Bachelor of Engineering (Honours) (Electronic Systems and Internet of Things Engineering)

(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.

	TRIMESTER 1	TRIMESTER 2	TRIMESTER 3
2026	EG1000:03 Engineering 1	MA1003:03 Mathematical Techniques *PREREQ: MA1000 or MA1011 or MA1009*	EG1011:03 Statics and Dynamics *PREREQ: Allow concurrent enrolment in PH1005*
	EG1002:03 Computing and Sensors	PH1005:03 Newtonian Physics *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*	EG1010:03 Process Engineering
	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)*		EG1012:03 Electric Circuits

	TRIMESTER 1	TRIMESTER 2	TRIMESTER 3
2027	MA2000:03 Mathematics for Scientists and Engineers *PREREQ: MA1003*	**Major** PH2019:03 Electromagnetism and Optics *PREREQ: (EG1012 or PH1005) and MA1003*	**Major** CP1404:03 Programming II *PREREQ: CP1801 or CP1401 or CP1200 or EG1002 or CP2200 or SC1201*
	Major CC2511:03 Digital Logic and Embedded Systems *PREREQ: EG1002 or CP1404 or CP1401 or admittance into Master of Engineering (Professional)*	**Major** EE2201:03 Circuit Theory *PREREQ: EG1012 and MA2000. Allow concurrent enrolment for MA2000*	**Major** EE2300:03 Electronics and Circuit Design *PREREQ: EG1012*
	Minor Subject/Elective Subject *(depending on chosen structure)*	Minor Subject/Elective Subject *(depending on chosen structure)*	**Major** 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*

*Recommended choosing 2 minor/elective subjects in 2nd year (for a total of 9 subjects this year) This choice allows for a lighter 7-subject load in 4th year when completing your thesis. Alternatively, choose only 1 minor/elective subject in 2nd year (for a total of 8 subjects).

	TRIMESTER 1	TRIMESTER 2	TRIMESTER 3
2028	Minor Subject/Elective Subject *(depending on chosen structure)*	**Major** CC3501:03 Embedded Systems Design and Interfacing *PREREQ: (CC2511 and CP1404) or admittance into Master of Engineering (Professional)*	**Major** EE3600:03 Automation and Control Systems *PREREQ: (EG1012 and MA2000) or admittance into Master of Engineering (Professional)*
	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*	**Major** EE3010:03 Digital Signal Processing *PREREQ: At least 48 credit points from subjects in Bachelor of Engineering or Admission to Master of Engineering (Professional)*	**Major** EE3700:03 Communications Systems Principles *PREREQ EE2201*
		Major CP3406:03 Mobile Computing *PREREQ: (CP1404 or CP1804 and 18 credit points of CP subjects) or (CP1404 or CP1804 and admittance to Bachelor of Engineering (course codes 102809 or 116209)) or (CP1404 or CP1804 and admittance to BEng bit (course codes 112609 or 116309 or 103310 or 112610)) or (CP1404 or CP1804 and ADMITTANCE to BEng BSc (course codes 102909 or 116409 or 102910))*	**Major** MA3405:03 Statistical Data Mining for Big Data *PREREQ: MA2405 or MA2000 or SC2202 or SC2209*

2029	Vac work (Dec-Feb)	TRIMESTER 2	TRIMESTER 3
	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) **Major** EE3901:03 Sensor Technologies *PREREQ: (EE2201 and (CC2511 or CC2003)) or admittance into Master of Engineering (Professional)*	**Major** MA3832:03 Neural Network and Deep Learning *PREREQ: MA3405 or MA5405 and CP1404 or admission to BSc(Hons) 115809*	Minor Subject/Elective Subject *(depending on chosen structure)*
	: **BLOCK 2 (Mar-Apr)** **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*	**Major** CC4510:03 Digital System Design *PREREQ: CC3501 or admittance into Masters of Engineering (Prof)*	

COURSE HANDBOOK

Bachelor of Engineering (Honours)

Electronic Systems and Internet of Things Engineering Major