

# **Mechanical & Materials Engineering Bachelor of Engineering (Honours) and Master of Engineering**



## Recommended Study Plan

This study plan is a guide only for students commencing the Bachelor of Engineering (Hons) and Master of Engineering in Mechanical and Materials Engineering 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> 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>MECH2310</b> Science & Engineering of Metals	<b>MECH2700</b> Computational Engineering & Data Analysis	
SEMESTER YEAR 3					
Sem 1 Feb	<b>MECH3400</b> Thermodynamics & Heat Transfer	<b>MECH3610</b> System Engineering Principles	<b>MECH3780</b> Computational Mechanics	<b>MATH2010</b> Analysis of ODEs	<b>STAT2201</b> Analysis of Eng. & Scientific Data
Sem 2 July	<b>MECH3100</b> Mechanical Systems Design	<b>MECH3200</b> Advanced Dynamics & Vibrations	Elective	Elective	
SEMESTER YEAR 4					
Sem 1 Feb	<b>CHEE3301</b> Polymer Engineering	<b>MATE7013</b> Advanced Manufacturing	<b>METR4201</b> Control Engineering 1	<b>MECH4304</b> Net Shape Manufacturing	
Sem 2 July	<b>MATE4302</b> Electrochemistry and Corrosion	<b>MECH3301</b> Materials Selection	<b>MECH3410</b> Fluid Mechanics	Elective	
SEMESTER YEAR 5					
Sem 1 Feb	<b>*ENGG7291</b> Engineering Placement A				
Sem 2 July	<b>AERO4300</b> Aerospace Composites	<b>ENGG4900</b> Professional Practice & the Business Environment	<b>ENGG7701</b> Engineering Grand Challenges	<b>MATE7015</b> Additive Manufacturing	

Refer to the 2023 course list for electives:

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

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### July Commencement

SEMESTER YEAR 1					
Sem 2 July	<b>ENGG1100</b> Professional Engineering	<b>MATH1052</b> Multivariate Calculus & ODEs (or) <b>MATH1072</b> Advanced Multivariate Calculus & Ordinary Differential Equations	<b>ENGG1001</b> Programming for Engineers (or) <b>CSSE1001</b> Introduction to Software Engineering	<b>ENGG1700</b> Statics and Materials	
Sem 1 Feb	<b>ENGG1500</b> Thermodynamics: Energy & the Environment	<b>MATH1051</b> Calculus & Linear Algebra I (or) <b>MATH1071</b> Advanced Calculus & Linear Algebra I	<b>ENGG1300</b> Introduction to Electrical Systems	Elective	
SEMESTER YEAR 2					
Sem 2 July	<b>MATH2010</b> Analysis of ODEs	<b>STAT2201</b> Analysis of Eng. & Scientific Data	<b>MECH2210</b> Intermediate Mechanical & Space Dynamics	<b>MECH2310</b> Science & Engineering of Metals	<b>MECH2700</b> Computational Engineering & Data Analysis
Sem 1 Feb	<b>MATH2001</b> Calculus & Linear Algebra II		<b>MECH2305</b> Intro to Engineering Design & Manufacturing	<b>MECH2410</b> Fundamentals of Fluid Mechanics	<b>MECH2300</b> Structures & Materials
SEMESTER YEAR 3					
Sem 2 July	<b>AERO4300</b> Aerospace Composite	<b>MECH2100</b> Machine Element Design	<b>MECH3200</b> Advanced Dynamics & Vibrations	<b>MECH3301</b> Materials Selection	
Sem 1 Feb	<b>MECH3780</b> Computational Mechanics	<b>MECH4304</b> Net Shape Manufacturing	<b>MECH3610</b> System Engineering Principles	Elective	
SEMESTER YEAR 4					
Sem 2 July	<b>ENGG7701</b> Engineering Grand Challenges	<b>MECH3100</b> Mechanical Systems Design	<b>MECH3410</b> Fluid Mechanics	Elective	
Sem 1 Feb	<b>CHEE3301</b> Polymer Engineering	<b>MECH3400</b> Thermodynamics & Heat Transfer	<b>METR4201</b> Control Engineering 1	<b>MATE7013</b> Advanced Manufacturing	
SEMESTER YEAR 5					
Sem 2 July	<b>ENGG4900</b> Professional Practice & the Business Environment	<b>MATE4302</b> Electrochemistry and Corrosion	<b>MATE7015</b> Additive Manufacturing	Elective	
Sem 1 Feb	<b>*ENGG7291</b> Engineering Placement A				

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