Bachelor of Engineering (Honours)

Robotic and Mechatronic Engineering
Computer Engineering Major

Undergraduate Program - Consists of 64 units
Suggested Study Plans from 2027 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.

CRICOS: 00025B TEQSA: PRV12080

Bachelor of Engineering (Honours)

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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 | Major

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

X units — This course does not consist of 2 units

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)	**GENERAL ELECTIVE** (1 & 2) OR **PROGRAM ELECTIVE** (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)	**MATH2010**[1] 1 unit (1 & 2) **STAT2201**[1] 1 unit (1 & 2)	**CSSE2010** Introduction to Computer Systems (1 & 2)	**METR2000** Mechatronic Engineering Design 1
Sem 2 July	**ROBO2000** Introduction to Robotics	**ROBO2700** Numerical Methods for Robotics	**MECH2210** Intermediate Mechanical and Space Dynamics	**ELEC2004** Circuits, Signals and Systems

YEAR 3

Sem 1 Feb	**METR3100** Control System Implementation	**METR4201** Control Engineering 1	**MECH2300** Structures and Materials	**CSSE2310** Computer Systems Principles and Programming (1 & 2)
Sem 2 July	**METR3000** Mechatronic Engineering Design 2	**ROBO3000** Robotic Planning and Decision Making	**CSSE2002** Programming in the Large (1 & 2)	**CSSE3010** Embedded Systems Design and Interfacing (1 & 2)

YEAR 4

Sem 1 Feb	**METR4911**[2] 4 units (1 & 2) Thesis/Design Project **or** **ENGG4552** Major Design Project	**ROBO4000** Robotic Sensing and Perception	**ELEC3004** Signals, Systems and Control	**CSSE4011** Advanced Embedded Systems
Sem 2 July		**ENGG4902**[3] Professional Practice and the Business Environment B (1 & 2)	**COMP3506** Algorithms and Data Structures	**CSSE4010** Digital System Design

NOTES

[1] MATH2010: Analysis of Ordinary Differential Equations, STAT2201: Analysis of Engineering & Scientific Data
[2] Offered in Semester 2 under the course code METR4912, Thesis/Design Project
[3] Offered in Semester 1 under the course code ENGG4901, Professional Practice and the Business Environment A

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.

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CRICOS: 00025B TEQSA: PRV12080

Bachelor of Engineering (Honours)

Robotic and Mechatronic Engineering
Computer Engineering Major

Undergraduate Program - Consists of 64 units
Suggested Study Plan from **Semester 2, 2027** Commencement Onwards

THE UNIVERSITY OF QUEENSLAND
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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 | Major

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

X units — This course does not consist of 2 units

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)	**GENERAL ELECTIVE** (1 & 2) OR **PROGRAM ELECTIVE** (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	**ROBO2000** Introduction to Robotics	**ROBO2700** Numerical Methods for Robotics	**MECH2210** Intermediate Mechanical and Space Dynamics	**ELEC2004** Circuits, Signals and Systems
Sem 1 Feb	**MATH2001** Calculus & Linear Algebra II (1 & 2)	**MATH2010**[1] 1 unit (1 & 2) **STAT2201**[1] 1 unit (1 & 2)	**CSSE2010** Introduction to Computer Systems (1 & 2)	**METR2000** Mechatronic Engineering Design 1

YEAR 3

Sem 2 July	**ROBO3000** Robotic Planning and Decision Making	**ENGG4902**[2] Professional Practice and the Business Environment B (1 & 2)	**CSSE2002** Programming in the Large (1 & 2)	**CSSE2310** Computer Systems Principles and Programming (1 & 2)
Sem 1 Feb	**METR3100** Control System Implementation	**METR4201** Control Engineering 1	**MECH2300** Structures and Materials	**CSSE3010** Embedded Systems Design and Interfacing (1 & 2)

YEAR 4

Sem 2 July	**METR4912**[3] Thesis/Design Project (4 units, 1 & 2)	**METR3000** Mechatronic Engineering Design 2	**COMP3506** Algorithms and Data Structures	**CSSE4010** Digital System Design
Sem 1 Feb		**ROBO4000** Robotic Sensing and Perception	**ELEC3004** Signals, Systems and Control	**CSSE4011** Advanced Embedded Systems

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
[3] Can be substituted in for one of the courses METR4911, Thesis/Design Project, (Sem 2 Only), or ENGG4552, Major Design Project, (Sem 2 Only)

CRICOS: 00025B TEQSA: PRV12080

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