

# S751 MASTER OF ENGINEERING (PROFESSIONAL)

## FACULTY OF SCIENCE, ENGINEERING AND BUILT ENVIRONMENT

### MECHATRONICS AND CONTROL ENGINEERING SPECIALISATION SEQUENCE



FOR STUDENTS COMMENCING TRIMESTER 3 2024

Last updated 17/05/2024

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: [DAI001 Academic Integrity Module](#) (0 credit points)  
 AND [SEE700 Safety Induction Program](#) (0 credit points)  
 AND [STP710 Career Tools for Employability](#) (0 credit points)

<b>YEAR 1</b> Year: 2024	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				

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

<b>MASTER OF ENGINEERING (PROFESSIONAL) (S751) (EL-S000004)</b>
<a href="#">ADH702 Humanitarian - Development Nexus</a>
<a href="#">MAA754 Enterprise Risk Management</a>
<a href="#">MIS701 Digital Business Analysis</a>
<a href="#">MIS712 Managing Digital Transformation</a>
<a href="#">MIS770 Foundation Skills in Data Analysis</a>
<a href="#">MIS771 Descriptive Analytics and Visualisation</a>
<a href="#">MIS772 Predictive Analytics</a>
<a href="#">MIS775 Decision Modelling for Business Analytics</a>
<a href="#">MIS779 Decision Analytics in Practice</a>

<a href="#"><u>MIS781 Business Intelligence and Database</u></a>
<a href="#"><u>MIS782 Value of Information</u></a>
<a href="#"><u>MIS784 Marketing Analytics</u></a>
<a href="#"><u>MMM710 Emerging Issues in International Operations</u></a>
<a href="#"><u>MPA702 Financial Interpretation</u></a>
<a href="#"><u>MPE781 Economics for Managers</u></a>
<a href="#"><u>MPM703 Business Strategy and Analysis</u></a>
<a href="#"><u>MPM722 Human Resource Management</u></a>
<a href="#"><u>MWL705 Business for Social Impact</u></a>
<a href="#"><u>SEE707 Energy Market and Policy</u></a>
<a href="#"><u>SEE719 Microgrid Design and Management</u></a>
<a href="#"><u>SEN729 Railway Infrastructure Design and Management</u></a>
<a href="#"><u>SIT718 Real World Analytics</u></a>
<a href="#"><u>SIT719 Analytics for Security and Privacy</u></a>
<a href="#"><u>SIT720 Machine Learning</u></a>
<a href="#"><u>SIT742 Modern Data Science</u></a>
<a href="#"><u>SIT763 Cyber Security Management</u></a>
<a href="#"><u>SLE720 Risk Assessment and Control</u></a>
<a href="#"><u>SLE725 Environmental Management Systems</u></a>
<a href="#"><u>SLE740 Climate Change Adaptation and Mitigation</u></a>
<a href="#"><u>SLE741 Regional Development Economics and Planning</u></a>
<a href="#"><u>SLE742 Systems and Strategic Thinking</u></a>
<a href="#"><u>SLE743 Regional Development Modelling</u></a>
<a href="#"><u>SLE756 Sustainability in the Anthropocene</u></a>
<a href="#"><u>SLE757 Environmental Science and Global Change</u></a>
<a href="#"><u>SRQ762 Cost Planning</u></a>
<a href="#"><u>SRQ774 Construction Measurement and Estimating</u></a>
<a href="#"><u>SRQ780 Strategic Construction Procurement</u></a>

## S751 MASTER OF ENGINEERING (PROFESSIONAL) SPECIALISATION UNIT SETS

<b>CIVIL ENGINEERING (SP-S000086)</b>
<a href="#"><u>SEN725 Urban Stormwater Asset Design</u></a>

SEN727 Applied Rock Engineering

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 and Demand Management

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 Product Development Technologies

SEM712 Advanced Finite Element Analysis

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}