Bachelor of Engineering (Honours)

Chemical Engineering
Bioprocess 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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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 | Major

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)	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	PROGRAM ELECTIVE

YEAR 3

Sem 1 Feb	CHEE3004 Unit Operations	CHEE3005 Reaction Engineering	BIOE1001[1] Principles of Biomedical and Bioprocess Engineering	BREADTH ELECTIVE (!)
Sem 2 July	CHEE3007 Process Modelling and Control	CHEE3020 Process Systems Analysis	BIOL2202 Genetics	ADVANCED ELECTIVE (!)

YEAR 4

Sem 1 Feb	CHEE4002 Risk in Process Industries	BIOC2000 Biochemistry & Molecular Biology	BIOT3009 Quality Management Systems in Biotechnology	BIOE4020 Bioprocess Engineering
Sem 2 July	CHEE4001 Process Engineering Design Project (4 units)		ENGG4902[2] Professional Practice and the Business Environment B (1 & 2)	BIOE6028 Metabolic Engineering

NOTES

[1] May choose to do BIOL1020, Genes, Cells & Evolution as an alternative
[2] 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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Bachelor of Engineering (Honours)

Chemical Engineering
Bioprocess Engineering Major

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Suggested Study Plan from **Semester 2, 2025** Commencement Onwards

The University Of Queensland
AUSTRALIA

CREATE CHANGE

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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

! — 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)	**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	**BIOE1001**[1] Principles of Biomedical and Bioprocess Engineering

YEAR 3

Sem 2 July	**CHEE3007** Process Modelling and Control	**CHEE3020** Process Systems Analysis	**PROGRAM ELECTIVE**	**BIOL2202** Genetics
Sem 1 Feb	**CHEE3004** Unit Operations	**CHEE3005** Reaction Engineering	**BIOC2000** Biochemistry & Molecular Biology	**BIOE4020** Bioprocess Engineering

YEAR 4

Sem 2 July	**CHEE4001** Process Engineering Design Project (4 units)		**BIOE6028** Metabolic Engineering	**BREADTH ELECTIVE** !
Sem 1 Feb	**ENGG4901**[2] Professional Practice and the Business Environment A (1 & 2)	**CHEE4002** Risk in Process Industries	**BIOT3009** Quality Management Systems in Biotechnology	**ADVANCED ELECTIVE** !

NOTES

[1] May choose to do BIOL1020, Genes, Cells & Evolution as an alternative
[2] Offered in Semester 2 under the course code ENGG4902, Professional Practice and the Business Environment B

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