

## Course progression map for 2025 commencing students

This progression map provides advice on the suitable sequencing of units and guidance on how to plan unit enrolment for each semester of study. It does not substitute for the list of required units as described in the course 'Requirements' section of the Handbook.

### S3003 Bachelor of Applied Data Science Advanced (Honours)

Year 1 Semester 1	ADS1001 Data challenges 1	MAT1830 Discrete mathematics for computer science	FIT1045 Introduction to programming	Applied studies
Year 1 Semester 2	ADS1002 Data challenges 2	MAT1841 Continuous mathematics for computer science	FIT1008 Fundamentals of algorithms	Applied studies
Year 2 Semester 1	ADS2001 Data challenges 3	MTH2222 Mathematics of uncertainty OR MTH2225 Mathematics of Uncertainty (Advanced)	MTH2019 Multivariate mathematics for data science	Applied studies
Year 2 Semester 2	ADS2002 Data challenges 4	FIT2086 Modelling for data analysis	MTH2051 Introduction to computational mathematics	Applied studies
Year 3 Semester 1	Free elective	Free elective	MTH3241 Random processes in the sciences and engineering OR MTH3320 Computational linear algebra	MTH3330 Optimisation and operations research
Year 3 Semester 2	ADS3001 Advanced data challenges (12 points)		FIT3181 Deep learning	FIT3152 Data analytics (Sem 1) OR FIT3154 Advanced data analysis (Sem 2)
Year 4 Semester 1	ADS4001 Research methods	ADS4010 Frontiers of data science	Free elective (level three or higher approved for stage 4 with the course director)	Free elective (level three or higher approved for stage 4 with the course director)
Year 4 Semester 2	ADS4100 Industry research project (24 points)			

A	Data challenges
B	Techniques for data science
C	Applied studies
D	Advanced practice
E	Free elective