# S751 MASTER OF ENGINEERING (PROFESSIONAL)

# FACULTY OF SCIENCE, ENGINEERING AND BUILT ENVIRONMENT





### FOR STUDENTS COMMENCING TRIMESTER 2 2021

Last updated 18/03/2021

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 (O) credit point units: <u>SEE700 Safety Induction Program</u> (O credit points) AND <u>STP710 Career Tools for Employability</u> (O credit points)

AND STP050 Academic Integrity (O credit points)

YEAR <b>1</b>	Trimester 2		
Year: 2021	Trimester 3		
YEAR	Trimester 1		
<b>2</b> Year: 2022	Trimester 2		
	Trimester 3		
YEAR	Trimester 1		
<b>3</b> Year: 2023	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:	

## **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 <u>University Handbook</u> 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)
ADH702 Humanitarian - Development Nexus
ADH703 Evidence and Decision Making in Humanitarian Action
MAA754 Enterprise Risk Management
MIS701 Business Requirements 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
MPA702 Financial Interpretation

MPE781 Economics for Managers
MPM701 Business Process Management
MPM703 Business Strategy and Analysis
MPM722 Human Resource Management
MPM732 Critical Thinking for Managers
MWL705 Cultural Experience
SEB724 Engineering Leadership
SEB725 Engineering Entrepreneurship
SEE707 Energy Market and Policy
SEE719 Microgrid Design and Management
SEN729 Railway Infrastructure Design and Management
SIT717 Enterprise Business Intelligence
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
SLE721 Policy and Planning for Sustainable Development
SLE725 Environmental Management Systems
SLE740 Climate Change Adaptation and Mitigation
SLE741 Regional Development Economics and Planning
SLE742 Systems and Strategic Thinking
SLE743 Regional Development Modelling
SRQ 762 Cost Planning and Economics
SRQ 774 Construction Measurement and Estimating
SRQ 780 Strategic Construction Procurement
SRT750 Sustainable Futures

## Completion Rule

Must pass 4 unit(s) in {ADH702, ADH703, MAA754, MIS701, MIS712, MIS770, MIS771, MIS772, MIS775, MIS779, MIS781, 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, SRQ762, SRQ774, SRQ780, 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 {SEJ751, 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}