Master of Data Science (C6004) – 2023

Industry experience stream

Year 1 (48 credit points)

Semester 1	**FIT9132** (S1, S2) Introduction to databases	**FIT9136** (S1, S2) Algorithms and programming foundations in python	**FIT9137** (S1, S2) Introduction to computer architecture and networks	**MAT9004** (S1, S2) Mathematical foundations for data science and AI
Semester 2	**FIT5145** (S1, S2) Introduction to data science [FIT9136]	**FIT5125** (S1, S2) IT research methods	**FIT5202** (S2) Data processing for big data [FIT9136]	**FIT5197** (S1, S2) Statistical data modelling [FIT9136 and MAT9004]

Year 2 (48 credit points)

Semester 1	**FIT5147** (S1, S2) Data exploration and visualisation	**FIT5196** (S1, S2) Data wrangling [FIT9136]	**FIT5057** (S1, S2) Project management	**Data Science elective unit***
Semester 2	**FIT5120** (S1, S2) Industry experience project (12 points [Completion of 72 points, Co-requisite: FIT5122]		**FIT5122** (S1, S2) IT professional practice [Co-requisite: FIT5120 or FIT5127]	**Level 5 FIT Elective**

Research stream**

Year 1 (48 credit points)

Semester 1	**FIT9132** (S1, S2) Introduction to databases	**FIT9136** (S1, S2) Algorithms and programming foundations in python	**FIT9137** (S1, S2) Introduction to computer architecture and networks	**MAT9004** (S1, S2) Mathematical foundations for data science and AI
Semester 2	**FIT5145** (S1, S2) Introduction to data science [FIT9136 and FIT9132]	**FIT5125** (S1, S2) IT research methods	**FIT5202** (S2) Data processing for big data [FIT9136]	**FIT5197** (S1, S2) Statistical data modelling [FIT9136 and MAT9004]

Year 2 (48 credit points)

Semester 1	**FIT5126** (S1, S2) Masters thesis part 1 [FIT5125]	**FIT5057** (S1, S2) Project management	**FIT5147** (S1, S2) Data exploration and visualisation	**FIT5196** (S1, S2) Data wrangling [FIT9136]
Semester 2	**FIT5127** (S1, S2) Masters thesis part 2 [FIT5126]	**FIT5128** (S1, S2) Masters thesis final [Co-requisite: FIT5127]	**FIT5122** (S1, S2) IT professional practice [Co-requisite: FIT5120 or FIT5127]	**Data Science elective unit***

	FOUNDATION		CORE MASTER'S STUDIES		ADVANCED PRACTICE

*Data Science core units (choose 1):

FIT5149 Applied data analysis	FIT5230 Malicious AI
FIT5201 Machine learning	BMS5021 Introduction to bioinformatics
FIT5212 Data analysis for semi-structured data	BMS5022 Advanced bioinformatics

** Research stream requirements

- To be eligible for the research stream, students must have successfully completed 24 points of level five (non-foundation) FIT units and achieved an overall average of at least 75 per cent across all these units.
- Applications for the Research stream must be submitted by 31 January (for S1 thesis start) or 30 June (for S2 thesis start). Students will be notified when applications open for each intake.
- Research stream information and application: https://www.monash.edu/it/current-students/enrolment/honours-and-minor-thesis

Notes

Credit points	Unless specified, all units are worth 6 credit points Master of Data Science 16 units x 6cp = Total of 96 credit points
Year Level Requirements	1) A maximum of 24 points of level 9 (foundation) units will be counted; 2) At least 72 points must be completed at level 5.
Unit requisites	All pre-requisite and co-requisite requirements must be undertaken in order to be able to enrol into a specific unit
Duration of degree	2 years full-time, 4 years part-time
Time limit	Time limit = 6 years. Students have six years in which to complete this award from the time they commence. Periods of intermission are counted as part of the six 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