

Master of Engineering Technology (METC) - MEngTech

CRICOS code (International applicants): 066846G

	On-campus	Distance education
Semester intake:	Semester 1 (February) Semester 2 (July)	Semester 1 (February) Semester 2 (July)
Campus:	Toowoomba	-
Fees:	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
Standard duration:	3 semesters full-time or 6 semesters part-time or by distance education	
Program articulation:	From: Graduate Certificate in Engineering Technology ; Graduate Diploma of Engineering Technology	

Contact us

Future Australian and New Zealand students	Future International students	Current students
Ask a question Freecall (within Australia): 1800 269 500 Phone (from outside Australia): +61 7 4631 5315 Email: studyeng@usq.edu.au	Ask a question Phone: +61 7 4631 5543 Email: international@usq.edu.au	Ask a question Freecall (within Australia): 1800 007 252 Phone (from outside Australia): +61 7 4631 2285 Email usq.support@usq.edu.au

Program focus

This program is appropriate for those students who wish to extend their knowledge of a specific area of engineering. The Masters program also includes provision for students to evaluate information critically, and to select and apply an appropriate methodology to a particular research problem.

The Masters program builds on the Graduate Certificate and allows students to take either an Engineering Technology Studies Pathway (12 course work units) or undertake a project and prepare a dissertation (8 course work units and a 4 unit research project).

Students who complete only four units of coursework will be eligible for the award of Graduate Certificate in Engineering Technology. Students who complete the 12 units of coursework in the Engineering Technology Studies Pathway and students who complete the dissertation will be eligible for the award of Master of Engineering Technology.

Professional accreditation

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

Program objectives

Students who successfully complete the program will be able to demonstrate:

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

- an ability to evaluate research reports and to plan a research project; and either
- a capacity for investigation, evaluation and synthesis within an engineering context, or
- a knowledge of fundamental technology management issues.

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 Master of Engineering Technology consists of 12 units of study as indicated in the following recommended enrolment patterns for each major study area. For their first time, students studying full-time on-campus will enrol in four courses from Schedule A and Schedule B of the Recommended Enrolment Pattern of their chosen major. The four courses should include [ENG8001 Engineering and Surveying Research Methodology](#).

On successful completion of four courses including [ENG8001](#), students may choose either the Engineering Technology Studies Path or the Project and Dissertation Path. The Project and Dissertation Path will normally be available only to students that achieve a GPA of at least 5.0 across their previous courses. Full-time on-campus students taking the Project and Dissertation will normally enrol to do their project in their third

term of study. In exceptional circumstances, the Program Co-ordinator may grant permission to take the project in the second term.

Students studying part-time externally will follow an equivalent program extended over six terms. Students must complete the part-time external program within a maximum period of 12 terms.

Required time limits

Full-time students have a maximum of 3 years to complete this program. Part-time students have a maximum of 6 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 Master of 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

A Transdisciplinary Engineering option is also available for students wishing to enhance their knowledge across a range of engineering disciplines

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

The Faculty of Engineering and Surveying offers an articulated program of studies leading to the awards of [Graduate Certificate in Engineering Technology](#) and Master of Engineering Technology. These programs of study are suitable for graduates of three-year engineering, technology and science programs who wish to further their studies in engineering, and for graduates of four-year professional engineering programs who wish to continue their studies in a different discipline area.

The Graduate Certificate in Engineering Technology consists of four of study. The Master of Engineering Technology is composed of 12 units of study with the option for either all coursework (via an Engineering Technology Studies Path), or eight units of coursework and a four-unit Project and Dissertation.

The fully articulated program is intended to allow students to enhance and extend their knowledge of a particular engineering discipline area. .

Exit points

Students who, for whatever reason, are unable to complete the Master of Engineering Technology and who satisfy all of the requirements of the [Graduate Diploma of Engineering Technology](#) , (refer back to the 2008 USQ Handbook) may be permitted to exit with that award.

Exemptions

Candidates for admission to the program are eligible to seek exemptions in the various programs, in accordance with existing University regulations. For the Master of Engineering Technology the maximum number of exemptions permitted will be six units. Studies used as the basis for claims for exemptions must normally be

graduate studies and must not have been used to meet the requirements of any undergraduate award. They will normally have been completed within a period of five years prior to the date of application for exemptions.

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.

See [Enrolment Flowchart](#) for further details.

The Master of Engineering Technology consists of 12 units of study as indicated in the following recommended enrolment patterns for each major study area. For their first term, students studying full-time on-campus will enrol in four courses from Schedule A and should include [ENG8001 Engineering and Surveying Research Methodology](#).

On successful completion of four courses including [ENG8001](#), students may choose either the Engineering Technology Studies Path or the Project and Dissertation Path. The Project and Dissertation Path will normally be available only to students who achieve a GPA of at least 5.0 across their previous courses. Full-time on-campus students taking the Project and Dissertation Path will normally enrol to do their project in their third term of study. In exceptional circumstances, the Program Co-ordinator may grant permission to take the project in the second term.

Permission to enrol in [ENG8002 Project and Dissertation](#), must be obtained from the Program Co-ordinator.

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.

Agricultural Engineering Major recommended enrolment pattern

Major study: Agricultural Engineering (Major Study Code: 12931)								
Course	Year of program and semester in which course is normally studied						Enrolment requirements	Comments
	On-campus (ONC)		External (EXT)		Online (WEB)			
	Year	Sem	Year	Sem	Year	Sem		
Schedule A: Core Courses Students must complete the course listed in this schedule:								
ENG8001 Engineering and Surveying Research Methodology		1,2				1,2		
Schedule B: Major Courses Students must complete at least seven of the courses listed in this schedule:								
AGR3303 Agricultural Materials and Post-Harvest Technologies		1		1				
AGR3304 Soil Science		1		1				
AGR3305 Precision and Smart Technologies in Agriculture				1				
AGR4305 Agricultural Soil Mechanics		1						
ENV3104 Hydraulics II		1		1			Pre-requisite: ENV1101 or ENV2103 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: Agricultural Engineering (Major Study Code: 12931)								
Course	Year of program and semester in which course is normally studied						Enrolment requirements	Comments
	On-campus (ONC)		External (EXT)		Online (WEB)			
	Year	Sem	Year	Sem	Year	Sem		
ENV3105 Hydrology		2		2			Pre-requisite: ENG2102 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	
ENV4106 Irrigation Science		2		2			Pre-requisite: AGR3304 or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MEPR or GCNS or GDNS or MENS	
ENV4107 Water Resources Engineering		2		2			Pre-requisite: (ENV3104 and ENV3105) 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	
MAT2500 Engineering Mathematics 3		2		2			Pre-requisite: MAT1102 or MAT1502 or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MENS	
MEC3303 System Design		2		2			Pre-requisite: MEC2301 or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or GCNS or GDNS or MEPR or MENS	
MEC3302 Computational Mechanics in Design		1		1			Pre-requisite: (MEC2304 and MEC2401 and MEC2402) or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MEPR or GCNS or GDNS or MENS	
MEC4406 Robotics and Machine Vision		2		2			Pre-requisite: MEC2401 or ELE2103	
Schedule C: Engineering Technology Studies Path								
ENG8101 Technological Impact and its Management		1		1				
ENG8104 Asset Management in an Engineering Environment		1		1				
ENG8103 Management of Technological Risk		2		2				
ENG8205 Technology Management Practice		2		2				
Schedule D: Project and Dissertation Path								
ENG8002 Project and Dissertation**		1,2		1,2			Pre-requisite: ENG8001 Four units	

Footnotes

** Permission to enrol in this course must be obtained from the Program Co-ordinator.

Civil Engineering Major recommended enrolment pattern

Major study: CivilEngineering (Major Study Code: 15398)								
Course	Year of program and semester in which course is normally studied						Enrolment requirements	Comments
	On-campus (ONC)		External (EXT)		Online (WEB)			
	Year	Sem	Year	Sem	Year	Sem		
Schedule A: Core Courses Students must complete the course listed in this schedule:								
ENG8001 Engineering and Surveying Research Methodology		1,2				1,2		
Schedule B: Major Courses Students must complete at least seven of the courses listed in this schedule:								
CIV3403 Geotechnical Engineering		2		2			Pre-requisite: CIV2401 or CIV2403 or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MEPR or GCNS or GDNS or MENS	
CIV3505 Structural Analysis		1		1			Pre-requisite: MEC2402 and MAT1502 or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MEPR or GCNS or GDNS or MENS	
CIV3506 Concrete Structures		1		1			Pre-requisite: CIV2503 or Students must be enrolled in one of the following Program s: GCEN or GDET or METC or MEPR or GCNS or GDNS or MENS	
CIV4508 Structural Design II		1		1			Pre-requisite: CIV3505 and CIV3506 or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MEPR or GCNS or GDNS or MENS	
CIV5704 Road and Street Engineering				2				
ENV3105 Hydrology		2		2			Pre-requisite: ENG2102 or Students must be enrolled in one of the following Program s: GCEN or GDET or METC or MEPR or GCNS or PGCN or GDNS or MENS	
ENV3104 Hydraulics II		1		1			Pre-requisite: ENV1101 or ENV2103 or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MEPR or GCNS or GDNS or MENS	
ENV4107 Water Resources Engineering		2		2			Pre-requisite: (ENV3104 and ENV3105) 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	
ENV5205 Solid and Liquid Waste Treatment				1			Pre-requisite: ENV4203 or ENV4204 or Students must be enrolled in one of the following Programs: GCEN or	

Major study: CivilEngineering (Major Study Code: 15398)								
Course	Year of program and semester in which course is normally studied						Enrolment requirements	Comments
	On-campus (ONC)		External (EXT)		Online (WEB)			
	Year	Sem	Year	Sem	Year	Sem		
							GDET or METC or MEPR or GCNS or GDNS or MENS	
MAT2500 Engineering Mathematics 3		2		2			Pre-requisite: MAT1102 or MAT1502 or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MENS	
ENG8806						1		
Schedule C: Engineering Technology Studies Path								
ENG8101 Technological Impact and its Management		1		1				
ENG8104 Asset Management in an Engineering Environment		1		1				
ENG8103 Management of Technological Risk		2		2				
ENG8205 Technology Management Practice		2		2				
Schedule D: Project and Dissertation Path								
ENG8002 Project and Dissertation		1,2		1,2			Pre-requisite: ENG8001 Four units	

Computer Systems and Telecommunications Engineering Major recommended enrolment pattern

Major study: Computer Systems and Telecommunications Engineering (Major Study Code: 15645)							
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	
Schedule A: Core Courses Students must complete the course listed in this schedule							
ENG8001 Engineering and Surveying Research Methodology		1,2		1,2			
Schedule B: Major Courses Students must complete at least seven of the courses listed in this schedule:							
ELE2601 Telecommunications Principles		1		1			Pre-requisite: (ELE1502 and ELE1801) or Students must be enrolled in one of the following Programs: GCEN or GDET or METC
ELE2303 Embedded Systems Design		1		1			
ELE3305 Computer Systems and Communications Protocols		1		1			
ELE4607 Advanced Digital Communications*				1			Pre-requisite: ELE1301 or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MENS
CSC8415 Computer Network Programming		2		2			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.
CSC8407 Wireless and Internet Technology		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

Major study: Computer Systems and Telecommunications Engineering (Major Study Code: 15645)							
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	
							or MENC or MEPR or MENS or METC or MSST.
ELE3107 Signal Processing		2		2			
ELE3307 Real Time Systems		2		2			Pre-requisite: ELE1301 or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MENS
ELE3506 Electronic Measurement		2		2			Pre-requisite: (ELE1502 and (ELE2101 or ELE2103) and (ELE2503 or ELE2504)) or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MEPR or MENS
ELE4606 Communication Systems		2		2			Pre-requisite: (ELE2504 and ELE2601) or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MEPR or MENS
Schedule C: Engineering Technology Studies Path							
ENG8101 Technological Impact and its Management		1		1			
ENG8104 Asset Management in an Engineering Environment		1		1			
ENG8103 Management of Technological Risk		2		2			
ENG8205 Technology Management Practice		2		2			
Schedule D: Project and Dissertation Path							
ENG8002 Project and Dissertation		1,2		1,2			Pre-requisite: ENG8001

Footnotes

* Only offered in even years.

Environmental Engineering Major recommended enrolment pattern

Major study: Environmental Engineering (Major Study Code: 12932)							
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	
Schedule A: Core Courses Students must complete the course listed in this schedule:							
ENG8001 Engineering and Surveying Research Methodology		1,2				1,2	
Schedule B: Major Courses Students must complete at least seven of the courses listed in this schedule:							
AGR3304 Soil Science		1		1			
CIV3403 Geotechnical Engineering		2		2			Pre-requisite: CIV2401 or CIV2403 or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MEPR or GCNS or GDNS or MENS
ENV3104 Hydraulics II		1		1			Pre-requisite: ENV1101 or ENV2103 or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MEPR or GCNS or GDNS or MENS
ENV4204 Environmental Technology		1		1			Pre-requisite: MAT1100 or MAT1500 or Students must be enrolled in one of the following programs: GCEN or GDET or METC or MENS or GCNS or GDNS or MSST

Major study: Environmental Engineering (Major Study Code: 12932)							
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	
ENV3105 Hydrology		2		2			Pre-requisite: ENG2102 or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MEPR or GCN S or PGCN or GDNS or MENS
ENV4106 Irrigation Science		2		2			Pre-requisite: AGR3304 or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MEPR or GCN S or GDNS or MENS
ENV4107 Water Resources Engineering		2		2			Pre-requisite: (ENV3104 and ENV3105) 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
ENV4203 Public Health Engineering		2		2			Pre-requisite: ENV1101 or ENV2103 or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MEPR or GCNS or GDNS or MENS
ENV5205 Solid and Liquid Waste Treatment*				1			Pre-requisite: ENV4203 or ENV4204 or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MEPR or GCNS or GDNS or MENS
SVY4203 Urban and Regional Planning		1		1			
Schedule C: Engineering Technology Studies Path							
ENG8101 Technological Impact and its Management		1		1			
ENG8104 Asset Management in an Engineering Environment		1		1			
ENG8103 Management of Technological Risk		2		2			
ENG8205 Technology Management Practice		2		2			
Schedule D: Project and Dissertation Path							
ENG8002 Project and Dissertation		1,2		1,2			Pre-requisite: ENG8001

Footnotes

* Not available on-campus

Mechanical Engineering Major recommended enrolment pattern

Major study: Mechanical Engineering (Major Study Code: 12928)							
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	
Schedule A: Core Courses Students must complete the course listed in this schedule:							
ENG8001 Engineering and Surveying Research Methodology		1,2				1,2	
Schedule B: Major Courses Students must complete at least seven of the courses listed in this schedule:							
MEC3102 Fluid Mechanics		1		1			Pre-requisite: (MAT2500 and MEC2101) or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MEPR or GCNS or GDNS or MENS
MEC3302 Computational Mechanics in Design		1		1			Pre-requisite: (MEC2304 and MEC2401 and MEC2402) or Students must be enrolled in one of the following Programs: GCEN or

Major study: Mechanical Engineering (Major Study Code: 12928)							
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	
							GDET or METC or MEPR or GCNS or GDNS or MENS
MEC4103 Heat Transfer		1		1			Pre-requisite: MEC3102 or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MEPR or MENS
MEC3203 Materials Technology		1		1			Pre-requisite: MEC1201 or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or GCNS or GDNS or MEPR or MENS
MEC4104 Energy Technology		1		1			Pre-requisite: (MEC2101 and MEC3102) or MEC2106 or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MENS
MEC2401 Dynamics I		2		2			Pre-requisite: (MAT1502 and CIV1501) or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MEPR or MENS
MEC3204 Production Engineering		2		2			
MEC3303 System Design		2		2			Pre-requisite: MEC2301 or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or GCNS or GDNS or MEPR or MENS
ELE2103 Linear Systems and Control		2		2			
MEC3403 Dynamics II		2		2			Pre-requisite: (MEC2401 and MAT2500) or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MEPR or GCNS or GDNS or MENS
Schedule C: Engineering Technology Studies Path							
ENG8101 Technological Impact and its Management		1		1			
ENG8104 Asset Management in an Engineering Environment		1		1			
ENG8103 Management of Technological Risk		2		2			
ENG8205 Technology Management Practice		2		2			
Schedule D: Project and Dissertation Path							
ENG8002 Project and Dissertation		1,2		1,2			Pre-requisite: ENG8001

Mechatronic Engineering Major recommended enrolment pattern

Major study: Mechatronic Engineering (Major Study Code: 12937)							
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	
Schedule A: Core Courses Students must complete the course listed in this schedule:							
ENG8001 Engineering and Surveying Research Methodology		1,2				1,2	
Schedule B: Major Courses Students must complete at least seven of the courses listed in this schedule:							
ELE2303 Embedded Systems Design		1		1			
ELE3105 Computer Controlled Systems		1		1			Pre-requisite: ELE2103 or Students must be enrolled in one of the following Programs:

Major study: Mechatronic Engineering (Major Study Code: 12937)							
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	
							GCNS or GCEN or GDNS or MEPR or MENS or METC
ELE3305 Computer Systems and Communications Protocols		1		1			
MEC3203 Materials Technology		1		1			Pre-requisite: MEC1201 or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or GCNS or GDNS or MEPR or MENS
MEC3302 Computational Mechanics in Design		1		1			Pre-requisite: (MEC2304 and MEC2401 and MEC2402) or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MEPR or GCNS or GDNS or MENS
ELE3506 Electronic Measurement		2		2			Pre-requisite: (ELE1502 and (ELE2101 or ELE2103) and (ELE2503 or ELE2504)) or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MEPR or MENS
MEC3204 Production Engineering		2		2			
MEC3303 System Design		2		2			Pre-requisite: MEC2301 or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or GCNS or GDNS or MEPR or MENS
ELE2103 Linear Systems and Control		2		2			
Schedule C: Engineering Technology Studies Path							
ENG8101 Technological Impact and its Management		1		1			
ENG8104 Asset Management in an Engineering Environment		1		1			
ENG8103 Management of Technological Risk		2		2			
ENG8205 Technology Management Practice		2		2			
Schedule D: Project and Dissertation Path							
ENG8002 Project and Dissertation		1,2		1,2			Pre-requisite: ENG8001

Power Systems Engineering Major recommended enrolment pattern

Major study: Power Systems Engineering (Major Study Code: 15646)							
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	
Schedule A: Core Courses Students must complete the course listed in this schedule:							
ENG8001 Engineering and Surveying Research Methodology		1,2				1,2	
Schedule B: Major Courses Students must complete at least seven of the courses listed in this schedule:							
ELE3803 Electrical Plant		1		1			Pre-requisite: ELE1801 or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MEPR or GCNS or GDNS or MENS
ENG3003 Engineering Management		1		1			
ELE3807 Power Systems Analysis		1		1			
ENV2201 Land Studies		1		1			

Major study: Power Systems Engineering (Major Study Code: 15646)							
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	
ECO8010 Corporations and Sustainable Development		1		1			
MGT8015 Corporate Occupational Health and Safety				1		1	
ELE3805 Power Electronics Principles and Applications		2		2			Pre-requisite: (ELE1502 and ELE1801) or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MEPR or GCNS or GDNS or MENS
ELE2704 Electricity Supply Systems				2			
ENG4004 Engineering Project and Operations Management		2		2,3			
ELE3506 Electronic Measurement		2		2			Pre-requisite: (ELE1502 and (ELE2101 or ELE2103) and (ELE2503 or ELE2504)) or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MEPR or MENS
ELE3107 Signal Processing		2		2			
Schedule C: Engineering Technology Studies Path							
ENG8101 Technological Impact and its Management		1		1			
ENG8104 Asset Management in an Engineering Environment		1		1			
ENG8103 Management of Technological Risk		2		2			
ENG8205 Technology Management Practice		2		2			
Schedule D: Project and Dissertation Path							
ENG8002 Project and Dissertation		1,2		1,2			Pre-requisite: ENG8001

Structural Engineering Major recommended enrolment pattern

Major study: Structural Engineering (Major Study Code: 13108)							
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	
Schedule A: Core Courses Students must complete the course listed in this schedule:							
ENG8001 Engineering and Surveying Research Methodology		1,2				1,2	
Schedule B: Major Courses Students must complete at least seven of the courses listed in this schedule:							
CIV3403 Geotechnical Engineering		2		2			Pre-requisite: CIV2401 or CIV2403 or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MEPR or GCNS or GDNS or MENS
CIV3505 Structural Analysis		1		1			Pre-requisite: MEC2402 and MAT1502 or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MEPR or GCNS or GDNS or MENS
CIV3506 Concrete Structures		1		1			Pre-requisite: CIV2503 or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MEPR or GCNS or GDNS or MENS
CIV3603 Construction Methods				2			
CIV4508 Structural Design II		1		1			Pre-requisite: CIV3505 and CIV3506 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: Structural Engineering (Major Study Code: 13108)							
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 MEPR or GCNS or GDNS or MENS
ENG3103 Engineering Problem Solving Computations		2		2			Pre-requisite: (ENG2102 and MAT1502) or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MEPR or GCNS or GDNS or MENS
ENG8802 Advanced Prestressed Concrete						2	
ENG8803 Mechanics and Technology of Fibre Composites						1	
MAT2500 Engineering Mathematics 3		2		2			Pre-requisite: MAT1102 or MAT1502 or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MENS
MEC2401 Dynamics I		2		2			Pre-requisite: (MAT1502 and CIV1501) or Students must be enrolled in one of the following Programs: GCEN or GDET or METC or MEPR or MENS
Schedule C: Engineering Technology Studies Path							
ENG8101 Technological Impact and its Management		1		1			
ENG8104 Asset Management in an Engineering Environment		1		1			
ENG8103 Management of Technological Risk		2		2			
ENG8205 Technology Management Practice		2		2			
Schedule D: Project and Dissertation Path							
ENG8002 Project and Dissertation		1,2		1,2			Pre-requisite: ENG8001

Technology Management Major recommended enrolment pattern

Major study: Technology Management (Major Study Code: 15808)							
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	
Schedule A: Core Courses Students must complete the course listed in this schedule:							
ENG8001 Engineering and Surveying Research Methodology		1,2				1,2	
Schedule B: Major Courses Students must complete at least seven of the courses listed in this schedule:							
ENG8011 Assessment of Future Specialist Technology				1			
ENG8101 Technological Impact and its Management		1		1			
ENG8104 Asset Management in an Engineering Environment		1		1			
CIS8000 Global Information Systems Strategy		1,2				1,2	
ENG8103 Management of Technological Risk		2		2			
ENG8205 Technology Management Practice		2		2			
ENG8207 Technological Innovation and Development				2			
Schedule C: Engineering Technology Studies Path							
Elective+							
Elective+							
Elective+							

Major study: Technology Management (Major Study Code: 15808)							
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+							
Schedule D: Project and Dissertation Path							
ENG8002 Project and Dissertation		1,2		1,2			Pre-requisite: ENG8001

Footnotes

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

Transdisciplinary Engineering Major recommended enrolment pattern

Major study: Transdisciplinary Engineering (Major Study Code: 15648)							
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	
Schedule A: Core Courses Students must complete the course listed in this schedule:							
ENG8001 Engineering and Surveying Research Methodology		1,2				1,2	
Schedule B: Major Courses Students must complete at least seven of the courses listed in this schedule:							
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			
Schedule C: Engineering Technology Studies Path							
ENG8101 Technological Impact and its Management		1		1			
ENG8104 Asset Management in an Engineering Environment		1		1			
ENG8103 Management of Technological Risk		2		2			
ENG8205 Technology Management Practice		2		2			
Schedule D: Project and Dissertation Path							
ENG8002 Project and Dissertation		1,2		1,2			Pre-requisite: ENG8001

Footnotes

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