Bachelor of Advanced Science (Data Science)

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			**Major** MA1580:03 Foundations of Data Science
			Major Select 3 credit points of subjects from List 1 **Recommended: CP2404:03 Database Modelling*
			Elective **OR** Second Major Subject *(Depending on chosen structure)*

	TRIMESTER 1	TRIMESTER 2	TRIMESTER 3
2027	SC1101:03 Science, Technology and Truth	MA1000:03 Mathematical Foundations *PREREQ: MA1020 OR MA0020 OR BR0202 OR High School Senior Mathematics Equivalent*	MA1003:03 Mathematical Techniques *PREREQ: MA1000 OR MA1011 OR MA1009*
	CH1020:03 Preparatory Chemistry (any Level 1, 2, 3 or 5 subject if already satisfied via previous study)	**Major** Select 3 credit points of subjects from List 1	SC1109:03 Modelling Natural Systems-Advanced *PREREQ: MA1000 or MA1009*
	Elective **Students studying Data Science Major must select CP1401 to satisfy pre-requisite requirements* **OR** Second Major Subject *(Depending on chosen structure)*		**Major** CP1404:03 Programming II *PREREQ: CP1801 or CP1401 or CP1200 or EG1002 or CP2200 or SC1201*

	TRIMESTER 1	TRIMESTER 2	TRIMESTER 3
2028	SC2209:03 Quantitative Methods in Science-Advanced *PREREQ: MA1003 and ((SC1109 plus 6 credit points of other Level 1 subjects) or admission in 116409)*	Elective **OR** Second Major Subject *(Depending on chosen structure)*	**Major** MA2405:03 Advanced Statistical Modelling *PREREQ: MA1401 or BZ2001 or MA2401 or SC2202 or SC2209 and MA1000*
	Elective **OR** Second Major Subject *(Depending on chosen structure)*	Elective **OR** Second Major Subject *(Depending on chosen structure)*	**Major** MA3405:03 Statistical Data Mining for Big Data *PREREQ: MA2405 or MA2000 or SC2202 or SC2209*
	Elective **OR** Second Major Subject *(Depending on chosen structure)*		Elective **OR** Second Major Subject *(Depending on chosen structure)*

2029	TRIMESTER 1	TRIMESTER 2	TRIMESTER 3
	Major MA3831:03 Natural Language Processing, Web Scraping and Large Data Processing *PREREQ: CP1404 and MA3405*	SC3008:03 Professional Placement (TR1, TR2, TR3) *PREREQ: 12 credit points of second year subjects* **OR** SC3003:03 Science Research Internship* (TR1, TR2, TR3) *PREREQ: 15 credit points of AQ, BC, BS, BZ, CH, EV, EA, MA, MB, PH or SC Science Level 2 subjects* **Students must source a supervisor for their internship before enrolment*	
	Select 3 credit points of subjects from List 1 **(Advanced Skill Subjects)** **MA2000 recommended to enable selection of alternate core MA3212*	**Major** MA3832:03 Neural Network and Deep Learning *PREREQ: MA3405 or MA5405 and CP1404* **OR** MA3212:03 Optimisation and Operations Research *PREREQ: MA2000*	
	Elective **OR** Second Major Subject *(Depending on chosen structure)*		

COURSE HANDBOOK

Bachelor of Advanced Science
Data Science Major