

# PROGRAM PLAN

## MASTER OF PROFESSIONAL ENGINEERING (MECHANICAL)

**PROGRAM OPTION:**  
PATHWAY B (160 units)

**START DATE:**  
Semester 1 & 2 2019 - 2020

**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 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	<b>SEM 1</b> <b>DIRECTED</b> Please note, this can be studied in any term	<b>ENGG3500</b> Managing Engineering Projects <b>CORE</b>	<b>MECH3110</b> Mechanical Engineering Design 2 <b>CORE</b>	<b>MECH3695</b> Heat Transfer <b>CORE</b>
	<b>SEM 1</b> <b>DIRECTED</b> Please note, this can be studied in any term	<b>MECH6110</b> Mechanical Design Project	<b>MECH6410</b> Advanced Mechanics of Solids and FEA	<b>MECH6840A</b> MPE Thesis A <b>CORE</b>

YEAR 2	<b>SEM 2</b> <b>ENGG6400</b> Modelling and Control <b>CORE</b>	<b>ENGG6500</b> Engineering Complexity <b>CORE</b>	<b>MECH3720</b> Thermodynamics <b>CORE</b>	<b>DIRECTED</b> Please note, this can be studied in any term
	<b>SEMESTER 2</b> <b>MECH6840B</b> MPE Thesis B (20 units) This course <b>must</b> be taken in the semester immediately following MECH6840A <b>CORE</b>	<b>MECH6480</b> Advanced Fluid Mechanics and CFD <b>CORE</b>	<b>ELECTIVE</b> This can be taken in any term, including <i>summer</i> or <i>winter</i>	

### COMMENCING IN SEMESTER 2

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

YEAR 1	<b>SEM 2</b> <b>ENGG6400</b> Modelling and Control <b>CORE</b>	<b>ENGG6500</b> Engineering Complexity <b>CORE</b>	<b>DIRECTED</b> Please note, this can be studied in any term	<b>DIRECTED</b> Please note, this can be studied in any term
	<b>SEM 2</b> <b>MECH6840A</b> MPE Thesis A <b>CORE</b>	<b>MECH6480</b> Advanced Fluid Mechanics and CFD <b>CORE</b>	<b>MECH3720</b> Thermodynamics <b>CORE</b>	<b>ELECTIVE</b> This can be taken in any term, including <i>summer</i> or <i>winter</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 30 units from:

[MECH3720](#) Thermodynamics

[MCHA6300](#) Real-time Optimisation for Embedded Systems

[MECH6130](#) Mechanics of Bulk Solids and Particulates

[MECH6200](#) Computer Aided Engineering and Manufacturing

[MECH6250](#) Bulk Materials Handling and Transportation

[MECH6760](#) Renewable Energy Conversion

[MECH6830](#) Engineering Economic Analysis

To be eligible to graduate make sure you have completed 160 units (10 units = 1 course unless otherwise specified) which meet the following criteria:

- Core courses – 110 units
- [Directed courses](#) – 30 units
- Electives – 20 units. Visit the [Course Handbook](#) for more information. These electives 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
- 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
- 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 [Program Advisor](#).