MASTER OF DATA SCIENCE (C6004) – 2021

Industry Experience Stream

Year 1 (48 credit points)

First Semester	FIT9132 Introduction to databases	FIT9136 Algorithms and programming foundations in python	FIT9137 Introduction to computer architecture and networks	MAT9004 Mathematical foundations for data science and AI
Second Semester	FIT5145 Introduction to data science [FIT9136 and FIT9132]	FIT5147 Data exploration and visualisation	FIT5196 Data wrangling [FIT9136]	FIT5197 Statistical data modelling [FIT9136 and MAT9004]

Year 2 (48 credit points)

First Semester	FIT5125 IT research methods	Data Science core unit *	Data Science core unit *	Data Science core unit *
Second Semester	FIT5120 Industry experience project (12 points) [Refer to handbook]		FIT5122 IT professional practice [Co-requisite: FIT5120]	Level 5 Elective

Research Stream

Year 1 (48 credit points)

First Semester	FIT9132 Introduction to databases	FIT9136 Algorithms and programming foundations in python	FIT9137 Introduction to computer architecture and networks	MAT9004 Mathematical foundations for data science and AI
Second Semester	FIT5145 Introduction to data science [FIT9136 and FIT9132]	FIT5125 IT research methods	FIT5196 Data wrangling [FIT9136]	FIT5197 Statistical data modelling [FIT9136 and MAT9004]

Year 2 (48 credit points)

First Semester	FIT5126 Masters thesis part 1 [Refer to handbook]	FIT5147 Data exploration and visualisation	Data Science core unit *	Data Science core unit *
Second Semester	FIT5127 Masters thesis part 2 [FIT5126, Co-requisite: FIT5128]	FIT5128 Masters thesis final [FIT5126, Co-requisite: FIT5127]	Level 5 Elective	Data Science core unit *

	FOUNDATION		CORE MASTER'S STUDIES		ADVANCED PRACTICE

Data Science core units:

FIT5201 Machine learning	FIT5149 Applied data analysis
FIT5202 Data processing for big data	BMS5021 Introduction to bioinformatics
FIT5205 Data in society	BMS5022 Advanced bioinformatics
FIT5212 Data analysis for semi-structured data	

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