

# Bachelor of Engineering (Honours) [Embedded] (Electronic Systems and Internet of Things 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](mailto: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
<b>2025</b>	EG1000:03 Engineering 1	EG1011:03 Statics and Dynamics <i>PREREQ: Allow concurrent enrolment in PH1005</i>	EG1010:03 Process Engineering
	EG1002:03 Computing and Sensors	MA1000:03 Mathematical Foundations <i>PREREQ: MA1020 or MA0020 or Maths B or Maths C</i>	EG1012:03 Electric Circuits
	MA1020:03 Preparatory Mathematics (or SC1101:03 Science, Technology and Truth if already satisfied via previous study)	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 MA1000 and MA1008</i>	MA1003:03 Mathematical Techniques <i>PREREQ: MA1000 or MA1011 or MA1009</i>

\*Recommended studying all EG Level 1 subjects in 1<sup>st</sup> year as this provides the required knowledge to determine your major pathway (for a total of 9 subjects this year) This choice also allows for a lighter 7-subject load in your final year when completing your thesis.

	TRIMESTER 1	TRIMESTER 2	TRIMESTER 3
2026	<b>MA2000:03 Mathematics for Scientists and Engineers</b> <i>PREREQ: MA1003</i>	<b>Engineering Major</b> EE2201:03 Circuit Theory <i>PREREQ: EG1012 and MA2000. Allow concurrent for MA2000.</i>	<b>Engineering Major</b> CP1404:03 Programming II <i>PREREQ: CP1801 or CP1401 or CP1200 or EG1012 or CP2200 or SC1201</i>
	<b>SC2202:03 Quantitative Methods in Science</b> <i>PREREQ: SC1102 or SC1109 or Admission to 116209, 116309 or 116409</i> <b>OR</b> <b>SC2209:03 Quantitative Methods in Science – Advanced (TR1)</b> <i>PREREQ: MA1003 and SC1109, plus 6cp of Level 1 Subjects</i>	<b>Engineering Major</b> PH2019:03 Electromagnetism and Optics <i>PREREQ: (EG1012 or PH1005) and MA1003</i>	<b>Engineering Major</b> EE2300:03 Electronics and Circuit Design <i>PREREQ: EG1012</i>
	<b>Science Major</b>		<b>Science Major</b>

	TRIMESTER 1	TRIMESTER 2	TRIMESTER 3
2027	<b>Engineering Major</b> CC2511:03 Embedded Systems Design <i>PREREQ: EG1002 or CP1300 or CP1404 or Admittance into Master of Engineering (Professional)</i>	<b>Engineering Major</b> CP3406:03 Mobile Computing <i>PREREQ: CP1404 or CP1804 and admittance to BEng-BSc</i>	<b>Engineering Major</b> EE3600:03 Automatic Control 1 <i>PREREQ: EG1012 and MA2000 or Admittance into the Master of Engineering (Professional)</i>
	<b>Science Major</b>	<b>Engineering Major</b> CC3501:03 Embedded Systems Design and Interfacing <i>PREREQ:(CC2511 and CP1404) or Admittance to the Master of Engineering (Professional)</i>	<b>Engineering Major</b> Select 3 credit points of any Undergraduate Subject
		<b>Science Major</b>	<b>Science Major</b>

		TRIMESTER 1	TRIMESTER 2	TRIMESTER 3
<b>2028</b>	<b>Science Major</b>		<b>Engineering Major</b> 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>	<b>Engineering Major</b> EE3700:03 Communications Systems Principles <i>PREREQ: EE2201</i>
	<b>BLOCK 2 (Mar-Apr)</b>			<b>Engineering Major</b> MA3405:03 Statistical Data Mining for Big Data <i>PREREQ: MA2405 or MA2000 or SC2202 or SC2209</i>
	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>	<b>Science Major</b>		
			Select 3 credit points of any Level 2 or 3 Science Subject	<b>Science Major</b>

		Vac work (Dec-Feb)	TRIMESTER 2	TRIMESTER 3
<b>2029</b>		<i>Time available for work placements with engineering employers</i>	EG4011:03 Thesis Part 1 of 2 <i>PREREQ: (72 credit points in 46110 or 102810 or 102809 or 116209) OR (96 credit points in 46210 or 102910 or 102909) OR (96 credit points in 103310 or 112610 or 1112609 or 116309)</i>	EG4012:03 Thesis Part 2 of 2 <i>PREREQ: EG4011</i>
	<b>BLOCK 2 (Mar-Apr)</b>			
	<b>Engineering Major</b>	<b>Engineering Major</b> 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>	<b>Engineering Major</b> CC4510:03 Digital Systems Design <i>PREREQ: CC3501 or Admission to Master of Engineering (Professional)</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>
	<b>Engineering Major</b>	<b>Engineering Major</b> EE3901:03 Sensor Technologies <i>PREREQ: EE2201 and (CC2511 or CC2003) or Admittance to the Master of Engineering (Professional)</i>	<b>Engineering Major</b> MA3832:03 Neural Network and Deep Learning <i>PREREQ: MA3405 or MA5405 and CP1404</i>	

## COURSE HANDBOOK

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