

## Bachelor of Engineering (Honours) Bachelor of Business (BEHB) - BEng(Hons) BBus

QTAC code (Australian and New Zealand applicants): Toowoomba campus: 907342; External: 907345

CRICOS code (International applicants): 079516G

**This program is offered only to continuing students. No new admissions will be accepted. Students who are interested in this study area should consider the [Bachelor of Engineering \(Honours\) Bachelor of Business and Commerce](#) which will be offered from Semester 1, 2017.**

	On-campus	External
<b>Semester intake:</b>	No new admissions	No new admissions
<b>Campus:</b>	Toowoomba	-
<b>Fees:</b>	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
<b>Standard duration:</b>	5 years full-time, 8 years part-time or external	
<b>Program articulation:</b>	From: <a href="#">Associate Degree of Engineering</a> ; <a href="#">Bachelor of Engineering Science</a> ; <a href="#">Bachelor of Engineering (Honours)</a>	

### Notes:

See note on part-time study below within Admission requirements.

### 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

A graduate of this program is eligible to apply for membership of Engineers Australia as a graduate Engineer. After further professional development, a graduate member with a Bachelor of Engineering (Honours) may apply for chartered status as a Professional Engineer and, when granted, may use the post-nominal MIEAust CPEng.

The Bachelor of Engineering (Honours) program is accredited by Engineers Australia and, through an agreement reached between the professional engineering bodies of other countries (the Washington Accord), is also recognised in the United Kingdom, the United States of America, Canada, Ireland, Hong Kong, New Zealand and South Africa.

### Program aims

This combination of an Engineering program with a program in Business provides students with the opportunity to become qualified Engineers with a strong background in business principles and practice. There is an increasing need for engineering graduates to have business qualifications early in their career as they are often required to manage complex projects with both tight schedules and budgets. In some sectors of the industry

a business qualification can be one of the criteria for promotion. Many engineers have completed a [Master of Business Administration](#) to satisfy this requirement. This program enables students to obtain qualifications in both disciplines at the same time.

The program offers students a high level of flexibility as they are able to choose wide ranging combinations of an engineering major and a business major that best suits their career aspirations.

For more details of the two programs that comprise this award, applicants are asked to refer to the [Bachelor of Business](#) and [Bachelor of Engineering \(Honours\)](#) sections of this Handbook.

## Program objectives

Graduates of the Bachelor of Engineering (Honours) and Bachelor of Business program will have met the separate objectives of the [Bachelor of Engineering \(Honours\)](#) and the [Bachelor of Business](#) programs.

## 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).

## Program Information Set

View USQ's admission criteria, student profiles and a summary of all offers made under [Course Admission Information Set](#) via the QTAC website.

## Admission requirements

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

- have studied four semester units and achieved an exit assessment of 'Sound Achievement' or better in each of the following Queensland Senior Secondary School subjects: English and Mathematics B. It is recommended that applicants should also have satisfactorily completed the subject: Physics, or
- be able to demonstrate that they have achieved an equivalent standard in these subjects at another institution, and
- **Australian applicants:** have achieved a Queensland Overall Position (OP) band, or an equivalent Rank based on qualifications and previous work experience, at or above the specified cut-off level

Applicants should ensure they are able to complete this program within the maximum duration of eight years. To achieve this, students will need to complete a minimum of 5 units of study per year or be eligible for 16 units of credit.

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

### Commonwealth supported place

A Commonwealth supported place is where the Australian Government makes a contribution towards the cost of a students' higher education and students pay a [student contribution amount](#), which varies depending on

the courses undertaken. Students 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. 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 program involves five years of full-time study.

Students may apply for admission to study part-time or by distance education however applicants should ensure they are able to complete this program within the maximum duration of eight years. To achieve this, students will need to complete a minimum of 5 units of study per year or be eligible for 16 units of credit.

The combined Bachelor of Engineering (Honours) and Bachelor of Business degree is a 40 unit program consisting of Academic courses and Practice courses.

**Academic** courses are normally one-unit courses that involve approximately 155 hours of student work per unit.

The components of the program are shown in the following table:

<b>Program Component</b>	<b>Number of Academic Courses</b>	<b>Number of Practice Courses</b>
Core Studies	15	4
Engineering Major Study	17	4-5 depending upon the major
Business Major Study	8	0
Total Courses	40	8-9
Total Units	40	0

## **Required time limits**

Full-time students have a maximum of seven years to complete this program. Part-time or distance education students have a maximum of eight 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.

## **Core courses**

The courses that comprise the core studies program are shown in the following table:

Course	Units
<b>Academic Courses - Business</b>	
<a href="#">ACC1101 Accounting for Decision-Making</a>	1
LAW1101	1
<a href="#">MGT1000 Organisational Behaviour</a>	1
<a href="#">MKT1001 Introduction to Marketing</a>	1
<b>AND</b>	
<a href="#">POL1000 Government, Business and Society</a>	1
<b>OR</b>	
<a href="#">FIN1101 Introduction to Corporate Finance</a>	
<b>OR</b>	
<a href="#">ECO1000 Economics</a>	
<b>Academic Courses - Engineering</b>	
<a href="#">ENM1600 Engineering Mathematics</a>	1
<a href="#">ENM2600 Advanced Engineering Mathematics</a>	1
<a href="#">ENG1002 Introduction to Engineering and Built Environment Applications</a>	1
<a href="#">ENG1100 Introduction to Engineering Design</a>	1
ENG1101	1
ENG2102	1
<a href="#">ENG3104 Engineering Simulations and Computations</a>	1
<a href="#">ENG4110 Engineering Research Methodology</a>	1
<a href="#">ENG4111 Research Project Part 1</a>	1
<a href="#">ENG4112 Research Project Part 2</a>	1
<b>Practice Courses - Engineering</b>	
<a href="#">ENG1901 Engineering Practice 1</a>	0
<a href="#">ENG3902 Professional Practice 1</a>	0
<a href="#">ENG4903 Professional Practice 2</a>	0
<a href="#">ENG4909 Work Experience - Professional</a>	0

When compared to the Core Studies program in the [Bachelor of Engineering \(Honours\)](#) program the following changes have been made:

- the following courses have been deleted from the program: [ENG2002 Technology, Sustainability and Society](#), and [ENG3003 Engineering Management](#)
- five courses from the [Bachelor of Business](#) have been added to the program.

## Major studies

### Engineering majors

An Engineering major study provides students with knowledge and skills in a particular engineering discipline. Students must select one of the following majors as their Engineering major.

<b>Engineering major studies:</b>
Agricultural Engineering
Civil Engineering
Computer Systems Engineering
Electrical and Electronic Engineering
Environmental Engineering

Instrumentation and Control Engineering
Mechanical Engineering
Mechatronic Engineering
Power Engineering

The courses in each of the Engineering majors are listed in the [Bachelor of Engineering \(Honours\)](#) section of this Handbook. Students enrolled in the Bachelor of Engineering (Honours) and Bachelor of Business program only study 17 of the 20 courses listed in an Engineering major.

Of the 20 courses listed for each major, the three courses that are not required are:

Engineering Major	Courses not to be studied from the Major
Agricultural Engineering	3 Electives
Civil Engineering	3 Electives
Computer Systems Engineering	3 Electives
Electrical and Electronic Engineering	3 Electives
Environmental Engineering	3 Electives
Instrumentation and Control Engineering	3 Electives
Mechanical Engineering	3 Electives
Mechatronic Engineering	3 Electives
Power Engineering	3 Electives

Students should select any remaining Electives from the appropriate list for their engineering major.

### Business majors

Students must select a business major from one of the following eight-unit majors:

Business major studies:
Human Resource Management
Information Technology Management
International Business
Management and Leadership
Marketing
Supply Chain Management
Tourism Management

**Note:** With the permission of the Faculty of Health, Engineering and Sciences, students may select an alternative major from the [Bachelor of Business](#) or the [Bachelor of Commerce](#). The eight courses that comprise each of the business majors are listed in the relevant sections of this Handbook.

### Practical experience

To be eligible to graduate from the Bachelor of Engineering (Honours), students must obtain an aggregate of at least 60 days of suitable work experience during their program. This experience may be in an engineering office or laboratory where the student would be working principally with professional engineers and engineering associates. It may, however, be preferable for students to spend some time in field or factory activities to gain insight into industrial practice and to see what is involved in converting designs into finished products. Students are required to enrol in [ENG4909 Work Experience - Professional](#) in the latter part of their program and keep a record of appropriate experience as specified in the Course Specification. The work experience is to be

endorsed by an appropriate person in the organisation providing the experience and submitted to the examiner. The student must meet all costs associated with the acquisition of work experience to satisfy this requirement. The record of work experience must be made available for perusal by the Faculty of Health, Engineering and Sciences upon request. The acceptability or otherwise of employment experience, and the period of that type of experience that may be credited towards the 60 days, will be determined by the Examiner of [ENG4909 Work Experience - Professional](#).

## 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. Specialist software is required for some courses.

## Residential schools

The attendance requirement of residential schools within this degree is indicated by the following letters: V = Voluntary; O = Optional; C = Compulsory; R = Recommended; HR = Highly Recommended; M = Mandatory. To find out more about [residential schools](#), visit the [Residential School Schedule](#) to view specific dates for your degree, or visit the [Policy and Procedure Library](#).

Students are required to undertake practical and professional activities relevant to their program through enrolment in a series of Practice courses in the program. Practice courses are zero unit courses that may be undertaken in either on-campus or external mode and the final grades available are Pass (P)/Fail (F) only. They are a compulsory part of the program and do not attract a student contribution charge for Australian residents or a tuition fee for international students. The recommended enrolment schedule for Practice courses is shown in the Recommended Enrolment Pattern for the program in this Handbook.

External students must attend a number of residential schools during their program to obtain experience in practical and professional activities appropriate to the program. The residential schools are included in Practice courses which are conducted in Semester 3 or during the recess periods. The dates for each residential school Practice course are shown in the [Residential School Schedule](#) in this Handbook and external students should ensure they are able to attend the residential school prior to enrolling in a Practice course. Personal protective equipment is compulsory in many engineering, construction and spatial science laboratories, students should confirm the requirements before attending residential schools for Practice courses.

Students who enrol in on-campus mode for Practice courses normally undertake a series of weekly activities and/or attend a compulsory residential school.

[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.

## Exit points

Students who, for whatever reason, are unable to complete the Bachelor of Engineering (Honours) and Bachelor of Business and who satisfy all of the requirements of either the [Bachelor of Engineering \(Honours\)](#), the [Bachelor of Engineering Science](#), the [Associate Degree of Engineering](#) or the [Diploma of Engineering Studies](#) may be permitted to exit with that award.

## Credit

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

## Course transfers

Students who are enrolled in either the [Bachelor of Engineering \(Honours\)](#) program or the [Bachelor of Business](#) program may transfer to the program with advanced standing. If they have completed up to one year of one of those programs they would normally be able to complete the program in the minimum time, after four more years of full-time study. Other students may require longer than the minimum time.

## Honours

The level of honours awarded will be determined based on the USQ procedure. Please refer to the [Class of Honours Standard Schedule](#).

## Recommended enrolment patterns

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.

Due to the large number of combinations of engineering and business majors available separate recommended enrolment pattern tables are not printed in this Handbook.

Commencing on-campus students should enrol in the standard first year courses in the engineering major that they have selected. Towards the end of their first year they should consult the Faculty of Health, Engineering and Sciences for advice on the enrolment pattern to be followed in later years of the program.