



THE UNIVERSITY
OF QUEENSLAND
AUSTRALIA

CREATE CHANGE

Mechanical & Materials Engineering

Bachelor of Engineering (Honours)



Recommended Study Plan

This study plan is a guide only for students commencing the Bachelor of Engineering (Hons) in Mechanical and Materials Engineering in 2020. 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

SEM		YEAR 1			
Sem 1 Feb	ENGG1100 Engineering Design	ENGG1400 Engineering Mechanics: Statics & Dynamics	MATH1051 Calculus & Linear Algebra I	B0, B1 or B4 Elective	
Sem 2 July	ENGG1200 Engineering Modelling & Problem Solving	MATH1052 Multivariate Calculus & ODEs	ENGG1500 Engineering Thermodynamics	B0, B1 or B4 Elective	
SEM		YEAR 2			
Sem 3 Feb	MECH2305 Intro to Engineering Design & Manufacturing	MECH2410 Fundamentals of Fluid Mechanics	MATH2000 Calculus & Linear Algebra II	MECH2300 Structures & Materials	
Sem 4 July	MECH2100 Machine Element Design	MECH2210 Intermediate Mechanical & Space Dynamics	MECH2310 Science & Engineering of Metals	ENGG1300 Introduction to Electrical Systems	
SEM		YEAR 3			
Sem 5 Feb	MECH3600 Engineering Management & Communication	MECH3300 Finite Element Method & Fracture Mechanics	MECH3400 Thermodynamics & Heat Transfer	MATH2010 Analysis of ODEs	STAT2201 Analysis of Eng. & Scientific Data
Sem 6 July	MECH3100 Mechanical Systems Design	MECH3200 Advanced Dynamics & Vibrations	MECH3410 Fluid Mechanics	MECH3301 Materials Selection	
SEM		YEAR 4			
Sem 7 Feb	MECH4500 Engineering Thesis (or)	CHEE3301 Polymer Engineering	METR4201 Control Engineering 1	MECH4304 Net Shape Manufacturing	
Sem 8 July	MECH4552 Major Design Project	ENGG4900 Professional Practice & the Business Environment	CHEE4302 Electrochemistry & Corrosion	B4 Elective	

B0 Electives

[CHEM1090](#) Introductory Chemistry
[MATH1050](#) Mathematical Foundations
[PHYS1171](#) Physical Basis of Biological Systems

B1 Electives

[BIOL1040](#) Cells to Organisms
[CHEE1001](#) Principles of Biological Engineering
[CHEM1100](#) Chemistry 1
[CSSE1001](#) Introduction to Software Engineering
[ENGG1600](#) Introduction to Research Practices - The Big Issues

B1 Electives cont.

[ERTH1501](#) Earth Processes & Geological Materials for Engineers
[PHYS1002](#) Electromagnetism and Modern Physics

B4 Electives

[AERO4300](#) Aerospace Composites
[CHEE4301](#) Nanomaterials
[CHEE4305](#) Biomaterials: Materials in Medicine

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July Commencement

SEM		YEAR 1		
Sem 1 July	ENGG1211 Engineering Design, Modelling & Problem Solving	MATH1051 Calculus & Linear Algebra I	ENGG1300 Introduction to Electrical Systems	ENGG1400 Engineering Mechanics: Statics & Dynamics
Summer Sem				
Sem 2 Feb	MECH2300 Structures & Materials	ENGG1500 Engineering Thermodynamics	MECH2305 Intro to Engineering Design & Manufacturing	MATH1052 Multivariate Calculus & ODEs
SEM		YEAR 2		
Sem 3 July	MECH2100 Machine Element Design	MECH2210 Intermediate Mechanical & Space Dynamics	MECH2310 Science & Engineering of Metals	
Sem 4 Feb	MECH2410 Fundamentals of Fluid Mechanics	MATH2000 Calculus & Linear Algebra II	MATH2010 Analysis of ODEs	STAT2201 Analysis of Eng. & Scientific
				B0, B1 or B4 Elective
SEM		YEAR 3		
Sem 5 July	MECH3100 Mechanical Systems Design	MECH3200 Advanced Dynamics & Vibrations	MECH3410 Fluid Mechanics	MECH3301 Materials Selection
Sem 6 Feb	MECH3600 Engineering Management & Communication	MECH3300 Finite Element Method & Fracture Mechanics	MECH3400 Thermodynamics & Heat Transfer	B0, B1 or B4 Elective
SEM		YEAR 4		
Sem 7 July	MECH4501 Engineering Thesis	ENGG4900 Professional Practice & the Business Environment	CHEE4302 Electrochemistry & Corrosion	B4 Elective
Sem 8 Feb		METR4201 Control Engineering 1	CHEE3301 Polymer Engineering	MECH4304 Net Shape Manufacturing

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B4 Electives

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[CHEE4301](#) Nanomaterials
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