

Bachelor of Engineering (Honours) [Embedded] (Electrical and Electronic 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 you are receiving US Federal Aid, there are further compliance considerations. Please contact financialaid@jcu.edu.au to confirm compliance of your subject selections.

Student Resources: If you require advice about your study plan, choosing electives, or which subjects to enrol in, please contact your major advisor or degree coordinator ([CSE Course and Major Advisors](#)). For information on available elective subject options please also refer to the Study Area guide ([2026 JCU STUDY AREA GUIDE — College of Science & Engineering](#)).

Your plan may include subjects labelled with ***Intensive on-campus requirements**. These subjects involve mandatory on-campus or fieldwork attendance with extended hours over a dedicated face-to-face period. Please check the face-to-face dates for the subject in the [subject handbook](#) and do not enrol in subjects with overlapping face-to-face dates. For more information, see the CSE Student Guide to Succeeding in Trimester 2 Intensives on the CSE [Student Resources](#) webpage.

	TRIMESTER 1	TRIMESTER 2	TRIMESTER 3
2026			EG1010:03 Process Engineering
			EG1012:03 Electric Circuits
			MA1020:03 Preparatory Mathematics

	TRIMESTER 1	TRIMESTER 2	TRIMESTER 3
2027	EG1000:03 Engineering 1	MA1003:03 Mathematical Techniques <i>PREREQ: MA1000 or MA1011 or MA1009</i>	EG1011:03 Statics and Dynamics <i>PREREQ: 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>	Science Major
	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>		Science Major

	TRIMESTER 1	TRIMESTER 2	TRIMESTER 3
2028	MA2000:03 Mathematics for Scientists and Engineers <i>PREREQ: MA1003</i>	Engineering Major CP1407:03 Introductory Machine Learning and Data Science	Engineering Major CP1404:03 Programming II <i>PREREQ: CP1801 or CP1401 or CP1200 or EG1002 or CP2200 or SC1201</i>
	SC2202:03 Quantitative Methods in Science <i>PREREQ: SC1102 or SC1109</i> OR SC2209:03 Quantitative Methods in Science – Advanced <i>PREREQ: MA1003 and ((SC1109 plus 6 credit points of other Level 1 subjects) or admission in 116409)</i>	Science Major	Engineering Major EE2300:03 Electronics and Circuit Design <i>PREREQ: EG1012</i>
	Engineering Major CC2511:03 Embedded Systems Design <i>PREREQ: EG1002 or CP1300 or CP1404</i>		Science Major

2029	TRIMESTER 1	TRIMESTER 2	TRIMESTER 3
	Science Major	Engineering Major EE2201:03 Circuit Theory <i>PREREQ: EG1012 and MA2000. Allow concurrent enrolment for MA2000.</i>	Engineering Major EE3400:03 Power System Analysis <i>PREREQ: EE2201</i>
	Science Major	Engineering Major PH2019:03 Electromagnetism and Optics <i>PREREQ: (EG1012 or PH1005) and MA1003</i>	Engineering Major EE3600:03 Automatic Control 1 <i>PREREQ: EG1012 and MA2000</i>
	Select 3 credit points of any Level 2 or 3 Science Subject		Science Major

2030	Vac work (Dec-Feb)	TRIMESTER 2	TRIMESTER 3
	Time available for work placements with engineering employers	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)		
	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>	Engineering Major CC3501:03 Embedded Systems Design and Interfacing <i>PREREQ: CC2511 and CP1404</i>	Engineering Major EE3700:03 Communications Systems Principles <i>PREREQ: EE2201</i>
	BLOCK 2 (Mar-Apr)		
	Engineering Major EE3300:03 Electronics Applications <i>PREREQ: EE2300</i>	Engineering Major EE3010:03 Digital Signal Processing <i>PREREQ: 48 credit points from the Bachelor of Engineering</i>	Science Major

2031	Vac work (Dec-Feb)	TRIMESTER 2	TRIMESTER 3
	<i>Time available for work placements with engineering employers</i>	Engineering Major EE4310:03 Power Electronics <i>PREREQ: EE2201 and EE3600</i>	
	BLOCK 2 (Mar-Apr)	Engineering Major EE4400:03 Renewable System Integration <i>PREREQ: EE3400</i>	
	Engineering Major EE4500:03 Electrical and Electronic Systems Design Project <i>PREREQ: 48 credit points in Bachelor of Engineering – Bachelor of Science</i>		
	BLOCK 2 (Mar-Apr)		
Engineering Major EE4600:03 Control System Design <i>PREREQ: EE3600</i>			

COURSE HANDBOOK

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