# **Bachelor of Engineering (BENG) - BEng**

QTAC code (Australian and New Zealand applicants): Toowoomba campus: 907332; Distance education: 907335; Springfield campus: 927332

CRICOS code (International applicants): 003581E

This program is only offered to continuing students. No new admissions will be accepted. Students who

in which they will function as professional engineers. The program also seeks to instill in students a capacity to communicate effectively and adapt to change.

The Bachelor of Engineering is primarily vocationally oriented. However, the program has been designed to identify students who have the capacity to undertake further study at an advanced level and to make an original contribution to engineering knowledge. These students are encouraged to undertake the course ENG8001 Engineering Research Methods as one of their Elective courses. This, and the two Research Project courses, will assist them in achieving these goals.

# **Program objectives**

The objectives of this program are:

- 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; Computer Systems Engineering; Electrical and Electronic Engineering; Environmental Engineering; Instrumentation and Control Engineering; Mechanical Engineering; Mechanical Engineering; Mechatronic Engineering; or Power Engineering.
- 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
- to ensure that graduates are eligible for graduate membership of Engineers Australia, and other appropriate professional bodies.

## Admission requirements

## **Applicants shall normally:**

• have studied four semester units and achie

Commonwealth Supported students may be eligible to defer their fees through a Government loan called HECS-HELP.

#### Domestic full fee paying place

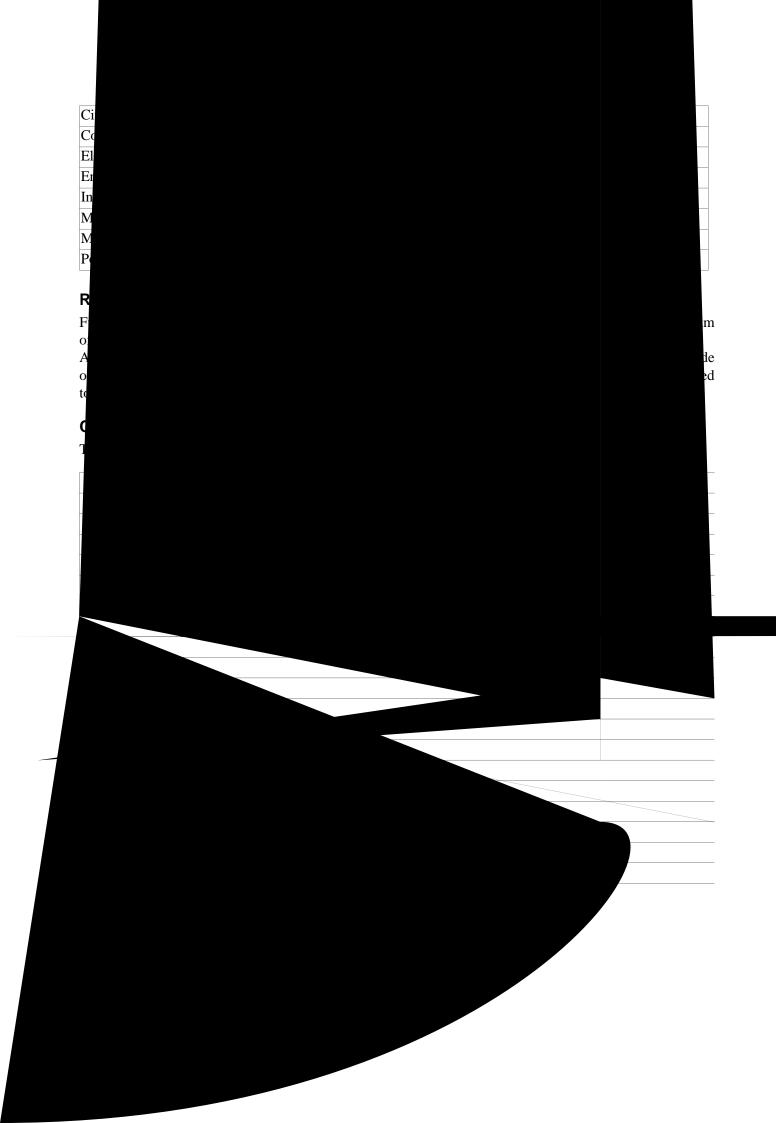
Domestic full fee paying places are funded entirely through the full fees paid by the student. Full fees vary depending on the courses that are taken. You are able to calculate the fees for a particular course via the Course Fee Finder.

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.



- Electrical and Electronic Engineering
- Environmental Engineering
- Instrumentation and Control Engineering
- Mechanical Engineering
- Mechatronic Engineering
- Power Engineering

## **Elective courses**

In the Bachelor of Engineering, students are not required to undertake the Elective courses until the third and fourth levels of the program. This enables students enrolled in the second level of the program to discuss their choice of Electives with their Faculty. The most popular choices of courses for Electives may thus be timetabled to allow students to attend in their third and fourth years of study. Appropriate Electives are shown in the tables in the Recommended Enrolment P

course. Practice courses **may not** be taken earlier than shown except with the permission of the Faculty of Health, Engineering and Sciences. In some cases students may enrol in two Practice courses in one term so they can complete the two residential schools in a two-week period. The actual dates for each residential school are shown in the Residential School schedule in this Handbook.

Safety boots are compulsory in engineering laboratories for several of the Practice courses and are strongly recommended for all other Practice courses.

#### Practice courses

The majority of the practical and professional experience requirements for the program are contained within the major recommended enrolment pattern in the following table. These are zero unit courses, which are a **compulsory part** of the program, however they do not attract a student contribution charge for Australian Residents or a tuition fee for international students.

ENG3902 Professional Practice 1 is to be studied in the student's penultimate year. Upon completion of ENG3902 Professional Practice 1, students must study ENG4111 Research Project Part 1 and ENG4112 Research Project Part 2 and ENG4903 Professional Practice 2 in the same academic year.

#### **Elective courses**

Elective courses are included in the list of Academic courses. Students should select these courses from the Electives listing.

## **Related programs**

Students may combine the Bachelor of Engineering with a program from another area of study. Currently the following combined programs have been accredited by the University and Engineers Australia:

- Bachelor of Engineering and Bachelor of Business
- Bachelor of Engineering and Bachelor of Information Technology
- Bachelor of Engineering and Bachelor of Science.

## Exit points

Students who, for whatever reason, are unable to complete the Bachelor of Engineering and who satisfy all of the requirements of either the Bachelor of Engineering Technology, the Associate Degree of Engineering or the Diploma of Engineering Studies may be permitted to exit with that award.

## Honours

The Bachelor of Engineering may be awarded with Honours. The class of honours to be awarded to a student is dependent upon:

- the Grade Point Average calculated from the grades achieved in the courses studied in, or transferred to, the program;
- the grade achieved by the student in the courses ENG4111 Research Project Part 1 and ENG4112 Research Project Part 2 (unless the student is exempted from these courses).

The minimum levels of achievement normally required for each class of honours are shown in the following table. To be assured of achieving a particular class of honours students must have achieved the specified grade in the research project courses and the minimum GPA requirements for all of the courses studied, for the last 16 courses studied, or for the last eight courses studied.

Class of Honours	GPA Calculated from	Minimum Grade		
	All Courses Studied in the	Achieved in		
	Program	Courses	Courses	Research Project
		Studied*#	Studied*#	Courses
First Class Honours	6.0	6.2	6.5	Α

Second Class Honours - Division A	5.5	5.7	5.9	В
Second Class Honours - Division B	5.0	5.1	5.3	С
Minimum number of courses required	20	16	8	

Footnotes

\* The results from courses ENG4111 and ENG4112 must be included (unless the student is exempted from these courses).

# The best results in a semester are to be used when not all of the results from a semester are required.

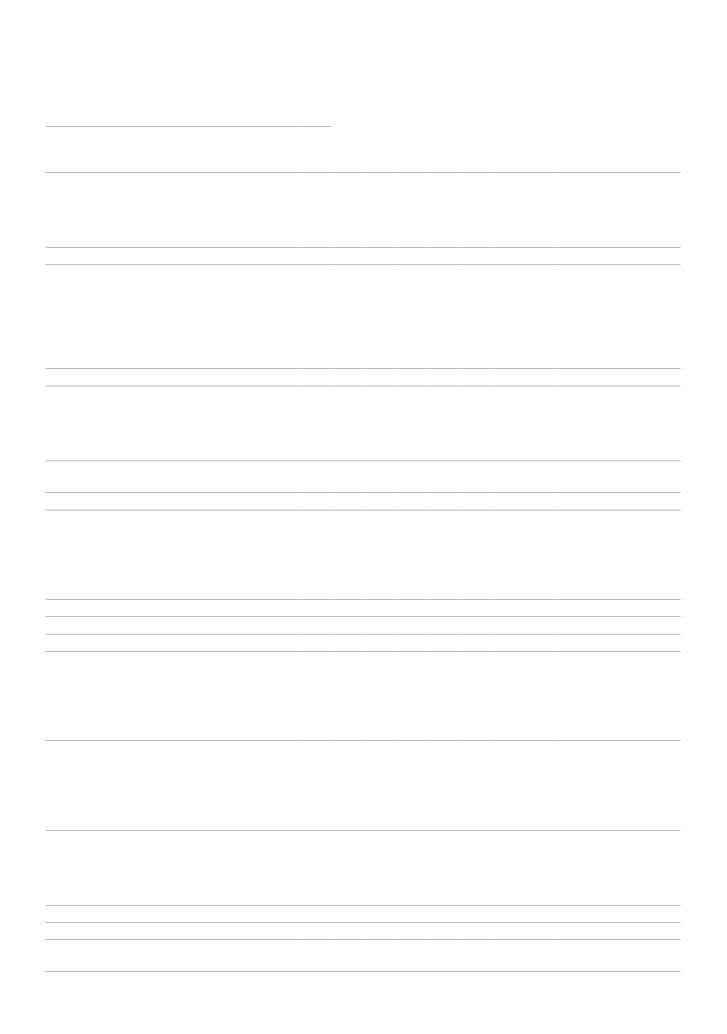
# Other information

ENG1901 Engineering Practice 1 is the first in a series of **Practice courses** designed to enable students to acquire engineering and professional practice skills, including practical and teamwork skills, problem solving and engineering judgement. It is designed principally to cater for the needs of recent school leavers and those lacking any significant experience of the engineering workforce. **Students who have a trade certificate and who have been employed in the engineering industry for some time may be able to claim exemption from the course.** 

## Agricultural Engineering Major 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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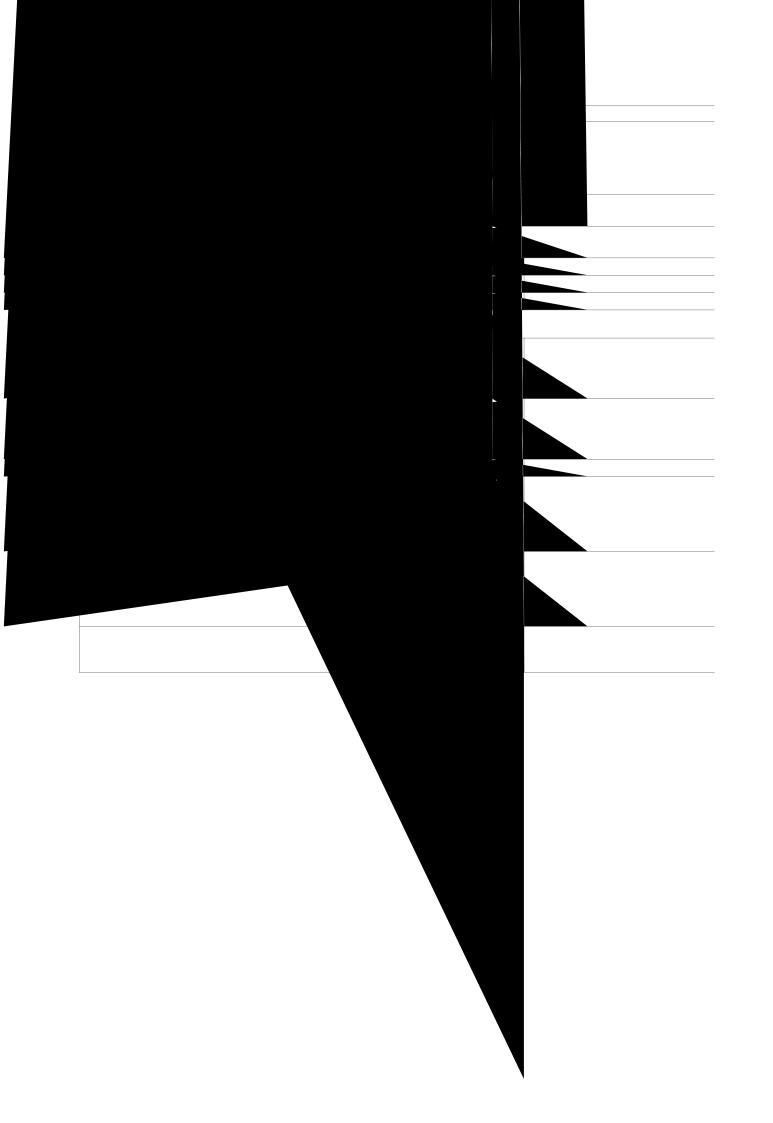


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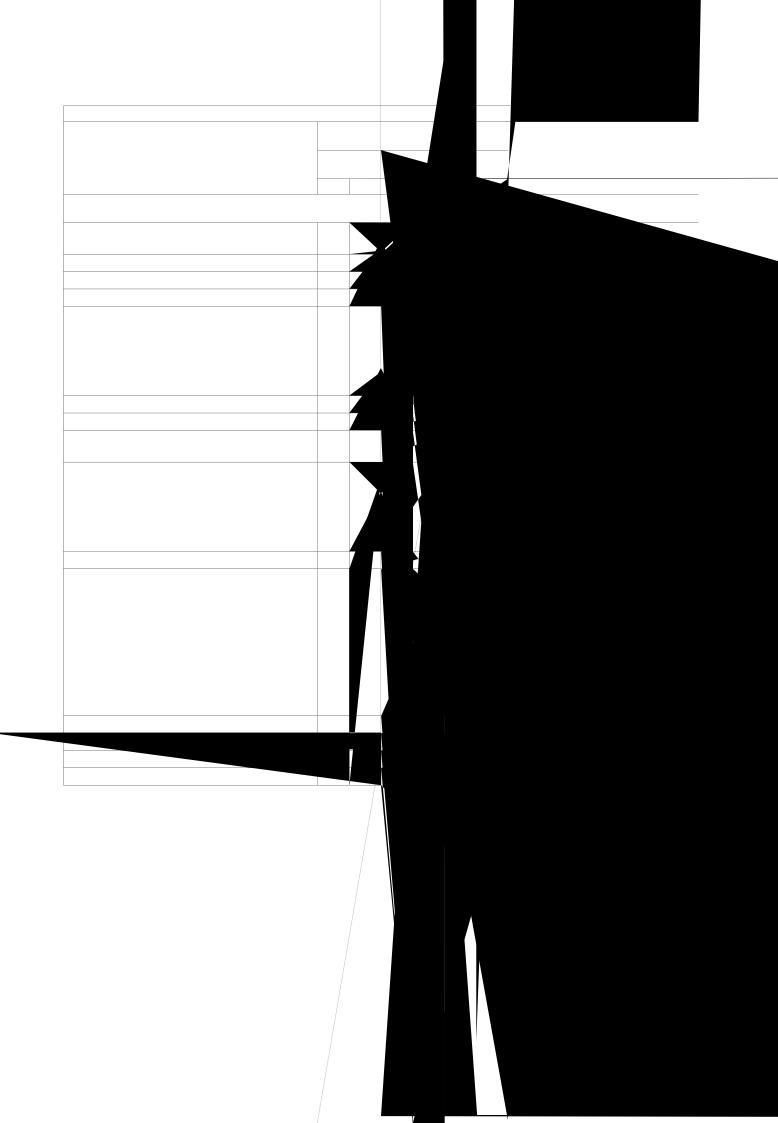
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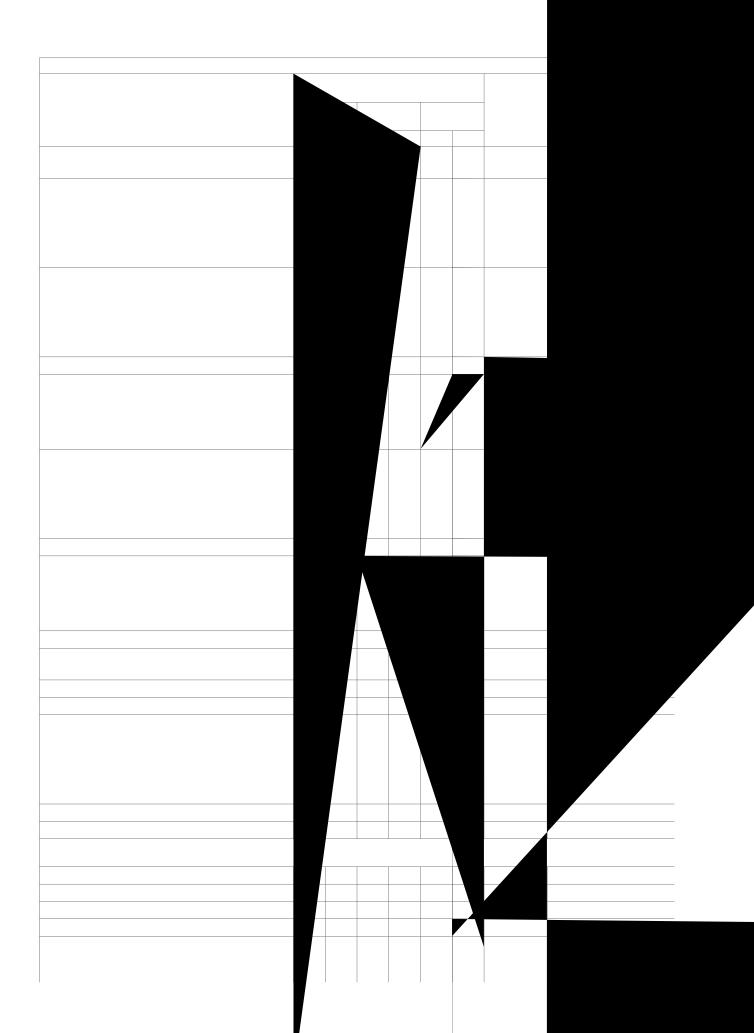
The course AGR2902 Field Practice may involve overnight field trips for which each student will be responsible for their own accommodation costs. This course is not offered in the on-campus mode. On-campus students should enrol in the external mode.

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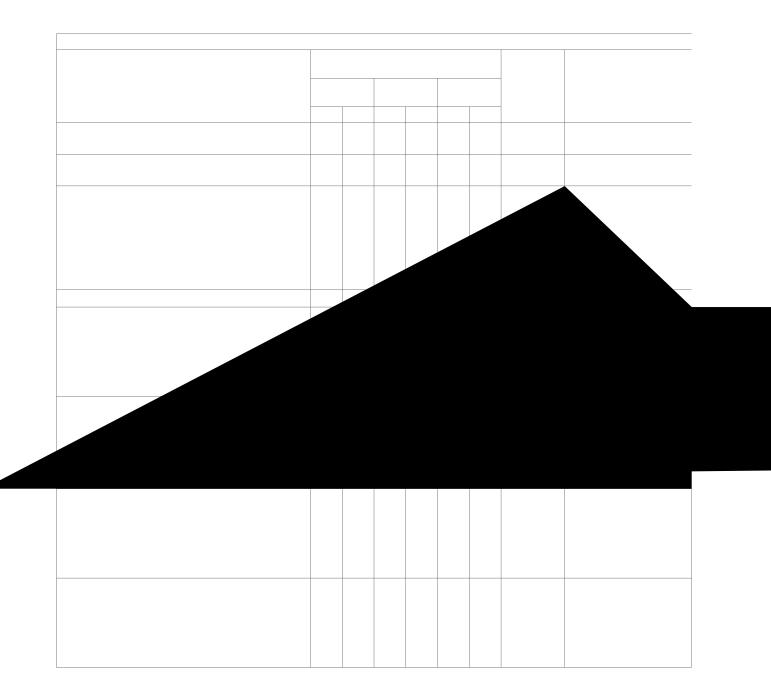
Students who have been granted an exemption from ELE1801 Electrical

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To satisfy the requirements of the program students must complete all of the Academic and Practice courses in the following table that shows the recommended enrolment patterns for on-campus and external students for our Toowoomba campus. Students following a non-standard enrolment pattern should consult the course synopses section of this Handbook to ascertain if a course is offered in another term.

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