

Bachelor of Engineering (Honours) (Mechanical 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 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
			MA1020:03 Preparatory Mathematics
			Select 3 credit points of any undergraduate subjects

2027	TRIMESTER 1	TRIMESTER 2	TRIMESTER 3
	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 MA1000 and MA1008</i>	EG1012:03 Electric Circuits
	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>		Select 3 credit points of any undergraduate subjects

2028	TRIMESTER 1	TRIMESTER 2	TRIMESTER 3
	MA2000:03 Mathematics for Scientists and Engineers <i>PREREQ: MA1003</i>	Major CP1407:03 Introductory Machine Learning and Data Science	Major EG2008:03 Fluid Mechanics <i>PREREQ: MA2000 and EG1011</i>
	Major CS2001:03 Engineering Strength of Materials <i>PREREQ: EG1011</i>	Major EG2010:03 Materials Science and Engineering	Major ME2521:03 Dynamics of Machine Elements <i>PREREQ: EG1011</i>
	Select 3 credit points of any undergraduate subjects		Major ME2525:03 Machine Element Design <i>PREREQ: CS2001</i>

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)		
	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 ME3525:03 Mechanical Design PREREQ: ME2525	Major ME3512:03 Heat and Mass Transfer PREREQ: MA2000

2030	Vac work (Dec-Feb)	TRIMESTER 2	TRIMESTER 3
	Time available for work placements with engineering employers	Major ME3515:03 Advanced Manufacturing Engineering PREREQ: ME2525 and EG2010	
	BLOCK 2 (Mar-Apr)		
	Major ME4513:03 Advanced Fluid Mechanics PREREQ: CS3008 or EG2008	Major EG4013:03 Asset Management, Maintenance and Reliability PREREQ: Completion of 24 credit points	
	BLOCK 2 (Mar-Apr)		
	Major ME4515:03 Advanced Mechanical Engineering Design PREREQ: ME3525	Major ME4522:03 Thermodynamics and Energy Conversion PREREQ: EG2008 or ME2512	

COURSE HANDBOOK

[Bachelor of Engineering \(Honours\) Handbook](#)
[Mechanical Engineering Major](#)