

S466 BACHELOR OF ENGINEERING (INDUSTRY) (HONOURS)

FACULTY OF SCIENCE, ENGINEERING AND BUILT ENVIRONMENT

ELECTRICAL AND RENEWABLE ENERGY ENGINEERING MAJOR SEQUENCE - NO MATHS METHODS



FOR STUDENTS COMMENCING TRIMESTER 2 2025

Last updated 28/01/2025

When you first enrol via StudentConnect and go through the enrolment steps, you may be able to simply confirm any units that are pre-populated for you. You can also add any that you need to do, as part of your first year’s enrolment – by using the information on this map and in the Handbook.

You must also complete the following compulsory zero (0) credit point units: STP010 Career Tools for Employability (0 credit points)
AND SEJ010 Introduction to Safety and Project Oriented Learning (0 credit points)
AND DAI001 Academic Integrity and Respect At Deakin (0 credit points)

YEAR 1 Year: 2025	Trimester 2				
	Trimester 3				
YEAR 2 Year: 2026	Trimester 1				
	Trimester 2				
	Trimester 3				
YEAR 3 Year: 2027	Trimester 1				
	Trimester 2				
	Trimester 3				
YEAR 4 Year: 2028	Trimester 1				
	Trimester 2				
	Trimester 3				
YEAR 5 Year: 2029	Trimester 1				
	Trimester 2				
	Trimester 3				
YEAR 6 Year: 2030	Trimester 1				
	Trimester 2				
	Trimester 3				

It is recommended students undertake SEJ441 and SEJ446 in consecutive trimesters.

@Students who have not completed VCE Mathematical Methods should complete SIT190 in their first trimester of study before enrolling in SIT194 and SIT199. This unit replaces an elective.

*Students must have successfully completed STP010 Career Tools for Employability (0-credit point unit) before commencing SEL798 Engineering Industry Experience A

+Students enrolled in Online mode for these units are required to attend campus mode conducted activities during the corresponding Intensive Activities in a trimester. Attendance at campus mode activities is linked to assessment requirements within the Engineering programs, failure to attend will result in not meeting the hurdle requirement of the respective assessment. Thus, a fail grade shall be awarded for the respective affected unit(s) for that particular trimester.

S466 COURSE RULES

- Must pass 38 credit points for course
- Must pass ALL units in {DAI001, STP010, SEJ010}
- Must pass 6 credit points in {SEL798, SEL799}
- Must pass 1 unit set(s) in {Civil Engineering (MJ-S000092), Electrical and Renewable Energy Engineering (MJ-S000093), Mechanical Engineering (MJ-S000094), Mechatronics Engineering (MJ-S000095), Environmental and Sustainability Engineering (MJ-S000096)}
- Must have completed 1 unit sets in {CR-S000016}

FOR USE ONLY WHEN UNDERTAKING A CONSULTATION WITH A STUDENT ADVISER:

Student ID: _____		Name: _____		
Deakin email: _____			Preferred contact no: _____	
Year commenced:	Period commenced:	eCOE (if applicable):	Campus: _____	Mode: _____
Student adviser: _____				Date: _____

Notes

GENERAL INFORMATION

This course map is a guide only. You must also ensure you meet the course rules and structure as set out in the official University Handbook of the year you commenced your course. This course map has been created to be used electronically.

Not all units are available in all study periods or mode of delivery.

- Full time study is typically three to four units (or credit points) each study period.
- Part time study is typically one to two units (or credit points) each study period – part time study will extend the duration of your studies.
- Trimester 3 is typically an optional study period - unless it’s your first study period and/or a compulsory study period for your course.

Unit options can be found in the 'Advanced Unit Search' in the most current year’s University Handbook.

If you have applied for or received credit for units as recognition of prior learning (RPL), it may alter the units you need to study.

Please seek advice from a Student Adviser in StudentCentral if you have any queries or need help understanding your course structure and unit options.

S466 BACHELOR OF ENGINEERING (INDUSTRY) (HONOURS) CORE UNITS UNIT SETS

BENG(HONS)(IND) CORE (S466) (CR-S000016)
DAI001 Academic Integrity and Respect At Deakin
SEB101 Engineering Physics
SEJ010 Introduction to Safety and Project Oriented Learning
SEJ441 Engineering Project A
SEJ446 Engineering Project B
SEP105 Introduction to Programming for Engineers
SEP291 Engineering Modelling
SEP701 Continuing Professional Development
SET111 Sustainable Design
SIT194 Introduction to Mathematical Modelling
SIT199 Applied Algebra and Statistics
STP010 Career Tools for Employability

Completion Rule

- Must pass all unit(s) in {SEB101, SEJ010, SEJ441, SEJ446, SEP105, SEP291, SEP701, SET111, SIT194, SIT199, STP010}
- Must pass 2 unit(s) in {DAI001, STP050}

S466 BACHELOR OF ENGINEERING (INDUSTRY) (HONOURS) MAJOR UNIT SETS

CIVIL ENGINEERING (MJ-S000092)
SEJ103 Materials Engineering Project
SEJ104 Engineering in Society
SEJ201 Structural Design
SEJ202 Field Investigation
SEM216 Stress and Failure Analysis
SEM218 Fluid Mechanics
SEN770 Infrastructure Engineering
SEV254 Road and Pavement Engineering
SEV300 Reinforced Concrete and Steel Structures
SEV301 Water Engineering Design
SEV320 Theory of Structures

<u>SEV322 Hydrology and Hydraulics</u>
<u>SEV362 Geotechnical Engineering</u>
<u>SEV402 Traffic and Transport Engineering</u>

- Completion Rule
- Must pass all unit(s) in {SEJ103, SEJ104, SEJ201, SEJ202, SEM216, SEM218, SEN770, SEV254, SEV300, SEV301, SEV320, SEV322, SEV362, SEV402}

ELECTRICAL AND RENEWABLE ENERGY ENGINEERING (MJ-S000093)
<u>SEE210 Power Engineering Design</u>
<u>SEE212 Power Electronics</u>
<u>SEE216 Analogue and Digital Electronics</u>
<u>SEE217 Renewable Energy Generation System Design</u>
<u>SEE308 Electrical Machines and Drives</u>
<u>SEE312 Data Communication</u>
<u>SEE314 Energy Efficiency, Management and Market Analysis</u>
<u>SEE332 Transmission and Distribution System Design</u>
<u>SEE406 Power System Analysis</u>
<u>SEE416 Electrical Systems Protection</u>
<u>SEE419 Microgrid Design, Integration and Management</u>
<u>SEJ102 Electrical Systems Engineering Project</u>
<u>SEJ104 Engineering in Society</u>
<u>SEJ302 Control Systems Engineering</u>

- Completion Rule
- Must pass all unit(s) in {SEE210, SEE212, SEE216, SEE217, SEE308, SEE312, SEE314, SEE332, SEE406, SEE416, SEE419, SEJ102, SEJ104, SEJ302}

ENVIRONMENTAL AND SUSTAINABILITY ENGINEERING (MJ-S000096)
<u>SEJ103 Materials Engineering Project</u>
<u>SEJ104 Engineering in Society</u>
<u>SEJ202 Field Investigation</u>
<u>SEM218 Fluid Mechanics</u>
<u>SEN770 Infrastructure Engineering</u>
<u>SEV201 Environmental Health Engineering</u>
<u>SEV301 Water Engineering Design</u>
<u>SEV311 Air Pollution and Control</u>

<u>SEV322 Hydrology and Hydraulics</u>
<u>SEV331 Waste Engineering and Transformation Systems</u>
<u>SEV401 Integrated Catchment Systems</u>
<u>SLE010 Laboratory and Fieldwork Safety Induction Program</u>
<u>SLE207 Environmental Planning and Impact Assessment</u>
<u>SLE240 Quantitative Marine Science</u>
<u>SLE245 Marine Geographic Information Systems</u>

- Completion Rule
- Must pass all unit(s) in {SEJ103, SEJ104, SEJ202, SEM218, SEN770, SEV201, SEV301, SEV311, SEV322, SEV331, SEV401, SLE010, SLE207, SLE240, SLE245}

MECHANICAL ENGINEERING (MJ-S000094)
<u>SED344 Product Modelling and Design</u>
<u>SEJ103 Materials Engineering Project</u>
<u>SEJ104 Engineering in Society</u>
<u>SEJ201 Structural Design</u>
<u>SEJ302 Control Systems Engineering</u>
<u>SEM200 Machine Design</u>
<u>SEM202 Thermodynamics</u>
<u>SEM216 Stress and Failure Analysis</u>
<u>SEM218 Fluid Mechanics</u>
<u>SEM302 Advanced Stress Analysis</u>
<u>SEM310 Thermo-Fluid Systems</u>
<u>SEM313 Manufacturing</u>
<u>SEM327 Dynamics of Machines</u>
<u>SEM400 Computational Fluid Dynamics</u>

- Completion Rule
- Must pass all unit(s) in {SED344, SEJ103, SEJ104, SEJ201, SEJ302, SEM200, SEM202, SEM216, SEM218, SEM302, SEM310, SEM313, SEM327, SEM400}

MECHATRONICS ENGINEERING (MJ-S000095)
<u>SEE212 Power Electronics</u>
<u>SEE216 Analogue and Digital Electronics</u>
<u>SEE222 Embedded Systems Design</u>
<u>SEE307 Systems and Signals</u>

<u>SEE312 Data Communication</u>
<u>SEI102 Electrical Systems Engineering Project</u>
<u>SEI104 Engineering in Society</u>
<u>SEI302 Control Systems Engineering</u>
<u>SEM200 Machine Design</u>
<u>SEM327 Dynamics of Machines</u>
<u>SEN771 Intelligent Autonomous Robots</u>
<u>SER204 Electromechanical Systems</u>
<u>SER300 Mechatronic Design</u>
<u>SER400 Virtual and Augmented Interfaces</u>

Completion Rule

- Must pass all unit(s) in {SEE212, SEE216, SEE222, SEE307, SEE312, SEI102, SEI104, SEI302, SEM200, SEM327, SEN771, SER204, SER300, SER400}