

Bachelor of Computer Science Advanced (Honours) (C3001) – 2026

Data science specialisation

Year 1	First Semester	FIT1053 Introduction to programming (advanced)	FIT1047 Introduction to computer systems, networks and security	FIT1058 Foundations of computing	Elective
	Second Semester	FIT1054 Fundamentals of algorithms (advanced)	FIT1049 IT professional practice	FIT1043 Introduction to data science	Elective
Year 2	First Semester	FIT2004 Algorithms and data structures	FIT2094 Databases	FIT2179 Data visualisation	FIT2083 Innovation and research in computer science
	Second Semester	FIT2014 Theory of computation	Elective	FIT2086 Modelling for data science	FIT2082 Computer science research project
Year 3	First Semester	FIT3163* Data science project 1	FIT3152 Data analytics	Level 3* Data Science and AI Approved Elective**	Elective
	Second Semester	FIT3164* Data science project 2	Level 3* Data Science and AI Approved Elective**	Elective	Elective
Year 4	First Semester	FIT4441 Honours thesis – part 1	FIT4442 Honours thesis – part 2	Level 4/5 Computer science approved elective	Elective
	Second Semester	FIT4443 Honours thesis – part 3	FIT4444 Honours thesis – final	Level 4/5 Computer science approved elective	Elective

**Approved Data Science Electives (choose 1)

FIT3003 Business intelligence and data warehousing
FIT3154 Advanced data analysis
FIT3181 Deep learning

FIT3182 Big data management and processing
FIT3183 Malicious AI and dark side security

Note that not all units will be taught in every year and some will be offered only in alternate years.

* Industry Based Learning (IBL)

- Students accepted into the IBL program will replace FIT3163, FIT3164 and one Level 3 Data Science Approved Elective with FIT3045 Industry based learning (18 points).
- IBL placements will normally be completed in semester 1 of third year for BCS Advanced Honours students.
- Students completing an IBL placement must overload in one semester OR complete a summer unit to complete the course in 3 years.

Notes

Credit points	Unless specified, all units are worth 6 credit points Bachelor of Computer Science Advanced (Honours): 32 units x 6 credit points = Total of 192 credit points
Year Level Requirements	1) Normally 48 points, and a maximum of 60 points, of first year level units will be counted; 2) At least 36 points must be completed at third year level.
Unit requisites	All pre-requisite and co-requisite requirements must be undertaken to be able to enrol into a specific unit
Duration of degree	4 years full-time, 8 years part-time
Time limit	Time limit = 10 years. Students have ten years in which to complete this award from the time they commence first year. Periods of intermission are counted as part of the ten years.
Monash University handbook	Students should follow the course requirements for the year the course was commenced https://handbook.monash.edu/browse/By%20Faculty/FacultyofInformationTechnology