

# S751 MASTER OF ENGINEERING (PROFESSIONAL)

## FACULTY OF SCIENCE, ENGINEERING AND BUILT ENVIRONMENT

### MECHATRONICS AND CONTROL ENGINEERING SPECIALISATION SEQUENCE



FOR STUDENTS COMMENCING TRIMESTER 1 2021

Last updated 15/01/2021

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: SEE700 Safety Induction Program (0 credit points)  
AND STP050 Academic Integrity (0 credit points)  
AND STP710 Career Tools for Employability (0 credit points)

<b>YEAR 1</b> Year: 2021	Trimester 1				
	Trimester 2				
	Trimester 3				

<b>YEAR 2</b> Year: 2022	Trimester 1				
	Trimester 2				
	Trimester 3				

#### S751 COURSE RULES

- Must pass 16 credit points for course
- Must pass ALL units in {SEE700, STP050, 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, Engineering Management, Additive Manufacturing}
- 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), Additive Manufacturing (SP-S000085), 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

COURSE GROUPED ELECTIVES (EL-S7512010420)
<a href="#">ADH702 Humanitarian - Development Nexus</a>
<a href="#">ADH703 Evidence and Decision Making in Humanitarian Action</a>
<a href="#">MAA754 Enterprise Risk Management</a>
<a href="#">MIS701 Business Requirements 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="#">MIS781 Business Intelligence and Database</a>
<a href="#">MIS782 Value of Information</a>
<a href="#">MIS784 Marketing Analytics</a>
<a href="#">MPA702 Financial Interpretation</a>

<a href="#"><u>MPE781 Economics for Managers</u></a>
<a href="#"><u>MPM701 Business Process Management</u></a>
<a href="#"><u>MPM703 Business Strategy and Analysis</u></a>
<a href="#"><u>MPM722 Human Resource Management</u></a>
<a href="#"><u>MPM732 Critical Thinking for Managers</u></a>
<a href="#"><u>MWL705 Cultural Experience</u></a>
<a href="#"><u>SEB724 Engineering Leadership</u></a>
<a href="#"><u>SEB725 Engineering Entrepreneurship</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>SIT717 Enterprise Business Intelligence</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>SLE721 Policy and Planning for Sustainable Development</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>SRQ 762 Cost Planning and Economics</u></a>
<a href="#"><u>SRQ 774 Construction Measurement and Estimating</u></a>
<a href="#"><u>SRQ 780 Strategic Construction Procurement</u></a>
<a href="#"><u>SRT750 Sustainable Futures</u></a>

Completion Rule

- Must pass 4 unit(s) in {ADH702, ADH703, MAA754, MIS701, MIS712, MIS770, MIS771, MIS772, MIS775, MIS779, MIS781, MIS782, MIS784, MPA702, MPE781, MPM701, MPM703, MPM722, MPM732, MWL705, SEB724, SEB725, SEE707, SEE719, SEN729, SIT717, SIT718, SIT719, SIT720, SIT742, SIT763, SLE720, SLE721, SLE725, SLE740, SLE741, SLE742, SLE743, SRQ 762, SRQ 774, SRQ 780, SRT750}

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

#### ADDITIVE MANUFACTURING (SP-S000085)

[SEM723 Simulation, Testing and Validation for Additive Manufacturing](#)

[SEM724 Design for Additive Manufacturing](#)

[SEM725 Materials for Additive Manufacturing](#)

[SEM726 Advanced 3d Modelling and Simulation for Additive Manufacturing](#)

##### Completion Rule

- Must pass 4 credit points in {SEM723, SEM724, SEM725, SEM726}

#### CIVIL ENGINEERING (SP-S000086)

[SEN725 Urban Stormwater Asset Design](#)

[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}

#### ENGINEERING MANAGEMENT (SP-S000077)

[SEB711 Managing and Developing Innovation](#)

[SEB724 Engineering Leadership](#)

[SEB725 Engineering Entrepreneurship](#)

##### Completion Rule

- Must pass 4 credit points in {SEB711, SEB724, SEB725}

#### MECHANICAL ENGINEERING DESIGN (SP-S000049)

[SEJ751 Materials Performance and Durability](#)

SEM711 Product Development Technologies

SEM712 Introduction to Finite Element Analysis

SEM722 Advanced Manufacturing Technology

Completion Rule

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

#### MECHATRONICS AND CONTROL ENGINEERING (SP-S000051)

SEE701 Control Systems Engineering

SEE710 Instrumentation and Process Control

SEE711 Sensor Networks

SEE712 Embedded Systems

Completion Rule

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