

Bachelor of Engineering (Honours) [Embedded] (Civil 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 CS2002:03 Catchment, Stream and Lake Engineering
	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>	Engineering Major CS2003:03 Introduction to Structural Design <i>PREREQ: CS2001</i>	Engineering Major CS2005:03 Introduction to Geotechnical Engineering <i>PREREQ: EG1011</i>
	Engineering Major CS2001:03 Engineering Strength of Materials <i>PREREQ: EG1011</i>		Science Major

2029	TRIMESTER 1	TRIMESTER 2	TRIMESTER 3
	Science Major	Engineering Major CS3001:03 Concrete Engineering <i>PREREQ: CS2001</i>	Engineering Major EG2008:03 Fluid Mechanics <i>PREREQ: EG1011 and MA2000</i>
	Science Major	Science Major	Engineering Major CS3002:03 Soil Mechanics and Geology <i>PREREQ: CS2005</i>
	Select 3 credit points of any Level 2 or 3 Science Subject		Science Major

2030	Vac work (Dec-Feb)	TRIMESTER 2	TRIMESTER 3
	<i>Time available for work placements with engineering employers</i>	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 CS3004:03 Transportation Engineering <i>PREREQ: 48 credit points of undergraduate subjects</i>	Engineering Major CS3003:03 Design of Steel and Concrete Structures <i>PREREQ: CS2003 and CS3000</i>
	BLOCK 2 (Mar-Apr)		
	Engineering Major CS3000:03 Structural Analysis <i>PREREQ: CS2003 and MA2000</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>	Science Major

2031	Vac work (Dec-Feb)	TRIMESTER 2	TRIMESTER 3
	<i>Time available for work placements with engineering employers</i>	Engineering Major CS4005:03 Civil Engineering Design <i>PREREQ: CS3001 and CS3003 and CS4001 and CS4002</i>	
	BLOCK 2 (Mar-Apr)	Engineering Major CS4008:03 Water and Wastewater Engineering <i>PREREQ: 48 credit points of undergraduate subjects including CS2002 and EG1010</i>	
	Engineering Major CS4001:03 Foundation Engineering and Rock Mechanics <i>PREREQ: CS3002</i>		
	BLOCK 2 (Mar-Apr)	Engineering Major CS4010:03 Finite Element Analysis and Structural Dynamics <i>PREREQ: EG1002 and CS3000 and MA2000</i>	
	Engineering Major CS4002:03 Hydraulic and Coastal Engineering <i>PREREQ: EG2008 or CS3008</i>		

COURSE HANDBOOK

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