

# S466 BACHELOR OF ENGINEERING (INDUSTRY) (HONOURS)

FACULTY OF SCIENCE, ENGINEERING AND BUILT ENVIRONMENT

ENVIRONMENTAL ENGINEERING MAJOR SEQUENCE - NO MATHS METHODS OR CHEMISTRY



FOR STUDENTS COMMENCING TRIMESTER 1 2024

Last updated 27/06/2024

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: SEJ010 Introduction to Safety and Project Oriented Learning (0 credit points)

AND DAI001 Academic Integrity Module (0 credit points)

AND STP010 Career Tools for Employability (0 credit points)

<b>YEAR 1</b> Year: 2024	Trimester 1				
	Trimester 2				
	Trimester 3				

<b>YEAR 2</b> Year: 2025	Trimester 1				
	Trimester 2				
	Trimester 3				

<b>YEAR 3</b> Year: 2026	Trimester 1				
	Trimester 2				
	Trimester 3				

<b>YEAR 4</b> Year: 2027	Trimester 1				
	Trimester 2				
	Trimester 3				

<b>YEAR 5</b> Year: 2028	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 SEL703 Professional Practice. SEL703 Professional Practice is available in trimester 1, trimester 2 and trimester 3.

+ Students enrolled in cloud 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.

^ Students who have not completed VCE Chemistry 3 and 4 or an equivalent should choose to replace this elective with SLE133 prior to enrolling in SLE155.

#This unit has an assumed strong knowledge of Chemistry. Students without VCE Chemistry 3 and 4 or an equivalent are strongly encouraged to undertake SLE133 Chemistry in Our World in Trimester 1 (prior to SLE155 Chemistry for the Professional Sciences). Molecular science is integral to modern environmental engineering. For this reason, knowledge of chemistry is important for all students in the Bachelor of Environmental Engineering (Honours) course. Students who have a weak or no knowledge of year 12 Chemistry should study SLE133. Students who have a strong knowledge of Chemistry may proceed directly to SLE155, and choose an elective later in the degree.

## S466 COURSE RULES

- Must pass 38 credit points for course
- Must pass 14 credit points at levels {2, 3}
- Must pass 6 credit points at level {3}
- Must pass 1 unit set(s) in {BENG(HONS)(IND) CORE (S466) (CR-S000016)}
- Must pass 1 unit set(s) in {Civil Engineering (MJ-S000092), Electrical and Electronics Engineering (MJ-S000093), Mechanical Engineering (MJ-S000094), Mechatronics Engineering (MJ-S000095), Environmental Engineering (MJ-S000096)}

### 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

<b>BENG(HONS)(IND) CORE (S466) (CR-S000016)</b>
<a href="#">DAI001 Academic Integrity Module</a>
<a href="#">SEB101 Engineering Physics</a>
<a href="#">SEJ010 Introduction to Safety and Project Oriented Learning</a>
<a href="#">SEJ441 Engineering Project A</a>

<a href="#">SEJ446 Engineering Project B</a>
<a href="#">SEL703 Professional Practice</a>
<a href="#">SEL799 Industry Experience</a>
<a href="#">SEP105 Introduction to Programming for Engineers</a>
<a href="#">SEP291 Engineering Modelling</a>
<a href="#">SEP701 Continuing Professional Development</a>
<a href="#">SET111 Sustainable Design</a>
<a href="#">SIT194 Introduction to Mathematical Modelling</a>
<a href="#">SIT199 Applied Algebra and Statistics</a>
<a href="#">STP010 Career Tools for Employability</a>

Completion Rule

- Must pass all unit(s) in {SEB101, SEJ010, SEJ441, SEJ446, SEP105, SEP291, SEP701, SET111, SIT194, SIT199, STP010}
- Must pass 1 unit(s) in {DAI001}
- Must pass 6 credit points in {SEL703, SEL799}

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

CIVIL ENGINEERING (MJ-S000092)
<a href="#">SEJ103 Materials Engineering Project</a>
<a href="#">SEJ104 Engineering in Society</a>
<a href="#">SEJ201 Structural Design</a>
<a href="#">SEJ202 Field Investigation</a>
<a href="#">SEM216 Stress and Failure Analysis</a>
<a href="#">SEM218 Fluid Mechanics</a>
<a href="#">SEN770 Infrastructure Engineering</a>
<a href="#">SEV254 Road and Pavement Engineering</a>
<a href="#">SEV300 Reinforced Concrete and Steel Structures</a>
<a href="#">SEV301 Water Engineering Design</a>
<a href="#">SEV320 Theory of Structures</a>
<a href="#">SEV322 Hydrology and Hydraulics</a>
<a href="#">SEV362 Geotechnical Engineering</a>
<a href="#">SEV402 Traffic and Transport Engineering</a>

Completion Rule

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

## ELECTRICAL AND ELECTRONICS ENGINEERING (MJ-S000093)

[SEE210 Power Engineering Design](#)

[SEE212 Power Electronics](#)

[SEE213 Distributed Generation System](#)

[SEE216 Analogue and Digital Electronics](#)

[SEE222 Embedded Systems Design](#)

[SEE307 Systems and Signals](#)

[SEE308 Electrical Machines and Drives](#)

[SEE312 Data Communication](#)

[SEE332 Transmission and Distribution System Design](#)

[SEE406 Power System Analysis](#)

[SEE716 Electrical Systems Protection](#)

[SEJ102 Electrical Systems Engineering Project](#)

[SEJ104 Engineering in Society](#)

[SEJ302 Control Systems Engineering](#)

### Completion Rule

- Must pass all unit(s) in {SEE210, SEE212, SEE213, SEE216, SEE222, SEE307, SEE308, SEE312, SEE332, SEE406, SEE716, SEJ102, SEJ104, SEJ302}

## ENVIRONMENTAL ENGINEERING (MJ-S000096)

[SEJ202 Field Investigation](#)

[SEM218 Fluid Mechanics](#)

[SEN770 Infrastructure Engineering](#)

[SEV101 Global Environmental Systems](#)

[SEV201 Environmental Health Engineering](#)

[SEV301 Water Engineering Design](#)

[SEV311 Air and Noise Pollution](#)

[SEV322 Hydrology and Hydraulics](#)

[SEV331 Waste Engineering and Transformation Systems](#)

[SEV401 Integrated Catchment Systems](#)

[SLE010 Laboratory and Fieldwork Safety Induction Program](#)

[SLE155 Chemistry for the Professional Sciences](#)

[SLE207 Environmental Planning and Impact Assessment](#)

[SLE240 Quantitative Marine Science](#)

[SLE245 Marine Geographic Information Systems](#)

[SLE342 Risks to Healthy Environments](#)

Completion Rule

- Must pass all unit(s) in {SEJ202, SEM218, SEN770, SEV101, SEV201, SEV301, SEV311, SEV322, SEV331, SEV401, SLE010, SLE155, SLE207, SLE240, SLE245, SLE342}

### MECHANICAL ENGINEERING (MJ-S000094)

[SED344 Product Modelling and Design](#)

[SEJ103 Materials Engineering Project](#)

[SEJ104 Engineering in Society](#)

[SEJ201 Structural Design](#)

[SEJ302 Control Systems Engineering](#)

[SEM200 Machine Design](#)

[SEM202 Thermodynamics](#)

[SEM216 Stress and Failure Analysis](#)

[SEM218 Fluid Mechanics](#)

[SEM302 Advanced Stress Analysis](#)

[SEM310 Thermo-Fluid Systems](#)

[SEM313 Manufacturing](#)

[SEM327 Dynamics of Machines](#)

[SEM400 Computational Fluid Dynamics](#)

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)

[SEE212 Power Electronics](#)

[SEE216 Analogue and Digital Electronics](#)

[SEE222 Embedded Systems Design](#)

[SEE307 Systems and Signals](#)

[SEE312 Data Communication](#)

[SEJ102 Electrical Systems Engineering Project](#)

[SEJ104 Engineering in Society](#)

[SEJ302 Control Systems Engineering](#)

<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, SEJ102, SEJ104, SEJ302, SEM200, SEM327, SEN771, SER204, SER300, SER400}