Bachelor of Engineering (Honours)

Chemical Engineering
Materials Engineering 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.

CRICOS: 00025B TEQSA: PRV12080

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Undergraduate Program - Consists of 64 units
Suggested Study Plan from **Semester 1, 2025** Commencement Onwards

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)	**CHEM1100** Chemistry 1 (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)	**ENGG1500** Thermodynamics: Energy and the Environment (1 & 2)	**GENERAL ELECTIVE** (1 & 2) OR **PROGRAM ELECTIVE** (1 & 2)

YEAR 2

Sem 1 Feb	**CHEE2001** Process Principles (1 & 2)	**CHEE2003** Fluid and Particle Mechanics	**CHEE2010** Engineering Investigation and Statistical Analysis	**CHEM2056** Physical Chemistry for Engineering
Sem 2 July	**CHEE2020** Process Equipment and Control Systems	**CHEE2030** Chemical Thermodynamics	**CHEE2040** Heat and Mass Transfer	**ENGG1700**[1] Statics and Materials (1 & 2)

YEAR 3

Sem 1 Feb	**CHEE3004** Unit Operations	**CHEE3005** Reaction Engineering	**PROGRAM ELECTIVE**	**MECH2300** Structures and Materials
Sem 2 July	**CHEE3007** Process Modelling and Control	**CHEE3020** Process Systems Analysis	**MECH2310** Science and Engineering of Metals	**MECH3301** Materials Selection

YEAR 4

Sem 1 Feb	**ENGG4901**[2] Professional Practice and the Business Environment A (1 & 2)	**CHEE4002** Risk in Process Industries	**CHEE3301** Polymer Engineering	**PROGRAM ELECTIVE**
Sem 2 July	**CHEE4001** Process Engineering Design Project (4 units)		**MATE4302** Electrochemistry and Corrosion	**PROGRAM ELECTIVE**

NOTES

[1] ENGG1700: Statics and Materials can be completed in Year 1 in Semester 1 or Semester 2, swapping places with the respective Program Elective
[2] Offered in Semester 2 under the course code ENGG4902, Professional Practice and the Business Environment B

CRICOS: 00025B TEQSA: PRV12080

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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Bachelor of Engineering (Honours)

Chemical Engineering
Materials Engineering Major

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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 | 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)	CHEM1100 Chemistry 1 (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)	ENGG1500 Thermodynamics: Energy and the Environment (1 & 2)	GENERAL ELECTIVE (1 & 2) OR PROGRAM ELECTIVE (1 & 2)
YEAR 2				
Sem 2 July	CHEE2001 Process Principles (1 & 2)	CHEE2020 Process Equipment and Control Systems	CHEE2030 Chemical Thermodynamics	CHEE2040 Heat and Mass Transfer
Sem 1 Feb	CHEE2003 Fluid and Particle Mechanics	CHEE2010 Engineering Investigation and Statistical Analysis	CHEM2056 Physical Chemistry for Engineering	ENGG1700[1] Statics and Materials (1 & 2)
YEAR 3				
Sem 2 July	CHEE3007 Process Modelling and Control	CHEE3020 Process Systems Analysis	MECH2310 Science and Engineering of Metals	MECH3301 Materials Selection
Sem 1 Feb	CHEE3004 Unit Operations	CHEE3005 Reaction Engineering	PROGRAM ELECTIVE	MECH2300 Structures and Materials
YEAR 4				
Sem 2 July	CHEE4001 Process Engineering Design Project (4 units)		MATE4302 Electrochemistry and Corrosion	PROGRAM ELECTIVE
Sem 1 Feb	ENGG4901[2] Professional Practice and the Business Environment A (1 & 2)	CHEE4002 Risk in Process Industries	CHEE3301 Polymer Engineering	PROGRAM ELECTIVE

NOTES

[1] ENGG1700: Statics and Materials can be completed in Year 1 in Semester 1 or Semester 2, swapping places with the respective Program Elective
[2] Offered in Semester 2 under the course code ENGG4902, Professional Practice and the Business Environment B

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