

Graduate Diploma of Professional Engineering (GDNS) - GradDipProfEng

CRICOS code (International applicants): 067688J

	On-campus [^]	External
Start:	Semester 1 (February) Semester 2 (July) Semester 3 (November)	Semester 1 (February) Semester 2 (July) Semester 3 (November)
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:	1 year full-time or 2 years part-time	
Program articulation:	From: Graduate Certificate of Professional Engineering , To: Master of Professional Engineering	

Notes:

In 2023 the program follows the Semester calendar. The [Academic Calendar and Important Dates](#) webpage will allow you to view and download a copy of the important dates for the Semester calendar.

Footnotes

[^] Semester 3 intake for Domestic students On-campus and External. For International Students External intake only.

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: study@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

Professional accreditation

The Graduate Diploma of Professional Engineering is not accredited by any professional bodies other than the University of Southern Queensland.

Program objectives

On completion of this program graduates should be able to:

- demonstrate and interpret an integrated understanding of a complex body of knowledge in one or more disciplines or areas of practice; and
- apply specialised cognitive and technical skills in an advanced body of knowledge or practice in one or more disciplines or areas of practice; and
- critically analyse and reflect upon sources of information to interpret and transmit knowledge, skills and ideas to specialist and non-specialist audiences.

Program Rules

Students are required to:

- Satisfactorily complete 8 credit points as listed in the standard progression to graduate from the program.
- Satisfactorily complete all courses within 4 years.
- Maintain satisfactory academic achievement throughout the duration of the program, consistent with the UniSQ [Student Academic Progress Procedure](#).
- Meet all mandatory course requirements including attendance of mandatory residential school requirements where this is present in courses.
- Mandatory compliance to program needs for the graduate engineering ePortfolio associated with the program.
- Immunisations and vaccinations according to national standards requirements for on-campus mode studies.
- Meet the Inherent Requirements for the Graduate Diploma of Professional Engineering.

Australian Qualifications Framework

The Australian Qualifications Framework (AQF) is a single national, comprehensive system of qualifications offered by higher education institutions (including universities), vocational education and training institutions and secondary schools. Each AQF qualification has a set of descriptors which define the type and complexity of knowledge, skills and application of knowledge and skills that a graduate who has been awarded that qualification has attained, and the typical volume of learning associated with that qualification type.

This program is at AQF Qualification Level 08. Graduates at this level will have advanced knowledge and skills for professional or highly skilled work and/or further learning.

The full set of levels criteria and qualification type descriptors can be found by visiting www.aqf.edu.au.

Admission requirements

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

- Completion of an Australian university three or four-year Bachelor degree in the area of engineering in the relevant cognate specialisation (major), or equivalent.
Or
Completion of an appropriate four-year embedded honours Bachelor degree in the area of engineering in a non-cognate specialisation (major field), or equivalent.
- English Language Proficiency requirements for Category 3.

The standing of degrees awarded by an overseas institution will be determined by reference to the Sydney Accord, of which Engineers Australia (EA) is a signatory, and the federal government agency, International Education group, an agency of the Department of Education and Training.

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

Program structure

The Graduate Diploma of Professional Engineering comprises eight single unit academic courses as follows:

Schedule A: Four Core courses (four units)

Schedule B: Four Specialisation courses (four units)

Required time limits

Students have a maximum of 4 years to complete this program.

Specialisation

The specialisation study provides students with knowledge and skills in a specific discipline. The specialisation study areas in the Graduate Diploma of Professional Engineering are:

- Aerospace Engineering
- Agricultural Engineering
- Civil Engineering
- Electrical and Electronic Engineering
- Engineering Management and Enterprise
- Environmental Engineering
- Mechanical Engineering
- Power Engineering
- Structural Engineering

IT requirements

For information technology requirements, please refer to the [minimum computing standards](#).

Articulation

The [Graduate Certificate of Professional Engineering](#), the Graduate Diploma of Professional Engineering, and the [Master of Professional Engineering](#) are a nested suite of programs. Students who have completed the Graduate Diploma of Professional Engineering from prior engineering degree awards are able to apply to articulate with 6-8 credits (depends on selectives taken) to the [Master of Professional Engineering](#).

Students who have completed the Graduate Diploma of Professional Engineering from prior science degree awards are able to apply to articulate with partial credit to the [Master of Professional Engineering](#). Credit / Exemptions applications are reviewed on a case-by-case basis.

Applicants with similar discipline specialisations from science degrees to those offered can use this program to complete necessary requisite engineering knowledge to then articulate into the [Master of Professional En](#)

gineering. This transitional studies are for scientist graduates either working in engineering field already or planning a career extension into an engineering field of practice. For further information on this program option, please contact the School of Engineering Post-graduate Program Director via usq.support@usq.edu.au, and provide with the contact the science degree testamur and academic transcript.

Exit points

Students who have completed four courses in the program may satisfy the requirements for the [Graduate Certificate of Professional Engineering](#) and therefore may apply to exit the program with a [Graduate Certificate of Professional Engineering](#).

Credit

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

Enrolment

Students should note that some of the courses specify enrolment requirements (prerequisites). Students should therefore refer to the [Course Specification](#) section to determine the enrolment requirements for the courses they intend enrolling in. Students should avoid enrolling in courses for which they do not have sufficient pre-requisite knowledge. 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. Students should contact the School of Engineering Program Director (Post-Graduate) via usq.support@usq.edu.au if they encounter problems while enrolling in courses with requisites.

Aerospace Engineering specialisation recommended enrolment pattern

Specialisation: Aerospace Engineering (Specialisation Study Code: TBA)							
Course	Year of program and semester in which course is normally studied						Enrolment requirements
	On-campus (ONC)		External (EXT)		Online (ONL)		
	Year	Sem	Year	Sem	Year	Sem	
Schedule A: Core Courses Students must complete all four courses listed in this schedule.							
EBE5003 Research Training		1,3				1,3	Pre-requisite: (ENG5001 or ENG5002) and Students must be enrolled in one of the following Programs: MENS or GDNS or GCNS Pre-requisite or Co-requisite: ENG5105
ENG5001 Professional Skills in Engineering [†]		1,2,3				1,2,3	
ENG5500 Advanced Aerospace Systems		2				2	Pre-requisite: Students must be enrolled in the following Program: MENS (Aerospace Engineering specialisation)
ENG6208 Advanced Engineering Project Management		1				1	
Schedule B: Specialisation Courses Students must complete four of the courses listed in this schedule. Students from Mechanical undergraduate engineering programs choose from MECxxxx courses, and students from Electrical undergraduate engineering programs choose from ELExxxx courses							
*** <i>Students undertaking transitional studies from a non-engineering undergraduate degree may require a special enrolment pattern in lieu of some or all of schedule B courses..</i>							
ELE4109 Measurement Science and Instrument Engineering [^]						1	
ELE4605 Fields and Waves		1				1	Pre-requisite: {(MAT1502 or ENM1600) and ELE2103 and ELE2601 } or Students must be enrolled in one of the following Programs: MEPR or MENS or GCNS or GDNS
ELE4606 Communication Systems		2				2	Pre-requisite: (ELE2504 and ELE2601) or Students must be enrolled in one of the fol

Specialisation: Aerospace Engineering (Specialisation Study Code: TBA)							
Course	Year of program and semester in which course is normally studied						Enrolment requirements
	On-campus (ONC)		External (EXT)		Online (ONL)		
	Year	Sem	Year	Sem	Year	Sem	
							lowing Programs: GCEN or METC or MEPR or MENS or GCNS or GDNS
ELE4607 Advanced Digital Communications		1				1	Pre-requisite: ELE1301 or Students must be enrolled in one of the following Programs: GCEN or METC or GCNS or GDNS or MENS or MEPR
ELE5605 Electro-Magnetic Modelling		2				2,3	Pre-requisite: ELE4605 or Students must be enrolled in one of the following Programs: MENS or MEPR or GCNS or GDNS
ELE6005 Electronic Systems Integration *							
ENG5105 Advanced Numerical Modelling		2				2	Pre-requisite: Students must be enrolled in one of the following Programs: GCNS or GDNS or MENS or MEPR
ENG6208 Advanced Engineering Project Management		1				1	
MEC4108 Advanced Thermofluids						1	Pre-requisite: (MEC3107 & ENM2600 & ENG3104) or Students must be enrolled in one of the following Programs: MENS or MEPR or GCNS or GDNS or GEPR Students cannot enrol in MEC4108 if they have successfully completed, or are currently enrolled in, MEC4103
MEC4302 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 METC or MEPR or GCNS or GDNS or MENS
MEC5100 Computational Fluid Dynamics						1	Pre-requisite: MEC3107 or MEC3102 or MEC4108 or MEC5107 or ENV3104 or ENV5104 or Students must be enrolled in the following Program: MEPR
MEC5107 Thermofluids		2				2	Pre-requisite: Students must be enrolled in one of the following Programs: GCNS or GDNS or MENS
MEC5109 Aerospace Propulsion Systems		2				2	Pre-requisite: MEC3107 or MEC4108 or MEC5107
MEC5203 Fibre Reinforced Composites		2				2	Pre-requisite: (MEC1201 and (ENM2600 or MAT2100) and MEC2402) or Students must be enrolled in one of the following Programs: GCNS or GDNS or MEPR or MENS
MEC6203 Advanced Materials Technology *							
MEC6306 Advanced Aerospace Transport Structures *							
*** Please contact the School of Engineering Program Director (Post-graduate) via usq.support@usq.edu.au for alternative of up to 4 units of advanced undergraduate courses to complete pre-requisite engineering knowledge to allow future potential articulation into Master of Professional Engineering .							

Footnotes

† Unavailable in S3 2023

^ Offered odd years only

* First Offer in 2024 academic year

Agricultural Engineering specialisation recommended enrolment pattern

Specialisation: Agricultural Engineering (Specialisation Study Code: 16206)							
Course	Year of program and semester in which course is normally studied						Enrolment requirements
	On-campus (ONC)		External (EXT)		Online (ONL)		
	Year	Sem	Year	Sem	Year	Sem	
Schedule A: Core Courses Students must complete all four courses listed in this schedule.							
AGR8003 Critical Issues in Agriculture		2				2	
EBE5003 Research Training		1,3				1,3	Pre-requisite: (ENG5001 or ENG5002) and Students must be enrolled in one of the following Programs: MENS or GDNS or GCNS Pre-requisite or Co-requisite: ENG5105
ENG5001 Professional Skills in Engineering [†]		1,2,3				1,2,3	
ENG6208 Advanced Engineering Project Management		1				1	
Schedule B: Specialisation Courses Students must complete four of the courses listed in this schedule.							
<i>*** Students undertaking transitional studies from a non-engineering undergraduate degree may require a special enrolment pattern in lieu of some or all of schedule B courses..</i>							
AGR4305 Agricultural Soil Mechanics		1				1	
AGR6002 Emerging Technologies in Agriculture *	2						
AGR6305 Applications of Advanced Technology in Agriculture *	2						
CLI8003 Climate, Food, Water and Energy Security						2	
ENG5105 Advanced Numerical Modelling		2				2	Pre-requisite: Students must be enrolled in one of the following Programs: GCNS or GDNS or MENS or MEPR
ENV4106 Irrigation Science		2				2	Pre-requisite: AGR3304 or Students must be enrolled in one of the following Programs: GCEN or GCSC or GDSI or METC or MEPR or GCNS or GDNS or MENS or MSCN.
ENV4204 Environmental Technology		1				1	Pre-requisite: ENV2105 or Students must be enrolled in one of the following Programs: PDEV or GCEN or METC or MEPR or GCNS or GDNS or MENS
ENV5104 Advanced Hydraulic Systems		1				1	Pre-requisite: Students must be enrolled in one of the following Programs: GCNS or GDNS or MENS or MEPR
*** Please contact the School of Engineering Program Director (Post-graduate) via usq.support@usq.edu.au for alternative of up to 4 units of advanced undergraduate courses to complete pre-requisite engineering knowledge to allow future potential articulation into Master of Professional Engineering .							

Footnotes

[†] Unavailable in S3 2023

* First Offer in 2024 academic year

Civil Engineering specialisation recommended enrolment pattern

Specialisation: Civil Engineering (Specialisation Study Code: 16207)							
Course	Year of program and semester in which course is normally studied						Enrolment requirements
	On-campus (ONC)		External (EXT)		Online (ONL)		
	Year	Sem	Year	Sem	Year	Sem	
Schedule A: Core Courses Students must complete all four courses listed in this schedule.							
CIV5403 Advanced Geotechnical Engineering						3	Pre-requisite: CIV2401 or CIV2403 or Students must be enrolled in one of the following Programs: GCEN or METC or MEPR or GCNS or GDNS or MENS
EBE5003 Research Training		1,3				1,3	Pre-requisite: (ENG5001 or ENG5002) and Students must be enrolled in one of the following Programs: MENS or GDNS or GCNS Pre-requisite or Co-requisite: ENG5105
ENG5001 Professional Skills in Engineering [†]		1,2,3				1,2,3	
ENG6208 Advanced Engineering Project Management		1				1	
Schedule B: Specialisation Courses Students must complete four of the courses listed in this schedule.							
*** <i>Students undertaking transitional studies from a non-engineering undergraduate degree may require a special enrolment pattern in lieu of some or all of schedule B courses..</i>							
CIV4505 Structural Analysis		1				1	Pre-requisite: MEC2402 and (MAT1502 or ENM1600 or MAT1102) or Students must be enrolled in one of the following Programs: GCEN or METC or MEPR or GCNS or GDNS or MENS or GEPR
CIV4508 Structural Design II		1				1	Pre-requisite: (CIV3505 or CIV4505) and (CIV3506 or CIV4506) or Students must be enrolled in one of the following Programs: GCEN or METC or MEPR or GCNS or GDNS or MENS
CIV5704 Road and Street Engineering						2	
CIV5705 Pavement Design and Analysis						1	Pre-requisite: CIV3703 or Students must be enrolled in one of the following Programs: GCNS or GDNS or MENS or PGCN or GCAE or MEPR
ENG5105 Advanced Numerical Modelling		2				2	Pre-requisite: Students must be enrolled in one of the following Programs: GCNS or GDNS or MENS or MEPR
ENG6104 Asset Management in an Engineering Environment		1				1	
ENV4203 Public Health Engineering		2				2	Pre-requisite: ENV1101 or ENV2103 or Students must be enrolled in one of the following Programs: GCEN or METC or MEPR or GCNS or GDNS or MENS
ENV5104 Advanced Hydraulic Systems		1				1	Pre-requisite: Students must be enrolled in one of the following Programs: GCNS or GDNS or MENS or MEPR
*** Please contact the School of Engineering Program Director (Post-graduate) via usq.support@usq.edu.au for alternative of up to 4 units of advanced undergraduate courses to complete pre-requisite engineering knowledge to allow future potential articulation into Master of Professional Engineering .							

Footnotes

[†] Unavailable in S3 2023

Electrical and Electronic Engineering specialisation recommended enrolment pattern

Specialisation: Electrical and Electronic Engineering (Specialisation Study Code: 16208)							
Course	Year of program and semester in which course is normally studied						Enrolment requirements
	On-campus (ONC)		External (EXT)		Online (ONL)		
	Year	Sem	Year	Sem	Year	Sem	
Schedule A: Core Courses Students must complete all four courses listed in this schedule.							
EBE5003 Research Training		1,3				1,3	Pre-requisite: (ENG5001 or ENG5002) and Students must be enrolled in one of the following Programs: MENS or GDNS or GCNS Pre-requisite or Co-requisite: ENG5105
ELE4606 Communication Systems		2				2	Pre-requisite: (ELE2504 and ELE2601) or Students must be enrolled in one of the following Programs: GCEN or METC or MEPR or MENS or GCNS or GDNS
ENG5001 Professional Skills in Engineering [†]		1,2,3				1,2,3	
ENG6208 Advanced Engineering Project Management		1				1	
Schedule B: Specialisation Courses Students must complete four of the courses listed in this schedule.							
<i>*** Students undertaking transitional studies from a non-engineering undergraduate degree may require a special enrolment pattern in lieu of some or all of schedule B courses..</i>							
ELE4605 Fields and Waves		1				1	Pre-requisite: {(MAT1502 or ENM1600) and ELE2103 and ELE2601 } or Students must be enrolled in one of the following Programs: MEPR or MENS or GCNS or GDNS
ELE4607 Advanced Digital Communications		1				1	Pre-requisite: ELE1301 or Students must be enrolled in one of the following Programs: GCEN or METC or GCNS or GDNS or MENS or MEPR
ELE4807 Power Systems Analysis		1				1	
ELE5001 Industrial Communications Protocols		1				1	Pre-requisite: ELE2601 or Students must be enrolled in the following Program: GCNS, GDNS, MENS or MEPR
ELE5605 Electro-Magnetic Modelling		2				2,3	Pre-requisite: ELE4605 or Students must be enrolled in one of the following Programs: MENS or MEPR or GCNS or GDNS
ENG5105 Advanced Numerical Modelling		2				2	Pre-requisite: Students must be enrolled in one of the following Programs: GCNS or GDNS or MENS or MEPR
ENG6104 Asset Management in an Engineering Environment		1				1	
*** Please contact the School of Engineering Program Director (Post-graduate) via usq.support@usq.edu.au for alternative of up to 4 units of advanced undergraduate courses to complete pre-requisite engineering knowledge to allow future potential articulation into Master of Professional Engineering .							

Footnotes

[†] Unavailable in S3 2023

Engineering Management and Enterprise specialisation recommended enrolment pattern

Specialisation: Engineering Management and Enterprise (Specialisation Study Code: TBA)							
Course	Year of program and semester in which course is normally studied						Enrolment requirements
	On-campus (ONC)		External (EXT)		Online (ONL)		
	Year	Sem	Year	Sem	Year	Sem	
Schedule A: Core Courses Students must complete all four courses listed in this schedule.							
EBE5003 Research Training		1,3				1,3	Pre-requisite: (ENG5001 or ENG5002) and Students must be enrolled in one of the following Programs: MENS or GDNS or GCNS Pre-requisite or Co-requisite: ENG5105
ENG5001 Professional Skills in Engineering [†]		1,2,3				1,2,3	
ENG6104 Asset Management in an Engineering Environment		1				1	
ENG6207 Innovation Management and New Product Development [£]						3	
Schedule B: Specialisation Courses Students must complete one Schedule B technical engineering course from another GDNS technical specialisation (i.e., discipline major) plus three of the courses listed in this schedule							
<i>*** Students undertaking transitional studies from a non-engineering undergraduate degree may require a special enrolment pattern in lieu of some or all of schedule B courses..</i>							
Choose 1 Schedule B technical engineering course from another GDNS technical specialisation (ie. discipline major).							
Choose 3 courses from the following							
ENG6205 Project Management Practice		2				2	
FIN8201 Corporate Finance		1				1,3	
GIS2407 Web Based Geographic Information System		2				2	Pre-requisite: GIS1402 or Students must be enrolled in one of the following Programs: GCST or GDST or MSST or MSPT or GCNS or GDNS or MENS
MGT8049 Building an Engaged Workforce						2,3	
*** Please contact the School of Engineering Program Director (Post-graduate) via usq.support@usq.edu.au for alternative of up to 4 units of advanced undergraduate courses to complete pre-requisite engineering knowledge to allow future potential articulation into Master of Professional Engineering .							

Footnotes

† Unavailable in S3 2023

£ In Semester 3, 2023 this course will be delivered as a Transition (9 week) semester, commencing on 13 November 2023 and concluding on 12 January 2024

Environmental Engineering specialisation recommended enrolment pattern

Specialisation: Environmental Engineering (Specialisation Study Code: 16209)							
Course	Year of program and semester in which course is normally studied						Enrolment requirements
	On-campus (ONC)		External (EXT)		Online (ONL)		
	Year	Sem	Year	Sem	Year	Sem	
Schedule A: Core Courses Students must complete all four courses listed in this schedule.							
EBE5003 Research Training		1,3				1,3	Pre-requisite: (ENG5001 or ENG5002) and Students must be enrolled in one of the fol

Specialisation: Environmental Engineering (Specialisation Study Code: 16209)							
Course	Year of program and semester in which course is normally studied						Enrolment requirements
	On-campus (ONC)		External (EXT)		Online (ONL)		
	Year	Sem	Year	Sem	Year	Sem	
							Following Programs: MENS or GDNS or GCNS Pre-requisite or Co-requisite: ENG5105
ENG5001 Professional Skills in Engineering [†]		1,2,3				1,2,3	
ENG6205 Project Management Practice		2				2	
ENV5104 Advanced Hydraulic Systems		1				1	Pre-requisite: Students must be enrolled in one of the following Programs: GCNS or GDNS or MENS or MEPR
Schedule B: Specialisation Courses Students must complete four of the courses listed in this schedule.							
*** <i>Students undertaking transitional studies from a non-engineering undergraduate degree may require a special enrolment pattern in lieu of some or all of schedule B courses..</i>							
AGR4305 Agricultural Soil Mechanics		1				1	
CLI8204 Global Environmental Systems						1	
ENG5105 Advanced Numerical Modelling		2				2	Pre-requisite: Students must be enrolled in one of the following Programs: GCNS or GDNS or MENS or MEPR
ENV4106 Irrigation Science		2				2	Pre-requisite: AGR3304 or Students must be enrolled in one of the following Programs: GCEN or GCSC or GDSI or METC or MEPR or GCNS or GDNS or MENS or MSCN.
MEC5100 Computational Fluid Dynamics						1	Pre-requisite: MEC3107 or MEC3102 or MEC4108 or MEC5107 or ENV3104 or ENV5104 or Students must be enrolled in the following Program: MEPR
REN8101 Environment, Society and Sustainability						1	Enrolment is not permitted in REN8101 if REN1201 has been previously completed.
STA6200 Statistics for Quantitative Researchers		1				1,2	Enrolment is not permitted in STA6200 if S TA2300 or STA1003 or STA1004 has been previously completed
*** Please contact the School of Engineering Program Director (Post-graduate) via usq.support@usq.edu.au for alternative of up to 4 units of advanced undergraduate courses to complete pre-requisite engineering knowledge to allow future potential articulation into Master of Professional Engineering .							

Footnotes

[†] Unavailable in S3 2023

Mechanical Engineering specialisation recommended enrolment pattern

Specialisation: Mechanical Engineering (Specialisation Study Code: 16211)							
Course	Year of program and semester in which course is normally studied						Enrolment requirements
	On-campus (ONC)		External (EXT)		Online (ONL)		
	Year	Sem	Year	Sem	Year	Sem	
Schedule A: Core Courses Students must complete all four courses listed in this schedule.							
EBE5003 Research Training		1,3				1,3	Pre-requisite: (ENG5001 or ENG5002) and Students must be enrolled in one of the following Programs: MENS or GDNS or GCNS Pre-requisite or Co-requisite: ENG5105
ENG5001 Professional Skills in Engineering [†]		1,2,3				1,2,3	
ENG6208 Advanced Engineering Project Management		1				1	
MEC5203 Fibre Reinforced Composites		2				2	Pre-requisite: (MEC1201 and (ENM2600 or MAT2100) and MEC2402) or Students must

Specialisation: Mechanical Engineering (Specialisation Study Code: 16211)							
Course	Year of program and semester in which course is normally studied						Enrolment requirements
	On-campus (ONC)		External (EXT)		Online (ONL)		
	Year	Sem	Year	Sem	Year	Sem	
							be enrolled in one of the following Programs: GCNS or GDNS or MEPR or MENS
Schedule B: Specialisation Courses Students must complete four of the courses listed in this schedule.							
*** <i>Students undertaking transitional studies from a non-engineering undergraduate degree may require a special enrolment pattern in lieu of some or all of schedule B courses..</i>							
ENG5105 Advanced Numerical Modelling		2				2	Pre-requisite: Students must be enrolled in one of the following Programs: GCNS or GDNS or MENS or MEPR
ENG6104 Asset Management in an Engineering Environment		1				1	
MEC4104 Renewable Energy Technology		2				2	Pre-requisite: ((MEC2101 and MEC3102) or MEC2106) or Students must be enrolled in one of the following Programs: GCEN or GCNS or GDNS or METC or MENS or MEPR
MEC4403 Advanced Dynamics		2				2	Pre-requisite: (MEC2401 and (MAT2500 or ENM2600)) or Students must be enrolled in one of the following Programs: MENS or MEPR or GCNS or GDNS or GEPR
MEC5100 Computational Fluid Dynamics						1	Pre-requisite: MEC3107 or MEC3102 or MEC4108 or MEC5107 or ENV3104 or ENV5104 or Students must be enrolled in the following Program: MEPR
MEC5107 Thermofluids		2				2	Pre-requisite: Students must be enrolled in one of the following Programs: GCNS or GDNS or MENS
*** Please contact the School of Engineering Program Director (Post-graduate) via usq.support@usq.edu.au for alternative of up to 4 units of advanced undergraduate courses to complete pre-requisite engineering knowledge to allow future potential articulation into Master of Professional Engineering .							

Footnotes

† Unavailable in S3 2023

Power Engineering specialisation recommended enrolment pattern

Specialisation: Power Engineering (Specialisation Study Code: 16212)							
Course	Year of program and semester in which course is normally studied						Enrolment requirements
	On-campus (ONC)		External (EXT)		Online (ONL)		
	Year	Sem	Year	Sem	Year	Sem	
Schedule A: Core Courses Students must complete all four courses listed in this schedule.							
EBE5003 Research Training		1,3				1,3	Pre-requisite: (ENG5001 or ENG5002) and Students must be enrolled in one of the following Programs: MENS or GDNS or GCNS Pre-requisite or Co-requisite: ENG5105
ELE5805 Power Electronics and Drive Systems		2				2	Pre-requisite: (ELE1502 and ELE1801) or Students must be enrolled in one of the following Programs: GCEN or METC or MEPR or GCNS or GDNS or MENS
ENG5001 Professional Skills in Engineering [†]		1,2,3				1,2,3	
ENG6205 Project Management Practice		2				2	

Specialisation: Power Engineering (Specialisation Study Code: 16212)							
Course	Year of program and semester in which course is normally studied						Enrolment requirements
	On-campus (ONC)		External (EXT)		Online (ONL)		
	Year	Sem	Year	Sem	Year	Sem	
Schedule B: Specialisation Courses Students must complete four of the courses listed in this schedule.							
<i>*** Students undertaking transitional studies from a non-engineering undergraduate degree may require a special enrolment pattern in lieu of some or all of schedule B courses..</i>							
ELE4307 Real Time Systems		2				2	Pre-requisite: ELE1301 or Students must be enrolled in one of the following Programs: GCNS or GDNS or MENS or MEPR
ELE4506 Industrial Process Automation						1	Pre-requisite: (ELE2101 or ELE2103) and ELE3105 and MEC2501 or Students must be enrolled in the following program: GCNS or GDNS or MENS or MEPR
ELE4708 Electricity Supply Systems and Operations		2				2	Pre-requisite: Students must be enrolled in one of the following Programs: GCNS or GDNS or MENS or MEPR
ELE4807 Power Systems Analysis		1				1	
ELE6804 Advances in Power Engineering*		2				2	
ENG5105 Advanced Numerical Modelling		2				2	Pre-requisite: Students must be enrolled in one of the following Programs: GCNS or GDNS or MENS or MEPR
MEC4104 Renewable Energy Technology		2				2	Pre-requisite: ((MEC2101 and MEC3102) or MEC2106) or Students must be enrolled in one of the following Programs: GCEN or GCNS or GDNS or METC or MENS or MEPR
*** Please contact the School of Engineering Program Director (Post-graduate) via usq.support@usq.edu.au for alternative of up to 4 units of advanced undergraduate courses to complete pre-requisite engineering knowledge to allow future potential articulation into Master of Professional Engineering.							

Footnotes

† Unavailable in S3 2023

* First Offer in 2024 academic year

Structural Engineering specialisation recommended enrolment pattern

Specialisation: Structural Engineering (Specialisation Study Code: 16213)							
Course	Year of program and semester in which course is normally studied						Enrolment requirements
	On-campus (ONC)		External (EXT)		Online (ONL)		
	Year	Sem	Year	Sem	Year	Sem	
Schedule A: Core Courses Students must complete all four courses listed in this schedule.							
EBE5003 Research Training		1,3				1,3	Pre-requisite: (ENG5001 or ENG5002) and Students must be enrolled in one of the following Programs: MENS or GDNS or GCNS Pre-requisite or Co-requisite: ENG5105
ENG5001 Professional Skills in Engineering [†]		1,2,3				1,2,3	
ENG6104 Asset Management in an Engineering Environment		1				1	
CIV8801 Code-Based Structural Design						1	

Specialisation: Structural Engineering (Specialisation Study Code: 16213)							
Course	Year of program and semester in which course is normally studied						Enrolment requirements
	On-campus (ONC)		External (EXT)		Online (ONL)		
	Year	Sem	Year	Sem	Year	Sem	
Schedule B: Specialisation Courses Students must complete four of the courses listed in this schedule.							
*** <i>Students undertaking transitional studies from a non-engineering undergraduate degree may require a special enrolment pattern in lieu of some or all of schedule B courses..</i>							
CIV4505 Structural Analysis		1				1	Pre-requisite: MEC2402 and (MAT1502 or ENM1600 or MAT1102) or Students must be enrolled in one of the following Programs: GCEN or METC or MEPR or GCNS or GDNS or MENS or GEPR
CIV4506 Concrete Structures		1				1	Pre-requisite: CIV2503 or Students must be enrolled in one of the following Programs: GCEN or METC or MEPR or GCNS or GDNS or MENS
CIV4508 Structural Design II		1				1	Pre-requisite: (CIV3505 or CIV4505) and (CIV3506 or CIV4506) or Students must be enrolled in one of the following Programs: GCEN or METC or MEPR or GCNS or GDNS or MENS
CIV5403 Advanced Geotechnical Engineering		2				2	Pre-requisite: CIV2401 or CIV2403 or Students must be enrolled in one of the following Programs: GCEN or METC or MEPR or GCNS or GDNS or MENS
CIV6802 Advanced Prestressed Concrete [^]						2	
CIV6803 Advanced Mechanics and Technology of Fibre Composites						1	Pre-requisite: CIV3506 or MEC3203 or Students must be enrolled in one of the following Programs: PGCN or MEPR or GCNS or GDNS or MENS
ENG5105 Advanced Numerical Modelling		2				2	Pre-requisite: Students must be enrolled in one of the following Programs: GCNS or GDNS or MENS or MEPR
*** Please contact the School of Engineering Program Director (Post-graduate) via usq.support@usq.edu.au for alternative of up to 4 units of advanced undergraduate courses to complete pre-requisite engineering knowledge to allow future potential articulation into Master of Professional Engineering .							

Footnotes

- † Unavailable in S3 2023
^ Offered odd years only