

# PROGRAM PLAN

## BACHELOR OF AEROSPACE SYSTEMS ENGINEERING (HONOURS)

**PROGRAM OPTION:**  
Full Time or Part Time

**START DATE:**  
Semester 1 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 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

YEAR	SEMESTER	COURSE CODE	COURSE TITLE	STATUS	NOTES
YEAR 1	SEMESTER 1	ENGG1003	Introduction to Procedural Programming	CORE	
		ENGG1500	Introduction to Professional Engineering	CORE	
		MATH1110	Mathematics for Engineering, Science and Technology 1	CORE	Replaces option of MATH1110 OR MATH1210
		MECH1110	Introduction to Mechanical Engineering Design	CORE	In 2021 changed from Sem 2 to Sem 1
	SEMESTER 2	CIVL1100	Fundamentals of Engineering Mechanics	CORE	
		ELEC1310	Introduction to Electrical Engineering	CORE	
		MATH1120	Mathematics for Engineering, Science and Technology 2	CORE	Replaces option of MATH1120 OR MATH1220
		MECH1750	Engineering Materials 1	CORE	# From 2021 MECH1750 will count in place of PHYS1210
YEAR 2	SEMESTER 1	AERO2000	Aircraft Performance and Operations	CORE	In 2021 changed from Sem 2 to Sem 1
		ELEC2320	Electrical & Electronic Circuits	CORE	
		MATH2310	Calculus of Science & Engineering	CORE	
		MECH2360	Dynamics of Machines	CORE	
	SEMESTER 2	ELEC1710	Digital and Computer Engineering 1	CORE	
		ENGG2300	Engineering Fluid Mechanics	CORE	# From 2021 ENGG2300 will count in place of MECH2710
		ENGG2440	Modelling and Control	CORE	
		ENGG2500	Sustainable Engineering Practice	CORE	In 2021 changed from Sem 1 to Sem 2
YEAR 3	SEMESTER 1	AERO3000	Flight Dynamics	CORE	First offered in 2021
		AERO3600	Embedded Control Systems	CORE	
		ENGG3500	Managing Engineering Projects	CORE	
		MCHA3400	Embedded Systems Engineering	CORE	
	SEMESTER 2	AERO3400	Aerospace Propulsion Systems	CORE	First offered in 2021
		ENGG4500	Engineering Complexity	CORE	
		MCHA3500	Mechatronics Design 1	CORE	
		MECH2430	Mechanics of Solids 1	CORE	
YEAR 4	SEMESTER 1	AERO4100	Aircraft Systems & Avionics	CORE	First offered in 2022
		AERO4300	Aircraft Structural Design	CORE	First offered in 2022
		ELECTIVE			This can be of any level, and can be taken in any term, including summer or winter
		ENGG4801A	Engineering Final Year Project A	CORE	
	SEMESTER 2	AERO4500	Aerospace System Design	CORE	First offered in 2022
		AERO4600	Automatic Flight Control Systems	CORE	First offered in 2022
		ELECTIVE			This can be of any level, and can be taken in any term, including summer or winter
		ENGG4801B	Engineering Final Year Project B	CORE	This must be completed in the semester immediately following ENGG4801A

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

## PROGRAM PLAN

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To be eligible to graduate make sure you have completed 320 units (10 units = 1 course unless otherwise specified) which meet the following criteria:

- **Core** courses – 300 units  
*Prior to 2021*, students could choose to complete either MATH1110 and MATH1120, **OR** MATH1210 and MATH1220. Choice of maths courses is based on your assumed knowledge. To find out which MATH course you should enrol in please see the [Enrolling in Maths information](#). More information is in your [Program Handbook](#). Note that due to course offerings it is recommended midyear commencing students take MATH1110 and MATH1120, and that you also consider the University's [Summer School](#) offerings following your first semester.  
*After 2021*, the option to do MATH1210 and MATH1220 has been removed from the program. **From 2021 onwards:** 1) if you have not yet completed MATH1210 you must complete MATH1110; and 2) if you haven't completed MATH1220 then you must complete MATH1120.  
*# Students are required to complete just one of these two courses. Refer to the transition document in the [Program Handbook](#) for further information.*
- **Electives** – 20 units, of any **level**. Students can choose from any **unrestricted** course taught at the University (as long as it is not already a core course of this degree). Visit the [Course Handbook](#) to see a list of available electives.  
Please note, completion of **MATH1002** counts as 10 units of electives.
- Students must not exceed 120 units at 1000 level in this program.
- Students must undertake 12 weeks of approved [industrial experience](#).
- The duration of this program is 4 year full-time (40 units per semester) or part-time equivalent.
- The maximum time to complete this program is 10 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 Progress Advisor](#).