV3703</a> or Students must be enrolled in one of the following Programs: GCNS or GDNS or MENS or PGCN or GCAE or MEPR
<a href="#">ENV5205 Solid and Liquid Waste Treatment</a>					3	1	Pre-requisite: <a href="#">ENV4203</a> or <a href="#">ENV4204</a> or Students must be enrolled in one of the following Programs: GCEN or METC or MEPR or GCNS or GDNS or MENS
<b>Schedule B: Core Course</b> Students must complete at least two of the courses in this schedule							
<a href="#">CIV8801 Code-Based Structural Design</a>						1	
<a href="#">CIV8802 Advanced Prestressed Concrete</a> <sup>^</sup>						2	
<a href="#">CIV8804 Advanced Design Practice using Finite Element Analysis</a>						2	
<a href="#">ENG8111 Project Requirements Management</a>						2	

### Footnotes

<sup>^</sup> This course is offered in odd years only