S751 MASTER OF ENGINEERING (PROFESSIONAL)

FACULTY OF SCIENCE, ENGINEERING AND BUILT ENVIRONMENT

MECHANICAL ENGINEERING DESIGN SPECIALISATION SEQUENCE

FOR STUDENTS COMMENCING TRIMESTER 3 2025

Last updated 03/06/2025

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: DAI001 Academic Integrity and Respect At Deakin (0 credit points)
AND SEE700 Safety Induction Program (0 credit points)
AND STP710 Career Tools for Employability (0 credit points)

YEAR 1 Year: 2025	Trimester 3	SEN700 Research Methodology	SEM721 Engineering Design	SET721 Engineering Sustainability	Elective Unit / Engineering Specialisation
YEAR 2 Year: 2026	Trimester 1	SEJ751 Materials Performance and Durability	SEM712 Advanced Finite Element Analysis	Elective Unit/Engineering Specialisation	Elective Unit / Engineering Specialisation
	Trimester 2	SEM711 Product Development Technologies	SEM722 Advanced Manufacturing Technology	SEN710 Engineering Project Initiation	SEN723 Managing Engineering Projects
	Trimester 3				
YEAR 3 Year: 2027	Trimester 1	SEN720 Project Implementation and Evaluation		Elective Unit / Engineering Specialisation	SEL703 Professional Practice OR SEP701 Continuing Professional Development
	Trimester 2				
	Trimester 3				

It is recommended students undertake SEN710 and SEN720 in consecutive trimesters. If they are unable to complete these units consecutively, they will need to seek approval from the unit chair.

Students must have successfully completed STP710 Career Tools for Employability (0-credit-point compulsory unit) before commencing SEL703 Professional Practice, SEP701 Continuing Professional Development & SEN710 Engineering Project Initiation

S751 COURSE RULES

- Must pass 16 credit points for course
- Must pass ALL units in {DAI001, SEE700, STP710}
- Must pass ALL units in {SEM721, SEN700, SEN710, SEN720, SEN723, SET721}
- Must pass 1 units in {SEL703, SEP701}
- Must pass 4 credit points in unit set {Course Grouped Electives, Civil Engineering, Mechanical Engineering Design, Mechatronics and Control Engineering, Electrical and Renewable Energy Engineering}
- Must pass 1 unit set(s) in {Mechanical Engineering Design (SP-S000049), Mechatronics and Control Engineering (SP-S000051), Electrical and Renewable Energy Engineering (SP-S000076), Civil Engineering (SP-S000086)}

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.

S751 MASTER OF ENGINEERING (PROFESSIONAL) ELECTIVE UNIT SETS

MASTER OF ENGINEERING (PROFESSIONAL) (S751) (EL-S000004)
MAA754 Enterprise Risk Management
MIS701 Digital Business Analysis
MIS712 Managing Digital Transformation
MIS770 Foundation Skills in Data Analysis
MIS771 Descriptive Analytics and Visualisation
MIS772 Predictive Analytics
MIS775 Decision Modelling for Business Analytics
MIS779 Decision Analytics in Practice
MIS781 Business Intelligence and Database

MIS782 Value of Information
MIS784 Marketing Analytics
MMM710 Emerging Issues in International Operations
MPA702 Financial Interpretation
MPE781 Economics for Managers
MPM703 Business Strategy and Analysis
MPM722 Human Resource Management
MWL705 Business for Social Impact
SEE719 Microgrid Design and Management
SEN729 Railway Infrastructure Design and Management
SIT718 Real World Analytics
SIT719 Analytics for Security and Privacy
SIT720 Machine Learning
SIT742 Modern Data Science
SIT763 Cyber Security Management
SLE720 Risk Assessment and Control
SLE725 Environmental Management Systems
SLE740 Climate Change, Adaptation and Mitigation
SLE741 Regional Development Economics for Sustainability
SLE742 Systems Thinking for Sustainability and Resilience
SLE743 Spatial Analysis and Geographic Information Systems
SLE756 Sustainability in the Anthropocene
SLE757 Environmental Science and Global Change
SRQ762 Cost Planning
SRQ774 Construction Measurement and Estimating
SRQ780 Strategic Construction Procurement

S751 MASTER OF ENGINEERING (PROFESSIONAL) SPECIALISATION UNIT SETS

CIVIL ENGINEERING (SP-S000086)
SEN725 Urban Stormwater Asset Design
SEN727 Tunnel and Underground Construction
SEN728 Transportation Infrastructure Systems

SEN769 Advanced Structural Design

Completion Rule

- Must pass 4 credit points in {SEN725, SEN727, SEN728, SEN769}

ELECTRICAL AND RENEWABLE ENERGY ENGINEERING (SP-S000076)
SEE705 Energy Efficiency, Management and Market Analysis
SEE716 Electrical Systems Protection
SEE717 Smart Grid Systems
SEE718 Renewable Energy Systems

Completion Rule

- Must pass 4 credit points in {SEE705, SEE716, SEE717, SEE718}

MECHANICAL ENGINEERING DESIGN (SP-S000049)
SEJ751 Materials Performance and Durability
SEM711 Applied Dynamics and Product Development Technologies
SEM712 Advanced Modelling and Simulation
SEM722 Advanced Manufacturing Technology

Completion Rule

- Must pass 4 credit points in {SEJ751, SEM711, SEM712, SEM722}

MECHATRONICS AND CONTROL ENGINEERING (SP-S000051)
SEE701 Advanced Control Systems Engineering
SEE710 Instrumentation and Process Control
SEE711 Iot Systems Engineering
SEE712 Embedded Systems

Completion Rule

- Must pass 4 credit points in {SEE701, SEE710, SEE711, SEE712}