

2024 Commencement Mechanical Engineering
Specialisation with a minor in Data Science Bachelor
of Engineering (Honours)



Recommended Study Plan

This study plan is a **guide only** for students commencing the Bachelor of Engineering (Hons) with a Mechanical Engineering Specialisation and a minor in Data Science in 2024. Please note that all course selections must adhere to the course list outlined at [UQ Courses and Programs](#). If you have any questions or concerns regarding your course selections, please speak with a Mechanical Engineering [Academic Advisor](#).

Compulsory Core #8	Compulsory Specialisation #36	Preparatory courses or First Year or General Elective #0-#4
#6 Compulsory Extension Courses	#2 Advanced Electives	#8 Minor courses

February Commencement

SEMESTER YEAR 1				
Sem 1 Feb	ENGG1100 Professional Engineering	MATH1051 Calculus & Linear Algebra I (or) MATH1071 Advanced Calculus & Linear Algebra I	ENGG1001 Programming for Engineers (or) CSSE1001 Introduction to Software Engineering	ENGG1700 Statics and Materials
Sem 2 July	ENGG1500 Thermodynamics: Energy & the Environment	MATH1052 Multivariate Calculus & ODEs (or) MATH1072 Advanced Multivariate Calculus & Ordinary	ENGG1300 Introduction to Electrical Systems	Preparatory Course or First Year or General Elective
SEMESTER YEAR 2				
Sem 1 Feb	MECH2305 Intro to Engineering Design & Manufacturing	MATH2001 Calculus & Linear Algebra II	MECH2300 Structures & Materials	MECH2410 Fundamentals of Fluid Mechanics
Sem 2 July	MECH2100 Machine Element Design	MECH2210 Intermediate Mechanical & Space Dynamics	MECH2700 Computational Engineering & Data Analysis	Preparatory Course or First Year or General Elective
SEMESTER YEAR 3				
Sem 1 Feb	MECH3610 Systems Engineering Principles	MATH2010 Analysis of ODEs	STAT2201 Analysis of Eng. & Scientific Data	MECH3400 Thermodynamics & Heat Transfer
Sem 2 July	MECH3100 Systems Engineering Practice	MECH3200 Advanced Dynamics & Vibrations	DATA2001 Fundamentals of Data Science	MECH3780 Computational Mechanics
Sem 2 July	MECH3410 Fluid Mechanics			
SEMESTER YEAR 4				
Sem 1 Feb	ENGG4600 Engineering Thesis (or) ENGG4552 Major Design Project	METR4201 Control Engineering 1	INFS1200 Introduction to Information Systems	Data Science Elective Course
Sem 2 July		ENGG4902 Professional Practice & the Business Environment	Data Science Elective Course	Advanced Elective*

July Commencement

SEMESTER		YEAR 1		
Sem 2 July	ENGG1100 Professional Engineering	MATH1051 Calculus & Linear Algebra I (or) MATH1071 Advanced Calculus & Linear Algebra I	ENGG1001 Programming for Engineers (or) CSSE1001 Introduction to Software Engineering	ENGG1700 Statics and Materials
Sem 1 Feb	MECH2300 Structures & Materials	MATH1052 Multivariate Calculus & ODEs (or) MATH1072 Advanced Multivariate Calculus & Ordinary Differential Equations	ENGG1500 Thermodynamics: Energy & the Environment	ENGG1300 Introduction to Electrical Systems
SEMESTER		YEAR 2		
Sem 2 July	MECH2100 Machine Element Design	MATH2001 Calculus & Linear Algebra II	MECH2210 Intermediate Mechanical & Space Dynamics	MECH2700 Computational Engineering & Data Analysis
Sem 1 Feb	MECH2305 Intro to Engineering Design & Manufacturing	MATH2010 Analysis of ODEs	STAT2201 Analysis of Eng. & Scientific Data	MECH2410 Fundamentals of Fluid Mechanics
				MECH3780 Computational Mechanics
SEMESTER		YEAR 3		
Sem 2 July	MECH3200 Advanced Dynamics & Vibrations	Preparatory Course or First Year or General Elective	Preparatory Course or First Year or General Elective	MECH3410 Fluid Mechanics
Sem 1 Feb	MECH3610 Systems Engineering Principles	MECH3400 Thermodynamics & Heat Transfer	INFS1200 Introduction to Information Systems	Advanced Elective*
SEMESTER		YEAR 4		
Sem 2 July	ENGG4601 Engineering Thesis	MECH3100 Systems Engineering Practice	DATA2001 Fundamentals of Data Science	Data Science Elective Course
Sem 1 Feb		ENGG4901 Professional Practice & the Business Environment	METR4201 Control Engineering 1	Data Science Elective Course

*Refer to the course list for electives:

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