

Bachelor of Science (Mathematics) (Data Science)

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 3 and Block 4 (see the [Academic Calendar](#) for Block 3 and 4 dates). International students must maintain enrolment in subjects across the whole Trimester 2 period (May – August) and can do this by enrolling in a combination of TR2, Block 3 and/or Block 4 subjects.

	TRIMESTER 1	TRIMESTER 2	TRIMESTER 3
2025			MA1020:03 Preparatory Chemistry (or any Level 1, 2 or 3 or 5 subject if already satisfied via previous study)
			Data Science Major MA1580:03 Foundations of Data Science

	TRIMESTER 1	TRIMESTER 2	TRIMESTER 3
2026	CH1020:03 Preparatory Chemistry (or any Level 1, 2 or 3 or 5 subject if already satisfied via previous study)	Mathematics 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>	SC1102:03 Modelling Natural Systems <i>PREREQ: MA1020 or MA0020 or Senior Mathematics or equivalent</i> OR SC1109:03 Modelling Natural Systems – Advanced [^] <i>PREREQ: MA1000 or MA1009</i>
	SC1101:03 Science, Technology and Truth	Data Science Major CP1404:03 Programming II <i>PREREQ: CP1801 OR CP1401 OR CP1200 OR EG1002 OR CP2200 OR SC1201</i> Online	Mathematics Major MA1003:03 Mathematical Techniques <i>PREREQ: MA1000 or MA1011 or MA1009</i>
	Select 3 credit points of Level 1, 2 or 3 or 5 <i>Students must select CP1401 Programming I (TR1, TR2)</i>		Mathematics Major MA2210:03 Linear Algebra <i>PREREQ: MA1000</i>

[^]Note: SC1109 is compulsory in the Advanced BSc Program and should be taken instead of SC1102 if you are considering that pathway.

[^] Note: Students studying the Data Science major must take CP1401 to satisfy prerequisites within their course. Please refer to the course structure for details.

	TRIMESTER 1	TRIMESTER 2	TRIMESTER 3
2027	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</i>	Data Science Major Elective from List 1	Data Science Major MA2405:03 Advanced Statistical Modelling <i>PREREQ: MA1401 or BZ2001 or MA2401 or SC2202 or SC2209 and MA1000</i>
	Mathematics Major MA2000:03 Mathematics for Scientists and Engineers <i>PREREQ: MA1003</i>	Mathematics Major MA2211:03 Discrete Mathematics <i>PREREQ: MA1020 or Maths B or MA0020</i>	Data Science Major MA3405:03 Statistical Data Mining for Big Data <i>PREREQ: MA2405 or MA2000 or SC2202 or SC2209</i>
	Elective from List 2 (Skill Subjects)		Mathematics Major MA3210:03 Probability and Stochastic Processes <i>PREREQ: MA2000</i>

	TRIMESTER 1	TRIMESTER 2	TRIMESTER 3
2028	Data Science Major MA3831:03 Natural Language Processing, Web Scraping and Large Data Processing <i>PREREQ: CP1404 and MA3405</i>	SC3008:03 Professional Placement (TRI 1, TR2, TR3) <i>PREREQ: 12 credit points of Level 2 subjects. Enrolment is restricted to students with an approved placement.</i> OR SC3003:03 Science Research Internship (TRI 1, TR2, TR3) <i>PREREQ: 15 credit points of AQ, BC, BS, BZ, CH, EV, EA, MA, MB, PH or SC science level 2 subjects</i> <i>*Students wishing to enrol in SC3003 must have a minimum GPA of 5.5 and a supervisor for their internship.</i>	
	Mathematics Major MA3211:03 Mathematical Modelling of Dynamic Systems <i>PREREQ: MA2000 and (MA2210 or MA2201)</i>	Data Science Major MA3832:03 Neural Network and Deep Learning <i>PREREQ: MA3405 or MA5405 and CP1404</i> OR MA3212:03 Optimisation and Operations Research <i>PREREQ: MA2000</i>	
	Data Science Major Elective from List 1	Mathematics Major MA3212:03 Optimisation and Operations Research <i>PREREQ: MA2000</i>	

COURSE HANDBOOK

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[Data Science Major](#)

[Mathematics Major](#)