

# **Mechanical Engineering specialisation plus Aerospace Engineering major Bachelor of Engineering (Honours)**



## Recommended Study Plan

This study plan is a guide only for students commencing the Bachelor of Engineering (Hons) in Mechanical Engineering plus Aerospace Engineering major in 2023. Please note that all course selections must adhere to the program course list outlined at [UQ Courses and Programs](#). If you have any questions or concerns regarding your course selections, please speak with an [Academic Advisor](#) in the School of Mechanical and Mining Engineering.

### February Commencement

SEMESTER YEAR 1				
Sem 1 Feb	<b>ENGG1100</b> Professional Engineering	<b>MATH1051</b> Calculus & Linear Algebra I (or) <b>MATH1071</b> Advanced Calculus & Linear Algebra I	<b>ENGG1001</b> Programming for Engineers (or) <b>CSSE1001</b> Introduction to Software Engineering	<b>ENGG1700</b> Statics and Materials
Sem 2 July	<b>ENGG1500</b> Thermodynamics: Energy & the Environment	<b>MATH1052</b> Multivariate Calculus & ODEs (or) <b>MATH1072</b> Advanced Multivariate Calculus & Ordinary Differential Equations	<b>ENGG1300</b> Introduction to Electrical Systems	Elective
SEMESTER YEAR 2				
Sem 1 Feb	<b>MATH2001</b> Advanced Calculus & Linear Algebra II	<b>MECH2300</b> Structures & Materials	<b>MECH2305</b> Intro to Engineering Design & Manufacturing	<b>MECH2410</b> Fundamentals of Fluid Mechanics
Sem 2 July	<b>MECH2100</b> Machine Element Design	<b>MECH2210</b> Intermediate Mechanical & Space Dynamics	<b>MECH2700</b> Computational Engineering & Data Analysis	<b>MATH2010</b> Analysis of ODEs <b>STAT2201</b> Analysis of Eng. & Scientific Data
SEMESTER YEAR 3				
Sem 1 Feb	<b>MECH3400</b> Thermodynamics & Heat Transfer	<b>MECH3610</b> Systems Engineering Principles	<b>MECH3780</b> Computational Mechanics	Elective
Sem 2 July	<b>MECH3100</b> Mechanical Systems Design	<b>MECH3200</b> Advanced Dynamics & Vibrations	<b>MECH3410</b> Fluid Mechanics	<b>AERO4200</b> Flight Mechanics & Avionics
SEMESTER YEAR 4				
Sem 1 Feb	<b>ENGG4600</b> Engineering Thesis (or) <b>ENGG4552</b> Major Design Project	<b>AERO4450</b> Aerospace Propulsion	<b>AERO4470</b> Hypersonics	<b>METR4201</b> Control Engineering
Sem 2 July		<b>AERO4100</b> Aerospace Design & Manufacturing	<b>AERO4800</b> Space Engineering (or) <b>AERO4300</b> Aerospace Composites	<b>ENGG4900</b> Professional Practice & the Business Environment

Refer to the 2023 course list for electives:

[Bachelor of Engineering \(Honours\) - my.UQ - The University of Queensland, Australia](#)

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### July Commencement

SEMESTER		YEAR 1		
Sem 2 July 2023	<b>ENGG1100</b> Professional Engineering	<b>MATH1051</b> Calculus & Linear Algebra I (or) <b>MATH1071</b> Advanced Calculus & Linear Algebra I	<b>ENGG1001</b> Programming for Engineers (or) <b>CSSE1001</b> Introduction to Software Engineering	<b>ENGG1700</b> Statics and Materials
Sem 1 Feb 2024	<b>ENGG1500</b> Thermodynamics: Energy & the Environment	<b>MATH1052</b> Multivariate Calculus & ODEs (or) <b>MATH1072</b> Advanced Multivariate Calculus & Ordinary Differential Equations	<b>MECH2300</b> Structures & Materials	<b>MECH2305</b> Intro to Engineering Design & Manufacturing
SEMESTER		YEAR 2		
Sem 2 July 2024	<b>MATH2001</b> Advanced Calculus & Linear Algebra II	<b>MECH2210</b> Intermediate Mechanical & Space Dynamics	<b>MECH2700</b> Computational Engineering & Data Analysis	<b>MECH2100</b> Machine Element Design
Sem 1 Feb 2025	<b>ENGG1300</b> Introduction to Electrical Systems	Elective	<b>MECH2410</b> Fundamentals of Fluid Mechanics	<b>MATH2010</b> Analysis of ODEs <b>STAT2201</b> Analysis of Eng.& Scientific Data
SEMESTER		YEAR 3		
Sem 2 July 2025	<b>AERO4200</b> Flight Mechanics & Avionics	<b>MECH3100</b> Mechanical Systems Design	<b>MECH3200</b> Advanced Dynamics & Vibrations	<b>MECH3410</b> Fluid Mechanics
Sem 1 Feb 2026	<b>MECH3400</b> Thermodynamics & Heat Transfer	<b>MECH3610</b> Systems Engineering Principles	<b>MECH3780</b> Computational Mechanics	Elective
SEMESTER		YEAR 4		
Sem 2 July 2026	<b>*ENGG4601</b> Engineering Thesis	<b>AERO4100</b> Aerospace Design & Manufacturing	<b>AERO4800</b> Space Engineering or <b>AERO4300</b> Aerospace Composites	<b>ENGG4900</b> Professional Practice & the Business Environment
Sem 1 Feb 2027		<b>METR4201</b> Control Engineering	<b>AERO4450</b> Aerospace Propulsion	<b>AERO4470</b> Hypersonics

\*Students who wish to complete ENGG4552 Major Design Project should contact an Academic Advisor to discuss alterations to the standard guide to allow this.

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