Bachelor of Engineering (Honours) (Mechanical Engineering) – Bachelor of Information Technology

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.

	TRIMESTER 1	TRIMESTER 2	TRIMESTER 3
2025			EG1010:03 Process Engineering
			EG1012:03 Electric Circuits
			MA1020:03 Mathematical Methods *Cairns students must enrol online* **OR** Select 3 credit points of any undergraduate subjects

	TRIMESTER 1	TRIMESTER 2	TRIMESTER 3
2026	EG1000:03 Engineering 1	EG1011:03 Statics and Dynamics *PREREQ: Allow concurrent enrolment in PH1005*	CP1404:03 Programming II *PREREQ: CP1801 or CP1401 or CP1200 or EG1002 or CP2200 or SC1201*
	EG1002:03 Computing and Sensors	MA1003:03 Mathematical Techniques *PREREQ: MA1000 or MA1011 or MA1009*	Select 3 credit points of subjects from List 1
	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, 116409 or 116309. Allow concurrent for MA1000 and MA1008*	

	TRIMESTER 1	TRIMESTER 2	TRIMESTER 3
2027	MA2000:03 Mathematics for Scientists and Engineers *PREREQ: MA1003*	**Major** CP1407:03 Introductory Machine Learning and Data Science	CP1403:03 Design Thinking I
	CP1402:03 Internet Fundamentals	**Major** EG2010:03 Materials Science and Engineering	**Major** EG2008:03 Fluid Mechanics *PREREQ: MA2000 and EG1011*
	Major CS2001:03 Engineering Strength of Materials *PREREQ: EG1011*		**Major** ME2521:03 Dynamics of Machine Elements *PREREQ: EG1011*

	TRIMESTER 1	TRIMESTER 2	TRIMESTER 3
2028	CP3407:03 Advanced Software Engineering *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 116309))*	**Major** ME3512:03 Heat and Mass Transfer *PREREQ: MA2000*	CP2404:03 Database Modelling
	Select 3 credit points of subjects from List 2	Select 3 credit points of subjects from List 2	CP2406:03 Programming III *PREREQ: CP1404 or CP1804 or CP1300*
	Select 3 credit points of any undergraduate subjects		**Major** ME2525:03 Machine Element Design *PREREQ: CS2001*

	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*	**Major** ME3511:03 Dynamics and Acoustics *PREREQ: MA2000 and ME2521*	**Major** EE3600:03 Automatic Control 1 *PREREQ: EG1012 and MA2000*
	BLOCK 2 (Mar-Apr)		
	Major EG3001:03 Finite Element Analysis *PREREQ: EG1002 and EG1011 and MA2000*	**Major** ME3515:03 Advanced Manufacturing Engineering *PREREQ: ME2525 and EG2010*	**Major** ME3525:03 Mechanical Design *PREREQ: ME2525*

	Vac work (Dec-Feb)	TRIMESTER 2	TRIMESTER 3
2030	*Time available for work placements with engineering employers*	**Major** EG4013:03 Asset Management, Maintenance and Reliability *PREREQ: Completion of 24 credit points*	
	BLOCK 2 (Mar-Apr)		
	Major ME4513:03 Advanced Fluid Mechanics *PREREQ: CS3008 or EG2008*	**Major** ME4522:03 Energy, Conversion and Refrigeration *PREREQ: EG2008 or CS3008*	
	BLOCK 2 (Mar-Apr)		
	Major ME4515:03 Advanced Mechanical Engineering Design *PREREQ: ME3525*	Select 3 credit points of subjects from **List 2**	

COURSE HANDBOOK

Bachelor of Engineering (Honours) [Embedded] – Bachelor of Information Technology
Mechanical Engineering Major