

## Bachelor of Engineering Science and Bachelor of Vocational Education & Training (BNBV) - BENS BVET

QTAC code (Australian and New Zealand applicants): Toowoomba campus: 907702; External: 907705

**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](#).**

	On-campus	External	Online
<b>Start:</b>	No new admissions	No new admissions	No new admissions
<b>Campus:</b>	Toowoomba		-
<b>Fees:</b>	Commonwealth supported place Domestic full fee paying place	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>	4 years full-time, 8 years part-time		
<b>Program articulation:</b>	From: <a href="#">Associate Degree of Engineering</a> ; <a href="#">Bachelor of Engineering Science</a> To: <a href="#">Bachelor of Engineering (Honours)</a> ; <a href="#">Master of Engineering Science</a>		

### Contact us

Current students
<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

Professional accreditation for this program will be sought from Engineers Australia. Graduates from this program are eligible to apply for graduate membership of Engineers Australia as an Engineering Technologist. After further professional development, a graduate member with a Bachelor or Engineering Technology may apply for chartered status as an Engineering Technologist, and when granted, may use the post-nominal TMIEAust CEngT.

Graduates who choose to extend EDV3500 Competency Based Training and Assessment to meet the requirements for the VET qualification course TAE40110 - Certificate IV in Training and Assessment will have met the industry standard for training delivery in Australia's VET system. The program is not accredited with the Queensland College of Teachers.

### Program aims

- To equip graduates with the academic, personal, professional and technical knowledge, skills and understanding required to commence practice as a Graduate Engineering Technologist in Australia or overseas with appropriate social, cultural, industrial and environmental contexts.
- To graduate students who can demonstrate the knowledge, skills, practices and values inherent in contemporary understandings of best practice in vocational education and training, particularly as these understandings are reflected in the expectations of industry and key training organisations.

- To equip graduates with knowledge and understanding appropriate to working as educators with learners in the post-compulsory years and in a range of adult education and training settings.

## 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 the Queensland Senior Secondary School subject: English and Mathematics B; 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
- have access to an approved instructional setting in the post-compulsory education and training sector. Such access must enable the applicant to plan, implement and evaluate actual instructional programs as required by specified courses within the program. Written verification of such access will be required before enrolment can be confirmed.

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 Schedules](#).

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

## Program structure

The combined Bachelor of Engineering Science and Bachelor of Vocational Education & Training program comprises 32 academic units and involves four years of full-time study or eight years of part-time study. The program is available in both on-campus and external mode of study.

The combined program consists of 19 core, 13 major study and six practical courses. Students enrolled in the program may undertake a professional specialisation in one of the following major discipline areas:

- Civil Engineering
- Electrical and Electronic Engineering; or
- Mechanical Engineering

To satisfy the requirements of the program students must complete all the Academic and Practice courses in the following tables that show the recommended enrolment patterns for on-campus and external students. Students following a non-standard enrolment pattern should consult the [course specification](#) to ascertain if a course is offered in another term.

## Required time limits

Full-time students have a maximum of six years to complete this program. Part-time students have a maximum of 10 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.

## Practical experience

To be eligible to graduate from the Bachelor of Engineering Science, students must obtain an aggregate of at least 45 days of suitable Engineering 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 [ENG3909 Work Experience - Technologist](#) in the latter part of their program and keep a record of appropriate experience as outlined 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 practical 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 45 days, will be determined by the Examiner of [ENG3909 Work Experience - Technologist](#).

Credit or exemptions for [ENG3909 Work Experience - Technologist](#) will not normally be considered.

To be eligible to graduate from the Bachelor of Vocational Education & Training students must obtain an aggregate of 100 hours of professional Vocational Education & Training experience. Professional experience placements may be scheduled outside usual University teaching weeks. Travel to locations away from the areas local to the student's home campus may be necessary to complete the professional experience requirements. The professional experience components of the Bachelor of Vocational Education and Training program are all tied to four identified courses. In order to undertake courses to which professional experience placements are attached at any stage in the program it is a requirement that students will have satisfactorily completed all Vocational Education & Training professional experience courses in previous years in the program enrolment pattern. Students may complete their professional experience in approved placements. As students are studying wholly at a distance from USQ campus, special requirements will need to be met in relation to completion of professional experience, including submission of two digital video recordings of teaching sessions. For further information see [Professional Experience](#). It is required that Queensland-based students hold a current positive notice indicating that they are deemed suitable for working with children and young people. Further information about the "Blue Card" suitability process is available from the commission for Children and Young People.

## 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: 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.

## Articulation

Students can articulate into the [Bachelor of Engineering \(Honours\)](#) and [Master of Engineering Science](#) programs.

## Exit points

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

Students who, for whatever reason, are unable to complete The Bachelor of Vocational Education & Training degree and who satisfy all of the requirements of either the Associate Degree in Education Studies (DAES) and the Diploma of Education Studies (DPES) may be permitted to exit with that award.

## Credit

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

## Civil 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.

To satisfy the requirements of the program, students must complete all of the Academic and Practice Courses in the following tables that show 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 specification](#) to ascertain if a course is offered in another term.

Major study: Civil Engineering (Major Study Code:16749 )									
Course	Year of program and semester in which course is normally studied						Residential school	Enrolment requirements	Comments
	On-campus (ONC)		External (EXT)		Online (ONL)				
	Year	Sem	Year	Sem	Year	Sem			
<b>Academic Courses</b>									
<a href="#">ENG1002 Introduction to Engineering and Built Environment Applications</a>	1	1	1	1					
<a href="#">ENM1600 Engineering Mathematics</a>	1	1	1	1,2					
<a href="#">ENG1101</a>	1	1	2	1,2					
<a href="#">EDC1100</a>	1	1	2			1			
<a href="#">ENG1100 Introduction to Engineering Design</a>	1	2	1	1,2					
<a href="#">CIV1501 Engineering Statics</a>	1	2	1	2,3				Pre-requisite: <a href="#">ENM1600</a> or ( <a href="#">ENM1500</a> and <a href="#">CIV1500</a> ) or Students must be enrolled in one of the following Programs: MEPR or GCEN or GEPR	
<a href="#">EDC1300 The Collaborative Educator</a>	1	2	2			2		Pre-requisite: <a href="#">ESP3100</a> and Students must be enrolled in one of the following Programs: BEDU or BSED	
<a href="#">ENG2102</a>	1	2	2	2,3					
<a href="#">MEC1201 Engineering Materials</a>	2	1	3	1,2,3					
<a href="#">EDC1200</a>	2	1	3			1			
<a href="#">ENV2103 Hydraulics I</a>	2	1	4	1				Pre-requisite: <a href="#">CIV1500</a> or <a href="#">CIV1501</a> or Students must be enrolled in the following Program: GCEN or GEPR	
<a href="#">CIV2605 Construction Engineering</a>	2	1	4	1					
<a href="#">CIV2403 Geology and Geomechanics</a>	2	2	3	2				Pre-requisite: <a href="#">CIV1501</a> or <a href="#">CIV1500</a> or Students must be enrolled in one of the following Programs: MENS or GCEN or GEPR	
<a href="#">SVY1500 Spatial Science for Engineers</a>	2	2	3	2					
<a href="#">EDC1400 Thinking and Acting like a Teacher 2</a>	2	2	4		2			Pre-requisite: EP P1100 or <a href="#">EDC1000</a> and Students must be enrolled in one of the following Programs: BEDU (Primary) or BEDU (Primary + Special Education) or BEDU (Special Education) or BEDU (HPE Primary) or BEDU	25 hours professional experience

Major study: Civil Engineering (Major Study Code:16749)									
Course	Year of program and semester in which course is normally studied						Residential school	Enrolment requirements	Comments
	On-campus (ONC)		External (EXT)		Online (ONL)				
	Year	Sem	Year	Sem	Year	Sem			
							(SHPE Primary) or BPED		
<a href="#">EDC2300 Assessment Practices for Secondary</a>	2	2	4			2	Pre-requisite: <a href="#">ESP1200</a> or <a href="#">EDC1400</a> and Students must be enrolled in one of the following Programs: BEDU or BSED		
<a href="#">CIV2701 Road Design and Location</a>	3	1	5	1			Pre-requisite: MAT1500 or ENG1500 or ENM1500 or ENM1600 or Students must be enrolled in one of the following Programs: GCST or GDST or GCEN or GEPR		
<a href="#">MEC2402 Stress Analysis</a>	3	1	5	1			Pre-requisite: <a href="#">CIV1501</a> or Students must be enrolled in one of the following Programs: GCEN or METC or MEPR or GCNS or GDNS or MENS or GEPR		
<a href="#">EDC2400 Educating Learners with Special Needs Across Contexts</a>	3	1	6			1			
<a href="#">EDC3100 ICT and Pedagogy</a>	3	1	6			1		25 hours professional experience	
<a href="#">CIV2503 Structural Design I</a>	3	2	5	2			Pre-requisite: ( <a href="#">ENG1100</a> and <a href="#">MEC2402</a> ) or ( <a href="#">ENG1100</a> and <a href="#">CIV1501</a> for students enrolled in one of the following: BETC Infrastructure Management major or BENS Infrastructure Management Engineering major) or Students must be enrolled in: GCEN or GEPR		
<a href="#">CIV2502 Structural and Building Technology</a>	3	2	5	2					
<a href="#">ENV3105 Hydrology</a>	3	2	6	2					
<a href="#">EDU5221</a> ^	3		6			2			
<a href="#">EDC2100 Supportive Learning Environments: Cultivating Effective Classrooms</a>	4	1	7			1	Students must be enrolled in: BEDU (Early Child) or BEDU (Primary) or BEDU (Primary+Special Ed) or BEDU (Special Ed) or BEDU (HPE Primary)		

Major study: Civil Engineering (Major Study Code:16749)									
Course	Year of program and semester in which course is normally studied						Residential school	Enrolment requirements	Comments
	On-campus (ONC)		External (EXT)		Online (ONL)				
	Year	Sem	Year	Sem	Year	Sem			
								or BEDU (SHPE Primary) or BECH or MOLT (Primary) or BEED or BPED Co-requisite: BEDU (Primary) or BPED Only - EDP2111	
<a href="#">ENG3003 Engineering Management</a> <sup>†</sup>	4	1	7	1,3					
<a href="#">EDV3401</a> <sup>^</sup>	4		8			1			25 hours professional experience
<a href="#">EDV3551 Vocational and Workplace Literacies</a> <sup>^</sup>	4		8			1			
<a href="#">CMG2001 Job Organisation</a>	4	2	7	2					
<a href="#">CIV2702 Municipal Services</a>	4	2	7	2				Pre-requisite: <a href="#">ENV2103</a> or <a href="#">ENV1101</a>	
<a href="#">EDV3500 Competency Based Training and Assessment</a> <sup>^</sup>	4		8			2			25 hours professional experience
<a href="#">ENG3111 Technology Design Project</a>	4	2	8	1,2				Pre-requisite: ( <a href="#">ENG2102</a> or <a href="#">ENG1003</a> or <a href="#">ENG1101</a> ) and Undergraduate students must have completed 14 courses in their program.	
<b>Practice Courses</b>									
<a href="#">ENG1901 Engineering Practice 1</a>	1	1,2	2	2,3			C		
<a href="#">CIV2901 Geology and Geomechanics Practice</a>	2	2	3	2,3			C	Pre-requisite or Co-requisite: <a href="#">ENG1901</a> and <a href="#">CIV2403</a>	
<a href="#">ENV2902 Hydraulics Practice</a>	2	2	3	2,3			C	Pre-requisite or Co-requisite: <a href="#">ENV2103</a> or <a href="#">ENV1101</a>	
<a href="#">CIV3906 Civil Materials Practice</a>	3	1	4	3			C	Pre-requisite: <a href="#">MEC1201</a> and <a href="#">ENG1901</a> or Students must be enrolled in one of the following programs: ADCN or BCON or BCNH	
<a href="#">CIV3907 Civil Systems Practice</a> <sup>*</sup>	3		6	3			C	Pre-requisite: <a href="#">CIV2503</a> or Students must be enrolled in one of the following Programs: MENS or MEPR	
<a href="#">ENG3909 Work Experience - Technologist</a> <sup>*</sup>	3		6	1,3					

#### Footnotes

- ^ On-Campus students should enrol in the external or online offering of this course.  
 † The semester 3 offering of this course is offered in odd numbered years only.  
 \* On-campus students should enrol in the external offering of this course.

## Electrical and Electronic 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.

To satisfy the requirements of the program, students must complete all of the Academic and Practice Courses in the following tables that show 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 specification](#) to ascertain if a course is offered in another term.

Major study: Electrical and Electronic Engineering (Major Study Code:16750 )									
Course	Year of program and semester in which course is normally studied						Residential school	Enrolment requirements	Comments
	On-campus (ONC)		External (EXT)		Online (ONL)				
	Year	Sem	Year	Sem	Year	Sem			
<a href="#">ENG1002 Introduction to Engineering and Built Environment Applications</a>	1	1	1	1,2					
<a href="#">ENM1600 Engineering Mathematics</a>	1	1	1	1,2					
<a href="#">ENG1101</a>	1	1	2	1,2					
<a href="#">EDC1100</a>	1	1	2			1			
<a href="#">ENG1100 Introduction to Engineering Design</a>	1	2	1	1,2					
<a href="#">ELE1502 Electronic Circuits</a>	1	2	1	2					
<a href="#">EDC1300 The Collaborative Educator</a>	1	2	2			2		Pre-requisite: <a href="#">ESP3100</a> and Students must be enrolled in one of the following Programs: BEDU or BSED	
<a href="#">ENG2102</a>	1	2	2	2,3					
<a href="#">MEC1201 Engineering Materials</a>	2	1	3	1,2,3					
<a href="#">EDC1200</a>	2	1	3			1			
<a href="#">ELE1301 Computer Engineering</a>	2	1	4	1					
<a href="#">ELE2303 Embedded Systems Design</a>	2	1	4	1					
<a href="#">ELE1801 Electrical Technology</a>	2	2	3	2,3				Pre-requisite: <a href="#">ENM1500</a> or <a href="#">ENM1600</a> or Students must be enrolled in one of the following Programs: MEPR or GCEN or GEPR	
<a href="#">ELE2503 Electronic Systems</a>	2	2	3	2				Pre-requisite: <a href="#">ELE1502</a> or Students must be enrolled in the following Program: GCEN or GEPR	
<a href="#">EDC1400 Thinking and Acting like a Teacher 2</a>	2	2	4			2		Pre-requisite: EP P1100 or <a href="#">EDC1000</a> and Students must be enrolled in one of the following Programs: BEDU (Primary) or BEDU (Primary + Special Education) or BEDU (Special Education) or BEDU (HPE	25 hours professional experience



Major study: Electrical and Electronic Engineering (Major Study Code:16750 )									
Course	Year of program and semester in which course is normally studied						Residential school	Enrolment requirements	Comments
	On-campus (ONC)		External (EXT)		Online (ONL)				
	Year	Sem	Year	Sem	Year	Sem			
								Primary) or BEDU (SHPE Primary) or BPED	
<a href="#">EDC2300 Assessment Practices for Secondary</a>	2	2	4			2		Pre-requisite: <a href="#">ESP1200</a> or <a href="#">EDC1400</a> and Students must be enrolled in one of the following Programs: BEDU or BSED	
<a href="#">ELE2601 Telecommunications Principles</a>	3	1	5	1				Pre-requisite: ( <a href="#">ELE1502</a> and <a href="#">ELE1801</a> ) or Students must be enrolled in one of the following Programs: GCEN or METC or GEPR	
<a href="#">ELE2702 Electrical Measurement and Analysis</a>	3	1	5	1				Pre-requisite: (EN G1500 or MAT1500 or <a href="#">ENM1500</a> or <a href="#">ENM1600</a> ) and <a href="#">ELE1801</a> or Students must be enrolled in the following Program: GCEN	
<a href="#">EDC2400 Educating Learners with Special Needs Across Contexts</a>	3	1	6			1			
<a href="#">EDC3100 ICT and Pedagogy</a>	3	1	6			1		25 hours professional experience	
<a href="#">ELE2501 Electronic Workshop and Production</a>	3	2	5	2				Pre-requisite: ( <a href="#">ELE1502</a> and <a href="#">ELE1301</a> ) or Students must be enrolled in the following Program: GCEN	
<a href="#">ELE2101 Control and Instrumentation</a>	3	2	5	2				Pre-requisite: <a href="#">ENM1500</a> or <a href="#">ENM1600</a> or Students must be enrolled in one of the following Programs: MEPR or GCEN or GEPR	
<a href="#">EDC2100 Supportive Learning Environments: Cultivating Effective Classrooms</a>	3	2	6			2		Students must be enrolled in: BEDU (Early Child) or BEDU (Primary) or BEDU (Primary+Special Ed) or BEDU (Special Ed) or BEDU (HPE Primary) or BEDU (SHPE Primary) or BECH or MOLT (Primary) or BEED or BPED Co-requisite: BEDU (Pri	

Major study: Electrical and Electronic Engineering (Major Study Code:16750 )									
Course	Year of program and semester in which course is normally studied						Residential school	Enrolment requirements	Comments
	On-campus (ONC)		External (EXT)		Online (ONL)				
	Year	Sem	Year	Sem	Year	Sem			
								mary) or BPED Only - EDP2111	
EDU5221 <sup>^</sup>	3		6			2			
<a href="#">ELE3803 Electrical Plant</a>	4	1	7	1				Pre-requisite: <a href="#">ELE1801</a> or Students must be enrolled in one of the following Programs: GCEN or METC or MEPR or GCNS or GDNS or MENS or GEPR	
<a href="#">ENG3003 Engineering Management</a> <sup>†</sup>	4	1	7	1,3					
EDV3401 <sup>^</sup>	4		8			1			25 hours professional experience
EDV3551 Vocational and Workplace Literacies <sup>^</sup>	4		8			1			
<a href="#">ELE3805 Power Electronics Principles and Applications</a>	4	2	7	2				Pre-requisite: ( <a href="#">ELE1502</a> and <a href="#">ELE1801</a> ) or Students must be enrolled in one of the following Programs: GCEN or METC or MEPR or GCNS or GDNS or MENS	
<a href="#">ELE3506 Electronic Measurement</a>	4	2	7	2				Pre-requisite: ( <a href="#">ELE1502</a> and ( <a href="#">ELE2101</a> or <a href="#">ELE2103</a> ) and ( <a href="#">ELE2503</a> or <a href="#">ELE2504</a> )) or Students must be enrolled in one of the following Programs: GCEN or METC or MEPR or MENS	
EDV3500 Competency Based Training and Assessment <sup>^</sup>	4		8			2			25 hours professional experience
<a href="#">ENG3111 Technology Design Project</a>	4	2	8	1,2				Pre-requisite: (EN G2102 or <a href="#">ENG1003</a> or <a href="#">ENG1101</a> ) and Undergraduate students must have completed 14 courses in their program.	
<b>Practice Courses</b>									
<a href="#">ENG1901 Engineering Practice 1</a>	1	1,2	1	2,3			C		
<a href="#">ELE1911 Electrical and Electronic Practice A</a>	1	2	2	3			C		

Major study: Electrical and Electronic Engineering (Major Study Code:16750)									
Course	Year of program and semester in which course is normally studied						Residential school	Enrolment requirements	Comments
	On-campus (ONC)		External (EXT)		Online (ONL)				
	Year	Sem	Year	Sem	Year	Sem			
<a href="#">ELE2912 Electrical and Electronic Practice B</a>	2	1	3	3			C	Pre-requisite: ( <a href="#">ELE1301</a> and <a href="#">ELE1502</a> and <a href="#">ELE1801</a> ) or Students must be enrolled in one of the following Programs: GDNS or MENS	
<a href="#">ELE2913 Electrical and Electronic Practice C</a>	2	2		2			C	Pre-requisite: ( <a href="#">ELE1301</a> and <a href="#">ELE1502</a> and <a href="#">ELE1801</a> ) or Students must be enrolled in one of the following Programs: GDNS or MENS	
<a href="#">ELE3914 Electrical and Electronic Practice D</a>	3	1	5	2			C	Pre-requisite: ( <a href="#">ELE1801</a> and <a href="#">ELE1301</a> and <a href="#">ELE1502</a> ) or Students must be enrolled in one of the following Programs: MENS or MEPR	
<a href="#">ENG3909 Work Experience - Technologist</a> *	3		6	1,3					

#### Footnotes

^ On-campus students should enrol in the external or online offering of this course.

† The semester 3 offering of this course is offered in odd numbered years only.

\* On-campus students should enrol in the external offering of this course.

## Mechanical 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.

To satisfy the requirements of the program, students must complete all of the Academic and Practice Courses in the following tables that show 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 specification](#) to ascertain if a course is offered in another term.

Major study: Mechanical Engineering (Major Study Code:16751)									
Course	Year of program and semester in which course is normally studied						Residential school	Enrolment requirements	Comments
	On-campus (ONC)		External (EXT)		Online (ONL)				
	Year	Sem	Year	Sem	Year	Sem			
<a href="#">ENG1002 Introduction to Engineering and Built Environment Applications</a>	1	1	1	1,2					
<a href="#">ENM1600 Engineering Mathematics</a>	1	1	1	1,2					
<a href="#">ENG1101</a>	1	1	2	1,2					
<a href="#">EDC1100</a>	1	1	2			1			
<a href="#">MEC1201 Engineering Materials</a>	1	2	1	1,2,3					
<a href="#">CIV1501 Engineering Statics</a>	1	2	1	2,3				Pre-requisite: <a href="#">ENM1600</a> or ( <a href="#">ENM1500</a> and <a href="#">CIV1500</a> ) or Students must be enrolled in	

Major study: Mechanical Engineering (Major Study Code:16751)									
Course	Year of program and semester in which course is normally studied						Residential school	Enrolment requirements	Comments
	On-campus (ONC)		External (EXT)		Online (ONL)				
	Year	Sem	Year	Sem	Year	Sem			
							one of the following Programs: MEPR or GCEN or GEPR		
<a href="#">EDC1300 The Collaborative Educator</a>	1	2	2			2	Pre-requisite: <a href="#">ESP3100</a> and Students must be enrolled in one of the following Programs: BEDU or BSED		
<a href="#">ENG2102</a>	1	2	2	2,3					
<a href="#">ENG1100 Introduction to Engineering Design</a>	2	1	3	1,2					
<a href="#">EDC1200</a>	2	1	3			1			
<a href="#">MEC2202 Manufacturing Processes</a>	2	1	4	1			Pre-requisite: <a href="#">MEC1201</a> or Students must be enrolled in one of the following Programs: MEPR or GCEN		
<a href="#">MEC2402 Stress Analysis</a>	2	1	5	1			Pre-requisite: <a href="#">CIV1501</a> or Students must be enrolled in one of the following Programs: GCEN or METC or MEPR or GCNS or GDNS or MENS or GEPR		
<a href="#">ELE1801 Electrical Technology</a>	2	2	3	2,3			Pre-requisite: <a href="#">ENM1500</a> or <a href="#">ENM1600</a> or Students must be enrolled in one of the following Programs: MEPR or GCEN or GEPR		
<a href="#">MEC2106 Introduction to Thermofluids</a>	2	2	3	2			Pre-requisite: <a href="#">CIV1500</a> or <a href="#">CIV1501</a> or Students must be enrolled in one of the following Programs: BENH or BEBC or BEHS or GCEN or MENS or GEPR		
<a href="#">EDC1400 Thinking and Acting like a Teacher 2</a>	2	2	4			2	Pre-requisite: EP P1100 or <a href="#">EDC1000</a> and Students must be enrolled in one of the following Programs: BEDU (Primary) or BEDU (Primary + Special Education) or BEDU (Special Education) or BEDU (HPE Primary) or BEDU (SHPE Primary) or BPED	25 hours professional experience	
<a href="#">EDC2300 Assessment Practices for Secondary</a>	2	2	4			2	Pre-requisite: <a href="#">ESP1200</a> or		

Major study: Mechanical Engineering (Major Study Code:16751)									
Course	Year of program and semester in which course is normally studied						Residential school	Enrolment requirements	Comments
	On-campus (ONC)		External (EXT)		Online (ONL)				
	Year	Sem	Year	Sem	Year	Sem			
								EDC1400 and Students must be enrolled in one of the following Programs: BEDU or BSED	
MEC2101	3	1	4	1					
MEC2405 Machine Dynamics	3	1	5	1				Pre-requisite: CIV1501 or Students must be enrolled in the following Program: GCEN	
EDC2400 Educating Learners with Special Needs Across Contexts	3	1	6			1			
EDC3100 ICT and Pedagogy	3	1	6			1		25 hours professional experience	
MEC2304 Solid Modelling	3	2	5	2					
MEC2301 Design of Machine Elements	3	2	5	2				Pre-requisite: (MEC2402 and ENG1100) or Students must be enrolled in one of the following Programs: MEPR or GCEN or GEPR	
EDC2100 Supportive Learning Environments: Cultivating Effective Classrooms	3	2	6			2		Students must be enrolled in: BEDU (Early Child) or BEDU (Primary) or BEDU (Primary+Special Ed) or BEDU (Special Ed) or BEDU (HPE Primary) or BEDU (SHPE Primary) or BECH or MOLT (Primary) or BEED or BPED Co-requisite: BEDU (Primary) or BPED Only - EDP2111	
EDU5221 <sup>^</sup>	3		6			2			
MEC3203 Materials Technology	4	1	7	1				Pre-requisite: MEC1201 or Students must be enrolled in one of the following Programs: GCEN or METC or GCNS or GDNS or MEPR or MENS	
ENG3003 Engineering Management <sup>†</sup>	4	1	7	1,3					
EDV3401 <sup>^</sup>	4		8			1		25 hours professional experience	

Major study: Mechanical Engineering (Major Study Code:16751)									
Course	Year of program and semester in which course is normally studied						Residential school	Enrolment requirements	Comments
	On-campus (ONC)		External (EXT)		Online (ONL)				
	Year	Sem	Year	Sem	Year	Sem			
EDV3551 Vocational and Workplace Literacies <sup>^</sup>	4		8			1			
<a href="#">MEC3204 Production Engineering</a>	4	2	7	2					
<a href="#">MEC3303 Mechanical and Mechatronic System Design</a>	4	2	7	2				Pre-requisite: <a href="#">MEC2301</a> or Students must be enrolled in one of the following Programs: GCEN or METC or GCNS or GDNS or MEPR or MENS	
EDV3500 Competency Based Training and Assessment <sup>^</sup>	4		8			2			25 hours professional experience
<a href="#">ENG3111 Technology Design Project</a>	4	2	8	1,2				Pre-requisite: (EN G2102 or <a href="#">ENG1003</a> or <a href="#">ENG1101</a> ) and Undergraduate students must have completed 14 courses in their program.	
<b>Practice Courses</b>									
<a href="#">ENG1901 Engineering Practice 1</a>	1	1	2	2,3			C		
<a href="#">MEC2901 Mechanical Practice 1</a>	1	1	3				C		
<a href="#">MEC2902 Mechanical Practice 2</a>	2	1	4	1			C		
<a href="#">MEC3903 Mechanical Practice 3</a>	2	2	4	2			C		
<a href="#">MEC3904 Mechanical Practice 4</a>	3	2	6	2			C	Pre-requisite: <a href="#">MEC3102</a> or <a href="#">MEC2106</a> or Students must be enrolled in one of the following Programs: GDNS or MENS or MEPR	
<a href="#">ENG3909 Work Experience - Technologist</a> <sup>*</sup>	3		6	1,3					

#### Footnotes

- <sup>^</sup> On-campus students should enrol in the external or online offering of this course.  
<sup>†</sup> The semester 3 offering of this course is offered in odd numbered years only.  
<sup>\*</sup> On-campus students should enrol in the external offering of this course.