

Graduate Certificate of Advanced Engineering (GCAE) - GradCertAdvEng

This program is offered only to continuing students. No new admissions will be accepted. Students who are interested in this area of study should [contact us](#).

| | Online |
|------------------------------|---|
| Start: | No new admissions |
| Fees: | Domestic full fee paying place International full fee paying place |
| Standard duration: | 1-2 years part-time |
| Program articulation: | From: Bachelor of Engineering (Honours) To: Master of Advanced Engineering |

Notes:

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

Contact us

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| Current students |
| 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 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:

- 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.
- acquire advanced and integrated understanding of a complex body of knowledge in one or more disciplines or areas of professional practice.

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 Schedule](#)

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, external or online. Students are able to calculate the fees for a particular course via the [Course Fee Schedules](#).

Program structure

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

Required time limits

Students have a maximum of 2 years to complete this program.

Specialisation

The specialisation study provides students with knowledge and skills in a specific discipline. The 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. Students should be able to access a computer with the following [minimum standards](#). 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. Specialist software is required for some courses.

Articulation

Students who complete this program are eligible to articulate into the [Master of Advanced Engineering](#) degree. They will receive full credit for the courses studied if they study the same specialisation in both programs. The standing of degrees awarded by an overseas institution will be determined by reference to the National Office of Overseas Skills Recognition (NOOSR).

Credit

Exemptions/credit will be assessed based on the [UniSQ Credit and Exemption Procedure](#).

Advanced Structural Engineering Design specialisation recommended enrolment pattern

| Course | Year of program and semester in which course is normally studied | | | | | | Enrolment requirements |
|--|--|-----|----------------|-----|--------------|-----|------------------------|
| | On-campus (ONC) | | External (EXT) | | Online (ONL) | | |
| | Year | Sem | Year | Sem | Year | Sem | |
| Schedule A: Core Course | | | | | | | |
| Students must complete two of the courses in this schedule | | | | | | | |
| CIV8801 Code-Based Structural Design | | | | | | 1 | |
| CIV8802 Advanced Prestressed Concrete ^ | | | | | | 2 | |
| CIV8804 Advanced Design Practice using Finite Element Analysis | | | | | | 2 | |
| Schedule B: Core Course | | | | | | | |
| Students must complete two of the courses in this schedule | | | | | | | |
| ENG8104 | | | | | | 1 | |
| ENG8205 | | | | | | 2 | |
| ENG8208 | | | | | | 1 | |

Footnotes

[^] Offered Odd Years Only

Engineering Management specialisation recommended enrolment pattern

| Course | Year of program and semester in which course is normally studied | | | | | | Enrolment requirements |
|--|--|-----|----------------|-----|--------------|-----|------------------------|
| | On-campus (ONC) | | External (EXT) | | Online (ONL) | | |
| | Year | Sem | Year | Sem | Year | Sem | |
| Schedule A: Core Course | | | | | | | |
| Students must complete two of the courses in this schedule | | | | | | | |
| ENG8103 | | | | | | 2 | |
| ENG8104 | | | | | | 1 | |
| ENG8205 | | | | | | 2 | |
| Schedule B: Core Course | | | | | | | |
| Students must complete two of the courses in this schedule | | | | | | | |
| ENG8101 | | | | | | 1 | |
| ENG8207 [£] | | | | | | 3 | |
| ENG8208 | | | | | | 1 | |

Footnotes

[£] In Semester 3, 2023 this course will be delivered as a Transition (9 week) semester, commencing on 13 November 2023 and concluding on 12 January 2024

Notes:

Some courses may be offered on-campus at Springfield.

Engineering Project Management specialisation recommended enrolment pattern

| Course | Year of program and semester in which course is normally studied | | | | | | Enrolment requirements |
|-------------------------|--|-----|----------------|-----|--------------|-----|------------------------|
| | On-campus (ONC) | | External (EXT) | | Online (ONL) | | |
| | Year | Sem | Year | Sem | Year | Sem | |
| Schedule A: Core Course | | | | | | | |

| Course | Year of program and semester in which course is normally studied | | | | | | Enrolment requirements |
|--|--|-----|----------------|-----|--------------|------|------------------------|
| | On-campus (ONC) | | External (EXT) | | Online (ONL) | | |
| | Year | Sem | Year | Sem | Year | Sem | |
| Students must complete two of the courses in this schedule | | | | | | | |
| MGT8022 Project-Based Management * | | | | | | 2, 3 | |
| ENG8111 + | | | | | | 2 | |
| ENG8208 | | | | | | 1 | |
| Schedule B: Core Course | | | | | | | |
| Students must complete two of the courses in this schedule | | | | | | | |
| ENG8103 | | | | | | 2 | |
| ENG8104 | | | | | | 1 | |
| ENG8205 | | | | | | 2 | |

Footnotes

* It is strongly recommended that students enrol in [MGT8022](#) prior to, or at the same time as, enrolling in subsequent project management courses.

+ This course will not be offered in S2, 2020.

Notes:

Some courses may be offered on-campus at Springfield.

Civil and Structural Engineering specialisation recommended enrolment pattern

| Course | Year of program and semester in which course is normally studied | | | | | | Enrolment requirements |
|--|--|-----|----------------|-----|--------------|-----|--|
| | On-campus (ONC) | | External (EXT) | | Online (ONL) | | |
| | Year | Sem | Year | Sem | Year | Sem | |
| Schedule A: Core Course Students must complete the two courses in this schedule | | | | | | | |
| CIV5704 Road and Street Engineering | | | | | | 2 | |
| CIV5705 Pavement Design and Analysis | | | | | | 1 | Pre-requisite: CIV3703 or Students must be enrolled in one of the following Programs: GCNS or GDNS or MENS or PGCN or GCAE or MEPR |
| Schedule B: Core Course Students must complete two of the courses in this schedule | | | | | | | |
| CIV8801 Code-Based Structural Design | | | | | | 1 | |
| CIV8802 Advanced Prestressed Concrete ^ | | | | | | 2 | |
| CIV8804 Advanced Design Practice using Finite Element Analysis | | | | | | 2 | |
| ENG8111 + | | | | | | 2 | |

Footnotes

[^] Offered odd years only

+ This course will not be offered in S2, 2020.