

PROGRAM PLAN

MASTER OF PROFESSIONAL ENGINEERING (MECHANICAL)

PROGRAM OPTION:
PATHWAY A (240 units)

START DATE:
Semester 1 & 2 2019 - 2021

LOCATION:
Callaghan

This program plan is an enrolment guide to ensure you are on track to graduate. If at any time you wish to vary from this program plan seek advice from your Academic Program Advisor to ensure you remain on track.

 **PROGRAM HANDBOOK**

 **COURSE HANDBOOK**

NAME:

STUDENT NO.:

COURSE STATUS KEY

C = Completed

En = Enrolled

NS = Not Started

COMMENCING IN SEMESTER 1

YEAR 1	SEM 1	DIRECTED <i>Please note, this can be studied in any term</i>	MATH2310 Calculus of Science & Engineering CORE	MECH2360 Dynamics of Machines CORE	MECH3400 Materials Science & Engineering 2 CORE
	SEM 1	DIRECTED <i>Please note, this can be studied in any term</i>	ENGG3500 Managing Engineering Projects CORE	MECH3110 Mechanical Engineering Design 2 CORE	MECH3695 Heat Transfer CORE
	SEM 1	DIRECTED <i>Please note, this can be studied in any term</i>	MECH6110 Mechanical Design Project CORE	MECH6410 Advanced Mechanics of Solids and FEA CORE	MECH6840A MPE Thesis A: Experimental Methods CORE

YEAR 2	SEM 2	ELEC1310 Introduction to Electrical Engineering CORE	MECH2430 Mechanics of Solids 1 CORE	MECH2450 Engineering Computations 2 CORE	ENGG2300 Engineering Fluid Mechanics CORE <i>(Replaces MECH2710)</i>
	SEM 2	ENGG6400 Modelling & Control CORE	ENGG6500 Engineering Complexity CORE	MECH3720 Thermodynamics CORE	DIRECTED <i>Please note, this can be studied in any term</i>
	SEM 2	MECH6840B MPE Thesis B (20 units) CORE <i>This course must be taken in the semester immediately following MECH6840A</i>		MECH6480 Advanced Fluid Mechanics & CFD CORE	ELECTIVE <i>This can be taken in any term, including summer or winter</i>

COMMENCING IN SEMESTER 2

YEAR 2	SEM 1	DIRECTED <i>Please note, this can be studied in any term</i>	ENGG3500 Managing Engineering Projects CORE	MECH2360 Dynamics of Machines CORE	MECH3400 Materials Science & Engineering 2 CORE
	SEM 1	DIRECTED <i>Please note, this can be studied in any term</i>	MECH3110 Mechanical Engineering Design 2 CORE	MECH3695 Heat Transfer CORE	MECH6410 Advanced Mechanics of Solids & FEA CORE
	SEM 1	DIRECTED <i>Please note, this can be studied in any term</i>	MECH6110 Mechanical Design Project CORE	MECH6840B MPE Thesis B (20 units) CORE <i>This course must be taken in the semester immediately following MECH6840A</i>	

YEAR 3	SEM 2	ELEC1310 Introduction to Electrical Engineering CORE	MATH2310 Calculus of Science & Engineering CORE	MECH2430 Mechanics of Solids 1 CORE	MECH2450 Engineering Computations 2 CORE
	SEM 2	ENGG6400 Modelling and Control CORE	ENGG6500 Engineering Complexity CORE	ENGG2300 Engineering Fluid Mechanics CORE <i>Replaces MECH2710</i>	ELECTIVE <i>This can be taken in any term, including summer or winter</i>
	SEM 2	MECH6840A MPE Thesis A: Experimental Methods CORE	MECH3720 Thermodynamics CORE	MECH6480 Advanced Fluid Mechanics & CFD CORE	DIRECTED <i>Please note, this can be studied in any term</i>

COMPULSORY REQUIREMENT: EXPOSURE TO PROFESSIONAL PRACTICE (EPP)/INDUSTRIAL EXPERIENCE (IE) 12 WEEKS

PROGRAM PLAN

MASTER OF PROFESSIONAL ENGINEERING (MECHANICAL)

Pathway A directed courses

Please see the [program handbook](#) for the most up-to-date information

Complete 40 units from:

MECH6130 Mechanics of Bulk Solids and Particulates
MECH6200 Computer Aided Engineering and Manufacturing
MECH6250 Bulk Materials Handling and Transportation
MECH6760 Renewable Energy Conversion
MATS6001 Fundamentals of Materials Synthesis and Processing
MATS6002 Materials Characterisation Techniques
ARBE6402 Project Scheduling, Resource Management and Leadership
STAT6100 Systems Thinking for an Integrated Workforce
GSBS6200 Financial and Management Accounting (**replaces**
MECH6830 Engineering Economic Analysis)

Removed from the Program in 2021

If you have not already completed these courses / this course prior to 2021 then you choose a different Directed course in the above list:

MCHA6300 Real-time Optimisation for Embedded Systems
MECH6830 Engineering Economic Analysis

To be eligible to graduate make sure you have completed 240 units (10 units = 1 course unless otherwise specified) which meet the following criteria:

- Core courses – 190 units
- [Directed courses](#) – 40 units
- Electives – 10 units. Visit the [Course Handbook](#) for more information. This elective must be at the [6000 level](#).
- [MECH6840A/MECH6840B](#) are multi-term sequence courses. Students must complete Part A before Part B, and complete Part B in the semester immediately following Part A. If you complete Part A and are unable to complete Part B within the timeframe, you must re-enrol in and complete Part A again.
- **Important note for international students:** International students must be enrolled full time. The above enrolment pattern complies with the conditions of international student visas. Failing to follow this enrolment advice may result in international students not being able to graduate within the period of their Confirmation of Enrolment (CoE). Students who have questions about their enrolment should contact the Academic Program Advisor.
- It is also a requirement that students complete a total of 12 weeks of industrial experience. More information is found [here](#).
- The duration of this program is 3 years full time (40 units per semester) or part time equivalent.
- The maximum time to complete this program is 8 years.



Some courses have assumed knowledge and/or requisites, please refer to the individual [Course Handbook](#). Please refer to the [Program Handbook](#) for specific information on program structure. If you are intending varying from this program plan please seek advice from your [Academic Program Advisor](#).