Bachelor of Advanced Science (Physics) (Mathematics)

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 there are only Online subject offerings for you to select in a compulsory study period, contact enrolments@jcu.edu.au urgently for enrolment advice.

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).

	TRIMESTER 1	TRIMESTER 2	TRIMESTER 3
2026	SC1101:03 Science Technology and Truth	CH1020:03 Preparatory Chemistry (or any Level 1, 2 or 3 or 5 subject if already satisfied via previous study)	SC1109:03 Modelling Natural Systems-Advanced *PREREQ: MA1000 or MA1009*
	MA1000:03 Mathematical Foundations *PREREQ: MA1020 or MA0020 or BR0202 or High School Senior Mathematics equivalent*	**Physics Major** PH1005:03 Newtonian Physics *PREREQ: Maths B or MA1020 or MA0020 or MA1000 or MA1008. Allow concurrent for MA1020, MA1000 and MA1008*	MA1003:03 Mathematical Techniques *PREREQ: MA1000 or MA1011 or MA1009*
	Mathematics Major Elective from **List 1 (Breadth Subjects)**		**Physics Major** PH1007:03 Fundamental Physics *PREREQ: ((Maths B or equivalent or MA1020 or MA0020) and PH1005) or (Physics and Maths C)*

2027	TRIMESTER 1	TRIMESTER 2	TRIMESTER 3
	SC2209:03 Quantitative Methods in Science-Advanced *PREREQ: SC1109 and MA1003 plus 6 credit points of other Level 1 subjects*	**Physics Major** PH2019:03 Electromagnetism and Optics *PREREQ: (EG1012 OR PH1005) AND MA1003*	**Physics Major** PH2002:03 Classical Mechanics and Quantum Physics *PREREQ: MA1003 and PH1005 and (PH1006 or PH1007 or (EG1012 and EG1011))*
	Physics Major PH2048:03 Medicinal and Radiation Physics *PREREQ: MA1003 and PH1005 and (PH1007 or (EG1010 and EG1011 and EG1012))*	**Mathematics Major** MA2211:03 Discrete Mathematics *PREREQ: MA1020 or MA0020 or Maths B*	**Mathematics Major** MA2210:03 Linear Algebra *PREREQ: MA1000*
	Mathematics Major MA2000:03 Mathematics for Scientists and Engineers *PREREQ: MA1003*		**Mathematics Major** Elective from **List 1 (Breadth Subjects)**

2028	TRIMESTER 1	TRIMESTER 2	TRIMESTER 3
	Physics Major PH3021:03 Physics of the Earth, Solar System and Universe *PREREQ: PH1005 and (PH1007 or (EG1010 and EG1011 and EG1012))*	**Physics Major** PH3002:03 Advanced Quantum Physics *PREREQ: MA2000*	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*
	Mathematics Major MA3211:03 Mathematical Modelling and Differential Equations *PREREQ: MA2000*	**Mathematics Major** MA3212:03 Optimisation and Operations Research *PREREQ: MA2000*	**Physics Major** PH3008:03 Statistical Mechanics and Transport *PREREQ: MA2000 and PH1005 and (PH1007 or (EG1010 and EG1011 and EG1012)*
	Select 3 credit points of subjects from L**ist 1 (Advanced Skills Subjects)**		**Mathematics Major** MA3210:03 Probability and Stochastic Processes *PREREQ: MA2000*

COURSE HANDBOOK

Bachelor of Advanced Science
Physics Major
Mathematics Major