Bachelor of Engineering (Honours) [Embedded] (Chemical Engineering) – Bachelor of Science (Science Major)

Useful study planning/enrolment resources:

Subject Search
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.

Please note: *The trimesters in which subjects are offered vary by major. Refer to the JCU Handbook for details on when subjects in your major are available.*

	TRIMESTER 1	TRIMESTER 2	TRIMESTER 3
2025			EG1010:03 Process Engineering
			MA1020:03 Preparatory Mathematics *Cairns students must enrol online* (or SC1101:03 Science, Technology and Truth if already satisfied via previous study)

	TRIMESTER 1	TRIMESTER 2	TRIMESTER 3
2026	EG1000:03 Engineering 1	EG1011:03 Statics and Dynamics *PREREQ: Allow concurrent enrolment in PH1005*	EG1012:03 Electric Circuits
	EG1002:03 Computing and Sensors	MA1003:03 Mathematical Techniques *PREREQ: MA1000 or MA1011 or MA1009*	**Science Major**
	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)*	PH1005:03 Newtonian Physics *PREREQ: Maths B or MA1020 or MA0020 or MA1000 or MA1008 OR admission to 116209, Allow concurrent for MA1000*	

	TRIMESTER 1	TRIMESTER 2	TRIMESTER 3
2027	MA2000:03 Mathematics for Scientists and Engineers *PREREQ: MA1003*	**Engineering Major** CH1001:03 Chemistry: The Central Science *PREREQ: 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*	**Engineering Major** CH1002:03 Chemistry: Principles and Applications *PREREQ: CH1001 or CH1011 and allow concurrent for CH1011 and CH1001*
	SC2202:03 Quantitative Methods in Science *PREREQ: SC1102 or SC1109 or admission to Bachelor of Business and Environmental Science or admission to 116209, 116309 OR 116409* **OR** SC2209:03 Quantitative Methods in Science – Advanced *PREREQ: MA1003 and ((SC1109 plus 6 credit points of other Level 1 subjects) or admission in 116409)*	**Engineering Major** CP1407:03 Introductory Machine Learning and Data Science	**Engineering Major** EG2008:03 Fluid Mechanics *PREREQ: EG1011 and MA2000*
	Science Major		**Science Major**

	TRIMESTER 1	TRIMESTER 2	TRIMESTER 3
2028	**Engineering Major** CL2501:03 Process Analysis and Sustainability *PREREQ: EG1010*	**Science Major**	**Engineering Major** CH2103:03 Analytical Chemistry *PREREQ: CH1001 or CH1011*
	Science Major	**Science Major**	**Engineering Major** CL2502:03 Chemical Engineering Thermodynamics *PREREQ: CL2501 and MA2000*
	Science Major	Select 3 credit points of any Level 2 or 3 Science Subject	Select 3 credit points of any Level 2 or 3 Science Subject **Recommended students complete SC3003:03 Science Research Internship or SC3008:03 Professional Placement*

	Vac work (Dec-Feb)	TRIMESTER 2	TRIMESTER 3
2029	*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) EG3000:03 Introduction to Systems Engineering and Project Management *PREREQ: EG1000 and EG1002 and EG1010 and EG1011 and EG1012 and MA1000 and MA1003 and (PH1005 or EG1001) or 36 credit points of subjects*	**Engineering Major** CL3030:03 Reactor Design *PREREQ: CL2501 and MA2000*	**Engineering Major** EE3600:03 Automatic Control 1 *PREREQ: EG1012 and MA2000 or Admittance into the Master of Engineering (Professional)*
	BLOCK 2 (Mar-Apr) **Engineering Major** CL3021:03 Mass Transfer Operations *PREREQ: CL2501 and MA2000*	**Engineering Major** ME3512:03 Heat and Mass Transfer *PREREQ: MA2000*	**Science Major**

	Vac work (Dec-Feb)	TRIMESTER 2	TRIMESTER 3
2030	*Time available for work placements with engineering employers*	**Engineering Major** CL4072:03 Chemical Engineering design: (Part 2 of 2) *PREREQ: CL4071*	
	BLOCK 2 (Mar-Apr) **Engineering Major** CL4040:03 Safety, Environment and Sustainability in the Process Industries *PREREQ: CL2501*	**Engineering Major** CL4537:03 Minerals and Solids Processing *PREREQ: Must have completed 48 credit points toward BEng*	
	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*	**Engineering Major** CL4538:03 Bioprocess Engineering *PREREQ: CL2502 or CL3010 and CL3021 and CL3030*	

COURSE HANDBOOK

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