Bachelor of Engineering (Honours)

Mechanical Engineering
No Major

Undergraduate Program - Consists of 64 units
Suggested Study Plans from 2025 Commencement Onwards

THE UNIVERSITY OF QUEENSLAND
AUSTRALIA
CREATE CHANGE

Program and Course requirements

For the **Bachelor of Engineering (Honours)** full program and course requirements, click here. Make sure to check your program's rules to ensure you are compliant with requirements.

Prerequisite Courses

Students are expected to be aware if a course has prerequisites and must have successfully completed any required prerequisites before enrolling. A prerequisite course provides the foundational knowledge needed to progress to the next course and may be high school subjects or university-level study/courses.

Prerequisites are listed on the course profile and the course page on the Programs and Courses website.

Electives

Depending on your program, you may need to complete compulsory and elective courses.

Electives are courses you can choose, while compulsory courses are mandatory courses that you must study. You must successfully complete all the required units of elective and compulsory courses to meet the program requirements. Your program rules outline how many electives you can study and the types of electives you can choose from.

Search Programs and Courses website for your program to confirm program rules and elective options.

Academic Advice

Academic advisors provide specialist help in course selection and can look at your individual study history to make personalised recommendations on your study plan.

If you need assistance with your program, you can seek Academic Advice.

Additional Information

Course profiles are underlined and hyperlinked to their relevant course page which can be accessed by clicking the underlined text.

Program/General/Breadth/Advanced Electives can be found by clicking the hyperlinked elective text, and selecting "Mechanical Engineering Plan Options/Mechanical Engineering No Major Option" options for more information.

CRICOS: 00025B TEQSA: PRV12080

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The University Of Queensland
AUSTRALIA

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The following is a colour reference guide, including notes around course offerings and units:

Core Courses | Specialisation | Program Electives
General Electives | Breadth Electives | Advanced Electives
Extension Courses

1 & 2 — Course offered in both Semester 1 & 2

X units — This course does not consist of 2 units

! — Elective may be substituted for another Elective type as per Program requirements

YEAR 1

Sem 1 Feb	ENGG1100 Professional Engineering (1 & 2)	MATH1051 Calculus and Linear Algebra I (1 & 2)	ENGG1300 Introduction to Electrical Systems (1 & 2)	ENGG1500 Thermodynamics: Energy and the Environment (1 & 2)
Sem 2 July	ENGG1001 Programming for Engineers (1 & 2)	MATH1052 Multivariate Calc & Ordinary Differential Equations (1 & 2)	ENGG1700 Statics and Materials (1 & 2)	GENERAL ELECTIVE (1 & 2) OR PROGRAM ELECTIVE (1 & 2)

YEAR 2

Sem 1 Feb	MATH2001 Calculus & Linear Algebra II (1 & 2)	MECH2300 Structures and Materials	MECH2305 Introduction to Engineering Design and Manufacturing	MECH2410 Fundamentals of Fluid Mechanics
Sem 2 July	MATH2010[1] 1 unit (1 & 2) STAT2201[1] 1 unit (1 & 2)	MECH2100 Machine Element Design	MECH2210 Intermediate Mechanical and Space Dynamics	MECH2700 Computational Engineering and Data Analysis

YEAR 3

Sem 1 Feb	MECH3400 Thermodynamics and Heat Transfer	MECH3610 Systems Engineering Principles	METR4201 Control Engineering 1	MECH3780 Computational Mechanics
Sem 2 July	MECH3100 Mechanical Systems Design	MECH3200 Advanced Dynamics and Vibrations	MECH3410 Fluid Mechanics	GENERAL ELECTIVE (1 & 2) OR PROGRAM ELECTIVE (1 & 2)

YEAR 4

Sem 1 Feb	ENGG4552[2] 4 units (1 & 2) Major Design Project	ENGG4901[3] Professional Practice and the Business Environment A (1 & 2)	BREADTH ELECTIVE !	ADVANCED ELECTIVE
Sem 2 July		GENERAL ELECTIVE !	BREADTH ELECTIVE !	ADVANCED ELECTIVE

NOTES

[1] MATH2010: Analysis of Ordinary Differential Equations, STAT2201: Analysis of Engineering & Scientific Data
[2] Can be substituted for ENGG4600, Research Thesis
[3] Offered in Semester 2 under the course code ENGG4902, Professional Practice and the Business Environment B

Students must follow the program rules and requirements listed on the my.UQ website. Future course offerings are subject to change. Seek academic advice if you are undertaking a dual degree, have any questions or if you fail any courses.

Published: July 2025

Bachelor of Engineering (Honours)

Mechanical Engineering
No Major

Undergraduate Program - Consists of 64 units
Suggested Study Plan from **Semester 2, 2025** Commencement Onwards

The following is a colour reference guide, including notes around course offerings and units:

Core Courses	Specialisation	Program Electives
General Electives	Breadth Electives	Advanced Electives
Extension Courses		

THE UNIVERSITY OF QUEENSLAND
AUSTRALIA

CREATE CHANGE

1 & 2 — Course offered in both Semester 1 & 2

X units — This course does not consist of 2 units

! — Elective may be substituted for another Elective type as per Program requirements

YEAR 1

Sem 2 July	**ENGG1100** Professional Engineering (1 & 2)	**MATH1051** Calculus and Linear Algebra I (1 & 2)	**ENGG1300** Introduction to Electrical Systems (1 & 2)	**ENGG1500** Thermodynamics: Energy and the Environment (1 & 2)
Sem 1 Feb	**ENGG1001** Programming for Engineers (1 & 2)	**MATH1052** Multivariate Calc & Ordinary Differential Equations (1 & 2)	**ENGG1700** Statics and Materials (1 & 2)	**GENERAL ELECTIVE** (1 & 2) OR **PROGRAM ELECTIVE** (1 & 2)

YEAR 2

Sem 2 July	**MATH2001** Calculus & Linear Algebra II (1 & 2)	**MATH2010**[1] 1 unit (1 & 2) **STAT2201**[1] 1 unit (1 & 2)	**MECH2210** Intermediate Mechanical and Space Dynamics	**MECH2700** Computational Engineering and Data Analysis
Sem 1 Feb	**MECH2300** Structures and Materials	**MECH2305** Introduction to Engineering Design and Manufacturing	**MECH2410** Fundamentals of Fluid Mechanics	**GENERAL ELECTIVE** (1 & 2) OR **PROGRAM ELECTIVE** (1 & 2)

YEAR 3

Sem 2 July	**MECH2100** Machine Element Design	**MECH3200** Advanced Dynamics and Vibrations	**MECH3410** Fluid Mechanics	**GENERAL ELECTIVE** !
Sem 1 Feb	**MECH3400** Thermodynamics and Heat Transfer	**MECH3610** Systems Engineering Principles	**METR4201** Control Engineering 1	**MECH3780** Computational Mechanics

YEAR 4

Sem 2 July	**ENGG4601** Engineering Thesis (4 units)	**ENGG4902**[2] Professional Practice and the Business Environment B (1 & 2)	**MECH3100** Mechanical Systems Design	**ADVANCED ELECTIVE**
Sem 1 Feb		**BREADTH ELECTIVE** !	**BREADTH ELECTIVE** !	**ADVANCED ELECTIVE**

NOTES

[1] MATH2010: Analysis of Ordinary Differential Equations, STAT2201: Analysis of Engineering & Scientific Data
[2] Offered in Semester 1 under the course code ENGG4901, Professional Practice and the Business Environment A

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