

Bachelor of Engineering (Honours) [Embedded] (Electronic Systems and Internet of Things Engineering) – Bachelor of Science (Science Major)

(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.

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
2026	EG1000:03 Engineering 1	MA1000:03 Mathematical Foundations <i>PREREQ: MA1020 or MA0020 or BR0202 or High school subjects: Mathematical Methods or Specialist Mathematics (or equivalent such as Maths B or Maths C)</i>	EG1011:03 Statics and Dynamics <i>PREREQ: Allow concurrent enrolment in PH1005</i>
	EG1002:03 Computing and Sensors	PH1005:03 Newtonian Physics <i>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</i>	EG1012:03 Electric Circuits
	MA1020:03 Preparatory Mathematics		MA1003:03 Mathematical Techniques <i>PREREQ: MA1000 or MA1011 or MA1009</i>

*Studying all EG Level 1 subjects in 1st year is recommended as this provides the required knowledge to determine your major pathway.

	TRIMESTER 1	TRIMESTER 2	TRIMESTER 3
2027	MA2000:03 Mathematics for Scientists and Engineers <i>PREREQ: MA1003</i>	Engineering Major EE2201:03 Circuit Theory <i>PREREQ: EG1012 and MA2000. Allow concurrent for MA2000.</i>	EG1010:03 Process Engineering
	SC2202:03 Quantitative Methods in Science <i>PREREQ: SC1102 or SC1109 or Admission to 116209, 116309 or 116409</i> OR SC2209:03 Quantitative Methods in Science – Advanced <i>PREREQ: MA1003 and SC1109, plus 6 credit points of other Level 1 Subjects</i>	Engineering Major PH2019:03 Electromagnetism and Optics <i>PREREQ: (EG1012 or PH1005) and MA1003</i>	Engineering Major CP1404:03 Programming II <i>PREREQ: CP1801 or CP1401 or CP1200 or EG1012 or CP2200 or SC1201</i>
	Science Major		Engineering Major EE2300:03 Electronics and Circuit Design <i>PREREQ: EG1012</i>

	TRIMESTER 1	TRIMESTER 2	TRIMESTER 3
2028	Engineering Major CC2511:03 Digital Logic and Embedded Systems <i>PREREQ: EG1002 or CP1404 or CP1401 or Admittance into Master of Engineering (Professional)</i>	Engineering Major CP3406:03 Mobile Computing <i>PREREQ: (CP1404 or CP1804) and (18 credit points of CP subjects or admission to 102806, 116209, 112609, 116309, 103310, 112610, 102909, 116409, 102910)</i>	Engineering Major EE3600:03 Automation and Control Systems <i>PREREQ: (EG1012 and MA2000) or Admittance into the Master of Engineering (Professional)</i>
	Science Major	Engineering Major CC3501:03 Embedded Systems Design and Interfacing <i>PREREQ: (CC2511 and CP1404) or Admittance to the Master of Engineering (Professional)</i>	Engineering Major Select 3 credit points of any Level 1, 2, 3, 4 or 5 subjects
		Science Major	Science Major

2029	TRIMESTER 1	TRIMESTER 2	TRIMESTER 3
	Science Major	Engineering Major EE3010:03 Digital Signal Processing <i>PREREQ: 48 credit points from the Bachelor of Engineering (Hons) or Admission to the Master of Engineering (Professional)</i>	Engineering Major EE3700:03 Communications Systems Principles <i>PREREQ: EE2201</i>
	BLOCK 2 (Mar-Apr)		
	EG3000:03 Introduction to Systems Engineering and Project Management <i>PREREQ: EG1000 and EG1002 and EG1010 and EG1011 and EG1012 and MA1000 and MA1003 and (PH1005 or EG1001) or 36 credit points of subjects</i>	Science Major	Engineering Major MA3405:03 Statistical Data Mining for Big Data <i>PREREQ: MA2405 or MA2000 or SC2202 or SC2209</i>
		Select 3 credit points of any Level 2 or 3 Science Subject	Science Major

2030	Vac work (Dec-Feb)	TRIMESTER 2	TRIMESTER 3
	<i>Time available for work placements with engineering employers</i>	EG4011:03 Thesis Part 1 of 2 <i>PREREQ: 60 credit points</i>	EG4012:03 Thesis Part 2 of 2 <i>PREREQ: EG4011</i>
	BLOCK 2 (Mar-Apr)		
	Engineering Major EE3901:03 Sensor Technologies <i>PREREQ: EE2201 and (CC2511 or CC2003) or Admittance to the Master of Engineering (Professional)</i>	Engineering Major MA3832:03 Neural Network and Deep Learning <i>PREREQ: MA3405 or MA5405 and CP1404</i>	Select 3 credit points of any Level 2 or 3 Science Subject <i>*Recommended students complete SC3003:03 Science Research Internship or SC3008:03 Professional Placement</i>
	BLOCK 2 (Mar-Apr)		
	Engineering Major EE4500:03 Electrical and Electronic Systems Design Project <i>PREREQ: 48 credit points in Bachelor of Engineering, Bachelor of Engineering – Bachelor of Science or Bachelor of Engineering – Bachelor of Information Technology</i>	Engineering Major CC4510:03 Digital Systems Design <i>PREREQ: CC3501 or Admission to Master of Engineering (Professional)</i>	Science Major

COURSE HANDBOOK

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