Bachelor of Engineering (Honours) [Embedded] (Electrical and Electronic 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: 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** CP1407:03 Introductory Machine Learning and Data Science	**Engineering Major** CP1404:03 Programming II *PREREQ: CP1801 or CP1401 or CP1200 or EG1002 or CP2200 or SC1201*
	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)*	**Science Major**	**Engineering Major** EE2300:03 Electronics and Circuit Design *PREREQ: EG1012*
	Engineering Major CC2511:03 Embedded Systems Design *PREREQ: EG1002 or CP1300 or CP1404 or Admittance into Master of Engineering (Professional)*		**Science Major**

	TRIMESTER 1	TRIMESTER 2	TRIMESTER 3
2028	**Science Major**	**Engineering Major** EE2201:03 Circuit Theory *PREREQ: EG1012 and MA2000. Allow concurrent enrolment for MA2000.*	**Engineering Major** EE3400:03 Power System Analysis *PREREQ: EE2201 or Admission to the Master of Engineering (Professional)*
	Science Major	**Engineering Major** PH2019:03 Electromagnetism and Optics *PREREQ: (EG1012 or PH1005) and MA1003*	**Engineering Major** EE3600:03 Automatic Control 1 *PREREQ: EG1012 and MA2000 or Admittance into the Master of Engineering (Professional)*
	Select 3 credit points of any Level 2 or 3 Science Subject	**Science Major**	**Science Major**

	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** EE3010:03 Digital Signal Processing *PREREQ: 48 credit points from the Bachelor of Engineering or Admission to the Master of Engineering (Professional)*	**Engineering Major** EE3700:03 Communications Systems Principles *PREREQ: EE2201*
	BLOCK 2 (Mar-Apr) **Engineering Major** EE3300:03 Electronics Applications *PREREQ: EE2300 or Admittance to the Master of Engineering (Professional)*	**Engineering Major** CC3501:03 Embedded Systems Design and Interfacing *PREREQ:(CC2511 and CP1404) or Admittance to the Master of Engineering (Professional)*	**Science Major**

	Vac work (Dec-Feb)	TRIMESTER 2	TRIMESTER 3
2030	*Time available for work placements with engineering employers*	**Engineering Major** EE4310:03 Power Electronics *PREREQ: EE2201 and EE3600*	
	BLOCK 2 (Mar-Apr) **Engineering Major** EE4500:03 Electrical and Electronic Systems Design Project *PREREQ: 48 credit points in Bachelor of Engineering, Bachelor of Engineering – Bachelor of Science or Bachelor of Engineering – Bachelor of Information Technology*	**Engineering Major** EE4400:03 Renewable System Integration *PREREQ: EE3400 or Admission to the Master of Engineering (Professional)*	
	BLOCK 2 (Mar-Apr) **Engineering Major** EE4600:03 Control System Design *PREREQ: EE3600 or Admission to the Master of Engineering (Professional)*	Select 3 credit points of any Level 2 or 3 Science Subject **Note: Students are encouraged to select SC3003:03 Science Research Internship* ***OR*** *SC3008:03 Professional Placement* **Students wishing to enrol in SC3003 must have a minimum GPA of 5.5 and a supervisor for their internship.*	

COURSE HANDBOOK

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