

## Graduate Certificate in Engineering Technology (GCEN) - GradCertEngTech

CRICOS code (International applicants): 030323K

	On-campus	Distance education
<b>Semester intake:</b>	Semester 1 (February) Semester 2 (July)	Semester 1 (February) Semester 2 (July)
<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>	1 semester full-time or 2 semesters part-time or by distance education	
<b>Program articulation:</b>	To: <a href="#">Master of Engineering Technology</a>	

### 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:studyeng@usq.edu.au">studyeng@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>

### Program focus

This four unit Graduate Certificate program is appropriate for those students who wish to extend their knowledge in a specific area of engineering.

### Professional accreditation

The [Graduate Certificate in Engineering Technology](#) is not accredited by any professional bodies other than the University of Southern Queensland.

### Program aims

Students who successfully complete the Graduate Certificate in Engineering Technology will be able to demonstrate:

- a knowledge of a specialised area of engineering at an advanced level
- a good standard of written English language communication skill
- a knowledge of the professional journals and other information sources relevant to the specialised area of engineering.

### Admission requirements

To be eligible for admission to the program, candidates must possess a three-year degree in engineering, science or technology in the same field of study as their proposed major study, or a four-year degree in engineering, from a college or university recognised by the National Office of Overseas Skills Recognition

(NOOSR) as awarding degrees that are comparable to the education level of an Australian bachelor degree. Candidates for admission must have demonstrated a high level of academic performance and must also comply with the University requirements for competency in written and spoken English.

## How to apply

### Domestic students

[Application for postgraduate programs](#) may be made directly to USQ.

### International students

This program is offered to international students. An international student is a person who is not an Australian or New Zealand citizen and not an Australian permanent resident. Please refer to [USQ International](#) for information about entry requirements, visa arrangements and how to apply.

## Program fees

### Commonwealth supported place

A Commonwealth supported place is where the Australian Government makes a contribution towards the cost of your higher education and you as a student pay a [student contribution amount](#), which varies depending on the courses undertaken. You 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. You are able to calculate the fees for a particular course via the [Course Fee Finder](#).

Permanent Humanitarian Visa holders, Permanent Resident visa holders and New Zealand citizens who reside outside Australia pay full tuition fees.

Domestic full fee paying students may be eligible to defer their fees through a Government loan called [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](#).

## Program structure

The Graduate Certificate in Engineering Technology consists of any four units of study from the Recommended Enrolment Pattern.

Students should note that the choice of courses for full-time, on-campus study may be limited due to timetabling constraints and that not all courses will necessarily be offered each year.

Students will normally complete the four units in one term of full-time study or two terms of part-time study. Students must complete the program in two terms of full-time study or four terms of part-time study.

## 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.

## Major studies objectives

The major study provides students with knowledge and skills in a specific discipline. The nine major study areas in the Graduate Certificate in Engineering Technology are:

- Agricultural Engineering
- Civil Engineering
- Computer Systems and Telecommunications Engineering
- Environmental Engineering
- Mechanical Engineering
- Mechatronic Engineering
- Power Systems Engineering
- Structural Engineering and Technology Management
- Transdisciplinary Engineering

## IT requirements

Students should refer to the section entitled [Access to Information Technology Facilities](#) in the General Faculty and Program Information section of this Handbook.

## Articulation

Students who have completed this program are eligible to claim a maximum of 4 units of advanced standing in the [Master of Engineering Technology](#).

## Exemptions

No exemptions will be permitted in the Graduate Certificate in Engineering Technology. Candidates who have completed the same or similar courses at USQ or similar courses at another institution should, with the approval of the Program Coordinator, apply to vary their enrolment pattern on the basis of prior study.

## Enrolment

Graduates of engineering degree programs who are eligible for professional membership of Engineers Australia will not be permitted to undertake a major study in the same discipline area as their undergraduate degree.

Candidates for admission to this program should note that some of the courses specify enrolment requirements. This may mean that successful applicants will be enrolling in courses for which they do not have sufficient pre-requisite knowledge. Applicants should refer to the [course synopses](#) section of the Handbook to determine the enrolment requirements for the courses they intend enrolling in. Graduate students will be expected to rectify any deficiencies in their pre-requisite knowledge by private study, guided if necessary by the examiners of the relevant courses. Alternatively, they should enrol in the pre-requisite course(s). These courses will not contribute to the requirements for program completion.

Students should note that the choice of courses for full-time, on-campus study may be limited due to timetabling constraints and that not all courses will necessarily be offered each year.

Students must complete any four units of study in the recommended enrolment pattern.

## Agricultural Engineering Major recommended enrolment pattern

Major study: Agricultural Engineering (Major Study Code: 12600)							
Course	Year of program and semester in which course is normally studied						Enrolment requirements
	On-campus (ONC)		External (EXT)		Online (WEB)		
	Year	Sem	Year	Sem	Year	Sem	
<a href="#">AGR3303 Agricultural Materials and Post-Harvest Technologies</a>		1		1			
<a href="#">AGR3304 Soil Science</a>		1		1			

Major study: Agricultural Engineering (Major Study Code: 12600)							
Course	Year of program and semester in which course is normally studied						Enrolment requirements
	On-campus (ONC)		External (EXT)		Online (WEB)		
	Year	Sem	Year	Sem	Year	Sem	
<a href="#">AGR3305 Precision and Smart Technologies in Agriculture</a>				1			
<a href="#">AGR4305 Agricultural Soil Mechanics</a>		1					
<a href="#">ENV3104 Hydraulics II</a>		1		1			Pre-requisite: ENV1101 or <a href="#">ENV2103</a> or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MEPR or GCNS or GDNS or MENS
<a href="#">ENV3105 Hydrology</a>		2		2			Pre-requisite: <a href="#">ENG2102</a> or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MEPR or GCNS or PGCN or GDNS or MENS
<a href="#">ENV4106 Irrigation Science</a>		2		2			Pre-requisite: <a href="#">AGR3304</a> or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MEPR or GCNS or GDNS or MENS
<a href="#">ENV4107 Water Resources Engineering</a>		2		2			Pre-requisite: ( <a href="#">ENV3104</a> and <a href="#">ENV3105</a> ) or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MEPR or GCNS or GCEN or GDNS or MENS
<a href="#">MAT2500 Engineering Mathematics 3</a>		2		2			Pre-requisite: <a href="#">MAT1102</a> or <a href="#">MAT1502</a> or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MENS
<a href="#">MEC3303 System Design</a>		2		2			Pre-requisite: <a href="#">MEC2301</a> or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or GCNS or GDNS or MEPR or MENS
<a href="#">MEC3302 Computational Mechanics in Design</a>		1		1			Pre-requisite: ( <a href="#">MEC2304</a> and <a href="#">MEC2401</a> and <a href="#">MEC2402</a> ) or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MEPR or GCNS or GDNS or MENS
<a href="#">MEC4406 Robotics and Machine Vision</a>		2		2			Pre-requisite: <a href="#">MEC2401</a> or <a href="#">ELE2103</a>

### Civil Engineering Major recommended enrolment pattern

Major study: Civil Engineering (Major Study Code: 15394)							
Course	Year of program and semester in which course is normally studied						Enrolment requirements
	On-campus (ONC)		External (EXT)		Online (WEB)		
	Year	Sem	Year	Sem	Year	Sem	
<a href="#">CIV3403 Geotechnical Engineering</a>		2		2			Pre-requisite: CIV2401 or <a href="#">CIV2403</a> or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MEPR or GCNS or GDNS or MENS
<a href="#">CIV3505 Structural Analysis</a>		1		1			Pre-requisite: <a href="#">MEC2402</a> and <a href="#">MAT1502</a> or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MEPR or GCNS or GDNS or MENS
<a href="#">CIV3506 Concrete Structures</a>		1		1			Pre-requisite: <a href="#">CIV2503</a> or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MEPR or GCNS or GDNS or MENS

Major study: Civil Engineering (Major Study Code: 15394)							
Course	Year of program and semester in which course is normally studied						Enrolment requirements
	On-campus (ONC)		External (EXT)		Online (WEB)		
	Year	Sem	Year	Sem	Year	Sem	
<a href="#">CIV4508 Structural Design II</a>		1		1			Pre-requisite: <a href="#">CIV3505</a> and <a href="#">CIV3506</a> or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MEPR or GCNS or GDNS or MENS
<a href="#">CIV5704 Road and Street Engineering</a>				2			
<a href="#">ENV3105 Hydrology</a>		2		2			Pre-requisite: <a href="#">ENG2102</a> or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MEPR or GCNS or PGCN or GDNS or MENS
<a href="#">ENV3104 Hydraulics II</a>		1		1			Pre-requisite: ENV1101 or <a href="#">ENV2103</a> or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MEPR or GCNS or GDNS or MENS
<a href="#">ENV4107 Water Resources Engineering</a>		2		2			Pre-requisite: ( <a href="#">ENV3104</a> and <a href="#">ENV3105</a> ) or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MEPR or GCNS or GCEN or GDNS or MENS
<a href="#">ENV5205 Solid and Liquid Waste Treatment</a>				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 GDET or METC or MEPR or GCNS or GDNS or MENS
<a href="#">MAT2500 Engineering Mathematics 3</a>		2		2			Pre-requisite: <a href="#">MAT1102</a> or <a href="#">MAT1502</a> or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MENS

## Computer Systems and Telecommunications Engineering Major recommended enrolment pattern

Major study: Computer Systems and Telecommunications Engineering (Major Study Code: 15637)							
Course	Year of program and semester in which course is normally studied						Enrolment requirements
	On-campus (ONC)		External (EXT)		Online (WEB)		
	Year	Sem	Year	Sem	Year	Sem	
<a href="#">ELE2601 Telecommunications Principles</a>		1		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 GDET or METC
<a href="#">ELE2303 Embedded Systems Design</a>		1		1			
<a href="#">ELE3305 Computer Systems and Communications Protocols</a>		1		1			
<a href="#">ELE4607 Advanced Digital Communications*</a>				1			Pre-requisite: <a href="#">ELE1301</a> or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MENS
<a href="#">CSC8415 Computer Network Programming</a>		1		1			Pre-requisite - Students must be enrolled in one of the following Programs: MCOP or MPIT or MCOT or MCTE or MSBI or MSSC or MENC or MEPR or MENS or METC or MSST.
<a href="#">CSC8407 Wireless and Internet Technology</a>		1		1			Pre-requisite: Students must be enrolled in one of the following Programs: MCOP or MPIT or MCOT or MCTE or MSBI or MSSC or MENC or MEPR or MENS or METC or MSST.
<a href="#">ELE3107 Signal Processing</a>		2		2			

Major study: Computer Systems and Telecommunications Engineering (Major Study Code: 15637)							
Course	Year of program and semester in which course is normally studied						Enrolment requirements
	On-campus (ONC)		External (EXT)		Online (WEB)		
	Year	Sem	Year	Sem	Year	Sem	
<a href="#">ELE3307 Real Time Systems</a>		2		2			Pre-requisite: <a href="#">ELE1301</a> or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MENS
<a href="#">ELE3506 Electronic Measurement</a>		2		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 GDET or METC or MEPR or MENS
<a href="#">ELE4606 Communication Systems</a>		2		2			Pre-requisite: ( <a href="#">ELE2504</a> and <a href="#">ELE2601</a> ) or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MEPR or MENS
<a href="#">MEC4406 Robotics and Machine Vision</a>		2		2			Pre-requisite: <a href="#">MEC2401</a> or <a href="#">ELE2103</a>

#### Footnotes

\* Only offered in even years.

### Environmental Engineering Major recommended enrolment pattern

Major study: Environmental Engineering (Major Study Code: 12601)							
Course	Year of program and semester in which course is normally studied						Enrolment requirements
	On-campus (ONC)		External (EXT)		Online (WEB)		
	Year	Sem	Year	Sem	Year	Sem	
<a href="#">AGR3304 Soil Science</a>		1		1			
<a href="#">CIV3403 Geotechnical Engineering</a>		2		2			Pre-requisite: <a href="#">CIV2401</a> or <a href="#">CIV2403</a> or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MEPR or GCNS or GDNS or MENS
<a href="#">ENV3104 Hydraulics II</a>		1		1			Pre-requisite: <a href="#">ENV1101</a> or <a href="#">ENV2103</a> or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MEPR or GCNS or GDNS or MENS
<a href="#">ENV4204 Environmental Technology</a>		1		1			Pre-requisite: <a href="#">MAT1100</a> or <a href="#">MAT1500</a> or Students must be enrolled in one of the following programs: GCEN or GDET or METC or MENS or GCNS or GDNS or MSST
<a href="#">ENV3105 Hydrology</a>		2		2			Pre-requisite: <a href="#">ENG2102</a> or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MEPR or GCNS or PGCN or GDNS or MENS
<a href="#">ENV4106 Irrigation Science</a>		2		2			Pre-requisite: <a href="#">AGR3304</a> or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MEPR or GCNS or GDNS or MENS
<a href="#">ENV4107 Water Resources Engineering</a>		2		2			Pre-requisite: ( <a href="#">ENV3104</a> and <a href="#">ENV3105</a> ) or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MEPR or GCNS or GCEN or GDNS or MENS
<a href="#">ENV4203 Public Health Engineering</a>		2		2			Pre-requisite: <a href="#">ENV1101</a> or <a href="#">ENV2103</a> or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MEPR or GCNS or GDNS or MENS
<a href="#">ENV4204 Environmental Technology</a>		1		1			Pre-requisite: <a href="#">MAT1100</a> or <a href="#">MAT1500</a> or Students must be enrolled in one of the following

Major study: Environmental Engineering (Major Study Code: 12601)							
Course	Year of program and semester in which course is normally studied						Enrolment requirements
	On-campus (ONC)		External (EXT)		Online (WEB)		
	Year	Sem	Year	Sem	Year	Sem	
							ing programs: GCEN or GDET or METC or MENS or GCNS or GDNS or MSST
<a href="#">ENV5205 Solid and Liquid Waste Treatment*</a>				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 GDET or METC or MEPR or GCNS or GDNS or MENS
<a href="#">SVY4203 Urban and Regional Planning</a>		1		1			

#### Footnotes

\* Not available on-campus

## Mechanical Engineering Major recommended enrolment pattern

Major study: Mechanical Engineering (Major Study Code: 15395)							
Course	Year of program and semester in which course is normally studied						Enrolment requirements
	On-campus (ONC)		External (EXT)		Online (WEB)		
	Year	Sem	Year	Sem	Year	Sem	
<a href="#">MEC3102 Fluid Mechanics</a>		1		1			Pre-requisite: ( <a href="#">MAT2500</a> and <a href="#">MEC2101</a> ) or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MEPR or GCNS or GDNS or MENS
<a href="#">MEC3302 Computational Mechanics in Design</a>		1		1			Pre-requisite: ( <a href="#">MEC2304</a> and <a href="#">MEC2401</a> and <a href="#">MEC2402</a> ) or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MEPR or GCNS or GDNS or MENS
<a href="#">MEC4103 Heat Transfer</a>		1		1			Pre-requisite: <a href="#">MEC3102</a> or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MEPR or MENS
<a href="#">MEC3203 Materials Technology</a>		1		1			Pre-requisite: <a href="#">MEC1201</a> or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or GCNS or GDNS or MEPR or MENS
<a href="#">MEC4104 Energy Technology</a>		1		1			Pre-requisite: ( <a href="#">MEC2101</a> and <a href="#">MEC3102</a> ) or <a href="#">MEC2106</a> or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MENS
<a href="#">MEC2401 Dynamics I</a>		2		2			Pre-requisite: ( <a href="#">MAT1502</a> and <a href="#">CIV1501</a> ) or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MEPR or MENS
<a href="#">MEC3204 Production Engineering</a>		2		2			
<a href="#">MEC3303 System Design</a>		2		2			Pre-requisite: <a href="#">MEC2301</a> or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or GCNS or GDNS or MEPR or MENS
<a href="#">ELE2103 Linear Systems and Control</a>		2		2			
<a href="#">MEC3403 Dynamics II</a>		2		2			Pre-requisite: ( <a href="#">MEC2401</a> and <a href="#">MAT2500</a> ) or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MEPR or GCNS or GDNS or MENS

## Mechatronic Engineering Major recommended enrolment pattern

Major study: Mechatronic Engineering (Major Study Code: 12606)							
Course	Year of program and semester in which course is normally studied						Enrolment requirements
	On-campus (ONC)		External (EXT)		Online (WEB)		
	Year	Sem	Year	Sem	Year	Sem	
<a href="#">ELE2303 Embedded Systems Design</a>		1		1			
<a href="#">ELE3105 Computer Controlled Systems</a>		1		1			Pre-requisite: <a href="#">ELE2103</a> or Students must be enrolled in one of the following Programs: GCNS or GCEN or GDNS or MEPR or MENS or METC
<a href="#">ELE3305 Computer Systems and Communications Protocols</a>		1		1			
<a href="#">MEC3203 Materials Technology</a>		1		1			Pre-requisite: <a href="#">MEC1201</a> or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or GCNS or GDNS or MEPR or MENS
<a href="#">MEC3302 Computational Mechanics in Design</a>		1		1			Pre-requisite: ( <a href="#">MEC2304</a> and <a href="#">MEC2401</a> and <a href="#">MEC2402</a> ) or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MEPR or GCNS or GDNS or MENS
<a href="#">ELE3506 Electronic Measurement</a>		2		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 GDET or METC or MEPR or MENS
<a href="#">MEC3204 Production Engineering</a>		2		2			
<a href="#">MEC3303 System Design</a>		2		2			Pre-requisite: <a href="#">MEC2301</a> or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or GCNS or GDNS or MEPR or MENS
<a href="#">ELE2103 Linear Systems and Control</a>		2		2			
<a href="#">MEC4406 Robotics and Machine Vision</a>		2		2			Pre-requisite: <a href="#">MEC2401</a> or <a href="#">ELE2103</a>

## Power Systems Engineering Major recommended enrolment pattern

Major study: Power Systems Engineering (Major Study Code: 15638)							
Course	Year of program and semester in which course is normally studied						Enrolment requirements
	On-campus (ONC)		External (EXT)		Online (WEB)		
	Year	Sem	Year	Sem	Year	Sem	
<a href="#">ELE3803 Electrical Plant</a>		1		1			Pre-requisite: <a href="#">ELE1801</a> or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MEPR or GCNS or GDNS or MENS
<a href="#">ENG3003 Engineering Management</a>		1		1			
<a href="#">ELE3807 Power Systems Analysis</a>		1		1			
<a href="#">ENV2201 Land Studies</a>		1		1			
<a href="#">ECO8010 Corporations and Sustainable Development</a>		1		1			
<a href="#">MGT8015 Corporate Occupational Health and Safety</a>				1		1	
<a href="#">ELE3805 Power Electronics Principles and Applications</a>		2		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 GDET or METC or MEPR or GCNS or GDNS or MENS
<a href="#">ELE2704 Electricity Supply Systems</a>				2			
<a href="#">ENG4004 Engineering Project and Operations Management</a>		2		2,3			
<a href="#">ELE3506 Electronic Measurement</a>		2		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

Major study: Power Systems Engineering (Major Study Code: 15638)							
Course	Year of program and semester in which course is normally studied						Enrolment requirements
	On-campus (ONC)		External (EXT)		Online (WEB)		
	Year	Sem	Year	Sem	Year	Sem	
							Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MEPR or MENS
<a href="#">ELE3107 Signal Processing</a>		2		2			

### Structural Engineering Major recommended enrolment pattern

Major study: Structural Engineering (Major Study Code: 13421)							
Course	Year of program and semester in which course is normally studied						Enrolment requirements
	On-campus (ONC)		External (EXT)		Online (WEB)		
	Year	Sem	Year	Sem	Year	Sem	
<a href="#">CIV3403 Geotechnical Engineering</a>		2		2			Pre-requisite: CIV2401 or <a href="#">CIV2403</a> or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MEPR or GCNS or GDNS or MENS
<a href="#">CIV3505 Structural Analysis</a>		1		1			Pre-requisite: <a href="#">MEC2402</a> and <a href="#">MAT1502</a> or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MEPR or GCNS or GDNS or MENS
<a href="#">CIV3506 Concrete Structures</a>		1		1			Pre-requisite: <a href="#">CIV2503</a> or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MEPR or GCNS or GDNS or MENS
<a href="#">CIV3603 Construction Methods</a>				2			
<a href="#">CIV4508 Structural Design II</a>		1		1			Pre-requisite: <a href="#">CIV3505</a> and <a href="#">CIV3506</a> or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MEPR or GCNS or GDNS or MENS
<a href="#">ENG3103 Engineering Problem Solving Computations</a>		2		2			Pre-requisite: ( <a href="#">ENG2102</a> and <a href="#">MAT1502</a> ) or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MEPR or GCNS or GDNS or MENS
<a href="#">ENG8802 Advanced Prestressed Concrete</a>						2	
<a href="#">ENG8803 Mechanics and Technology of Fibre Composites</a>						1	
<a href="#">MAT2500 Engineering Mathematics 3</a>		2		2			Pre-requisite: <a href="#">MAT1102</a> or <a href="#">MAT1502</a> or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MENS
<a href="#">MEC2401 Dynamics I</a>		2		2			Pre-requisite: ( <a href="#">MAT1502</a> and <a href="#">CIV1501</a> ) or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MEPR or MENS

### Technology Management Major recommended enrolment pattern

Major study: Technology Management (Major Study Code: 15827)							
Course	Year of program and semester in which course is normally studied						Enrolment requirements
	On-campus (ONC)		External (EXT)		Online (WEB)		
	Year	Sem	Year	Sem	Year	Sem	
<a href="#">ENG8011 Assessment of Future Specialist Technology</a>				1			

Major study: Technology Management (Major Study Code: 15827)							
Course	Year of program and semester in which course is normally studied						Enrolment requirements
	On-campus (ONC)		External (EXT)		Online (WEB)		
	Year	Sem	Year	Sem	Year	Sem	
<a href="#">ENG8101 Technological Impact and its Management</a>		1		1			
<a href="#">ENG8104 Asset Management in an Engineering Environment</a>		1		1			
<a href="#">CIS8000 Global Information Systems Strategy</a>		1,2				1,2	
<a href="#">ENG8103 Management of Technological Risk</a>		2		2			
<a href="#">ENG8205 Technology Management Practice</a>		2		2			
<a href="#">ENG8207 Technological Innovation and Development</a>				2			

### Transdisciplinary Engineering Major recommended enrolment pattern

Major study: Transdisciplinary Engineering (Major Study Code: 15640)							
Course	Year of program and semester in which course is normally studied						Enrolment requirements
	On-campus (ONC)		External (EXT)		Online (WEB)		
	Year	Sem	Year	Sem	Year	Sem	
Elective+	1	1		1			
Elective+	1	1		1			
Elective+	1	1		1			
Elective+	1	2		2			
Elective+	1	2		2			
Elective+	1	2		2			
Elective+	1	2		2			
Elective+	1	2		2			
Elective+	1	2		2			
Elective+	1	2		2			

#### Footnotes

- + Electives will be approved by the Program Coordinator and will normally be Engineering, Science or Technology courses not lower than Level 3.