Bachelor of Engineering (Honours) (Chemical Engineering)

(MA1020 – Preparatory Mathematics Required)

Useful study planning/enrolment resources:

Course and Subject Handbook
Academic Calendars
Class Registration
Enrolment Resources

The information in the study planner is current at the time of creation may be subject to future change.

Attention International Student visa holders: To remain compliant with your enrolments requirements as a Student visa holder you are required to enrol in at least one On-Campus, Multi-Modal or WIL subject offering in each compulsory study period and you cannot enrol in more than one third (33%) of your total course load through online or distance learning. To complete your course within your CoE duration students must maintain sufficient subject enrolment.
If there are only Online subject offerings for you to select in a compulsory study period, contact enrolments@jcu.edu.au urgently for enrolment advice.

The College of Science and Engineering will be offering some subjects in Block 1 and Block 2 (see the Academic Calendar for Block 1 and 2 dates). International students must maintain enrolment in subjects across the whole Trimester 1 period (January – April) and can do this by enrolling in a combination of TR1, Block 1 and/or Block 2 subjects.

	TRIMESTER 1	TRIMESTER 2	TRIMESTER 3
2026	EG1000:03 Engineering 1	MA1000:03 Mathematical Foundations *PREREQ: MA1020 or MA0020 or BR0202 or High school subjects: Mathematical Methods or Specialist Mathematics (or equivalent such as Maths B or Maths C)*	EG1011:03 Statics and Dynamics *PREREQ: Allow concurrent enrolment in PH1005*
	EG1002:03 Computing and Sensors	PH1005:03 Newtonian Physics *PREREQ: Maths B or MA1020 or MA0020 or MA1000 or MA1008 OR admission to 116209, 116409 or 116309. Allow concurrent for MA1020, MA1000 and MA1008*	EG1010:03 Process Engineering
	MA1020:03 Preparatory Mathematics	Select 3 credit points of any undergraduate subjects	MA1003:03 Mathematical Techniques *PREREQ: MA1000 or MA1011 or MA1009*

**Students that have not completed the required Mathematics learning through High School studies are unable to complete an Engineering Minor and will be required to choose *MA1020 Preparatory Mathematics* as one of their Undergraduate elective subjects.

	TRIMESTER 1	TRIMESTER 2	TRIMESTER 3
2027	MA2000:03 Mathematics for Scientists and Engineers *PREREQ: MA1003*	**Major** CH1001:03 Chemistry: The Central Science *PREREQ: BR0301, CH1020, CH0020 or EG1010 or High School Senior Chemistry or admission to 71510 or 116910 or 70309 or 108209 or 70809 or 71809 or 115309 or 119209*	EG1012:03 Electric Circuits
	Major CL2501:03 Process Analysis and Sustainability *PREREQ: EG1010*	**Major** CP1407:03 Introductory Machine Learning and Data Science	**Major** CH1002:03 Chemistry: Principles and Applications *PREREQ: CH1001 or CH1011 and allow concurrent for CH1011 and CH1001*
		Major CL3030:03 Reactor Design *PREREQ: CL2501 and MA2000* *Only offered in odd years*	**Major** ME3512:03 Heat and Mass Transfer *PREREQ: MA2000*

	Vac work (Dec-Feb)	TRIMESTER 2	TRIMESTER 3
2028	*Time available for work placements with engineering employers*	**Major** CL2502:03 Chemical Engineering Thermodynamics *PREREQ: CL2501 and MA2000* *Only offered in even years*	**Major** EG2008:03 Fluid Mechanics *PREREQ: EG1011 and MA2000*
	BLOCK 2 (Mar-Apr) EG3000:03 Introduction to Systems Engineering and Project Management (TR3) *PREREQ: EG1000 and EG1002 and EG1010 and EG1011 and EG1012 and MA1000 and MA1003 and (PH1005 or EG1001) or 36 credit points*	**Major** CL4537:03 Minerals and Solids Processing *PREREQ: Must have completed 48 credit points toward BEngineering* *Only offered in even years*	**Major** EE3600:03 Automation and Control Systems *PREREQ: (EG1012 and MA2000) or admittance into Master of Engineering (Professional)*
	: **BLOCK 2 (Mar-Apr)** **Major** CL3021:03 Mass Transfer Operations *PREREQ: CL2501 and MA2000*	Select 3 credit points of any undergraduate subjects	**Major** CH2103:03 Analytical Chemistry *PREREQ: CH1001 or CH1011*

2029	Vac work (Dec-Feb)	TRIMESTER 2	TRIMESTER 3
	Time available for work placements with engineering employers	EG4011:03 Thesis Part 1 of 2 *PREREQ: 60 credit points*	EG4012:03 Thesis Part 2 of 2 *PREREQ: EG4011*
	BLOCK 2 (Mar-Apr) **Major** CL4040:03 Safety, Environment and Sustainability in the Process Industries *PREREQ: CL2501*	**Major** CL4072:03 Chemical Engineering Design (Part 2 of 2) *PREREQ: CL4071*	Select 3 credit points of any undergraduate subjects
	BLOCK 2 (Mar-Apr) **Major** CL4071:03 Chemical Engineering Design (Part 1 of 2) *PREREQ: (CL2502 or CL3010) and CL3021 and CL3030 and (CS3008 or EG2008) and ME3512*	**Major** CL4538:03 Bioprocess Engineering *PREREQ: CL2501 AND CL3021* *Only offered in odd years*	

COURSE HANDBOOK

Bachelor of Engineering (Honours)
Chemical Engineering Major