

Suggested Course Map - Master of Data Science¹

Course Architecture Key:

Part 1: Foundation	Part 2: Core Masters Study	Part 3: Advanced Practice
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Data science stream, Industry Experience option

Year	Sem	Units			
1	1	FIT9133 Programming foundations in Python	FIT9132 Introduction to databases	MAT9004 Mathematical foundations for data science	FIT9123 Introduction to business information systems or FIT9134 Computer architecture and operating systems
	2	FIT5145 Introduction to data science	FIT5196 Data wrangling	FIT5197 Modelling for data analysis	MDS data science stream
2	1	MDS data science stream	MDS data science stream	MDS data science stream	Level 5 Approved Elective
	2	FIT5122 Professional practice	FIT5120 Industry experience studio project (12 points)		Data Science Approved Elective

Data science stream, Minor Thesis option

Year	Sem	Units			
1	1	FIT9133 Programming foundations in Python	FIT9132 Introduction to databases	MAT9004 Mathematical foundations for data science	FIT9123 Introduction to business information systems or FIT9134 Computer architecture and operating systems
	2	FIT5145 Introduction to data science	FIT5196 Data wrangling	FIT5197 Modelling for data analysis	MDS data science stream
2	1	FIT5125 IT research methods	FIT5126 Minor thesis part 1	MDS data science stream	MDS data science stream
	2	FIT5127 Minor thesis part 2	FIT5128 Minor thesis final	MDS data science stream	FIT Level 5 Elective

¹ **Note on Progression:** semester structures shown are, for the most part, recommended suggestions rather than mandatory. However, minor thesis units and FIT5125 **must** be taken over two semesters, and the Industry experience project **must** be taken in the final semester of study.

Data analytics stream, Industry Experience option

Year	Sem	Units			
1	1	FIT9133 Programming foundations in Python	FIT9132 Introduction to databases	MAT9004 Mathematical foundations for data science	FIT9123 Introduction to business information systems or FIT9134 Computer architecture and operating systems
	2	FIT5145 Introduction to data science	FIT5196 Data wrangling	FIT5197 Modelling for data analysis	Level 5 Approved Elective
2	1	FIT5148 Big data management and processing	FIT5149 Applied data analysis	FIT5201 Data analysis algorithms	FIT5147 Data exploration and visualisation
	2	FIT5122 Professional practice	FIT5120 Industry experience studio project (12 points)		FIT5213 Advanced data analytics case study

Data analytics stream, Minor Thesis option

Year	Sem	Units			
1	1	FIT9133 Programming foundations in Python	FIT9132 Introduction to databases	MAT9004 Mathematical foundations for data science	FIT9123 Introduction to business information systems or FIT9134 Computer architecture and operating systems
	2	FIT5145 Introduction to data science	FIT5196 Data wrangling	FIT5197 Modelling for data analysis	Level 5 Approved Elective
2	1	FIT5125 IT research methods	FIT5126 Minor thesis part 1	FIT5148 Big data management and processing	FIT5147 Data exploration and visualisation
	2	FIT5127 Minor thesis part 2	FIT5128 Minor thesis final	FIT5201 Data analysis algorithms	FIT5149 Applied data analysis