

MASTER OF DATA SCIENCE (C6004)

– 2017 RE-ENROLMENT COURSE MAP FOR STUDENTS COMMENCING 2016 – DATA SCIENCE STREAM

1. FOUNDATION UNITS (24 PTS)

Students must complete:

a) three foundation units (18 points) from the list below:

- | | |
|---|--|
| <input type="checkbox"/> FIT9131 Programming foundations
<input type="checkbox"/> (MAT1830 Discrete mathematics for computer science or MAT2003 Continuous mathematics for computer science), OR
<input type="checkbox"/> MAT9004 Mathematical foundations for data science* | <input type="checkbox"/> FIT9132 Introduction to databases |
|---|--|

* Students that have satisfied the mathematics or statistics unit requirement must instead complete FIT5197 in the foundation block.

b) one unit (6 points) from the Data Science stream foundation units below:

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- | | |
|---|--|
| <input type="checkbox"/> FIT9059 Algorithms and data structures OR FIT5211 Algorithms and Data Structures
<input type="checkbox"/> FIT9123 Introduction to business
<input type="checkbox"/> FIT9134 Computer architecture and operating systems
<input type="checkbox"/> FIT9135 Data communications | |
|---|--|

2. CORE UNITS (48 PTS)

Students must complete:

a) three units (18 points) from the list below:

- | | |
|--|---|
| <input type="checkbox"/> FIT5145 Introduction to data structures
<input type="checkbox"/> FIT5197 Modelling for data analysis | <input type="checkbox"/> FIT5196 Data wrangling |
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b) four units (24 points) selected from:

- | | |
|--|---|
| <input type="checkbox"/> FIT5097 Business intelligence modelling
<input type="checkbox"/> FIT5147 Data exploration and visualisation
<input type="checkbox"/> FIT5149 Applied data analysis
<input type="checkbox"/> FIT5206 Digital continuity | <input type="checkbox"/> FIT5146 Data curation and management
<input type="checkbox"/> FIT5148 Distributed and big data processing
<input type="checkbox"/> FIT5205 Data in society |
|--|---|

c) one elective unit (6 points) selected from any unit in b) not already completed, or from the approved Data Science elective list below.

DATA SCIENCE ELECTIVES LIST (note: not all units will be offered every year)

- | | |
|--|--|
| <input type="checkbox"/> FIT5046 Mobile and distributed computing systems
<input type="checkbox"/> FIT5087 Archival systems
<input type="checkbox"/> FIT5097 Business intelligence modelling
<input type="checkbox"/> FIT5107 Managing business records
<input type="checkbox"/> FIT5146 Data curation and management
<input type="checkbox"/> FIT5195 Business intelligence and data warehousing
<input type="checkbox"/> FIT5204 Heritage informatics
<input type="checkbox"/> FIT5206 Digital continuity | <input type="checkbox"/> FIT5047 Intelligent systems
<input type="checkbox"/> FIT5088 Information and knowledge management systems
<input type="checkbox"/> FIT5106 Information organisation
<input type="checkbox"/> FIT5139 Advanced distributed and parallel systems
<input type="checkbox"/> FIT5166 Information retrieval systems
<input type="checkbox"/> FIT5201 Data analysis
<input type="checkbox"/> FIT5205 Data in society
<input type="checkbox"/> FIT5207 Data for sustainability |
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3. ADVANCED PRACTICE (24 PTS)

Students must complete 24 points of either research† or industry‡ units, as follows:

RESEARCH UNITS†

<input type="checkbox"/>	FIT5125 IT research methods
<input type="checkbox"/>	FIT5126 Masters thesis part 1
<input type="checkbox"/>	FIT5127 Masters thesis part 2
<input type="checkbox"/>	FIT5128 Masters thesis final

INDUSTRY UNITS‡

<input type="checkbox"/>	FIT5120 Industry experience studio project (12 points)
<input type="checkbox"/>	FIT5122 Professional practice
<input type="checkbox"/>	one unit from the approved Data Science elective list

† **Research component to be completed across final two semesters:** To enrol in the research units, students must have successfully completed 24 points of level five units and have achieved an overall average of at least 75% across all units.

‡ **Industry component to be completed in final semester**

NOTES:

Credit Points	Unless specified, all units are worth 6 credit points. Master of Data Science is a total of 96 credit points
Unit Requisites	All pre-requisite and co-requisite requirements must be undertaken in order to be able to enrol into a specific unit
Degree Duration	1, 1.5, or 2 years full-time, 2, 3, or 4 years part-time
Time Limit	Time limit = (Degree Duration x 2) + 2 = 4, 5, or 6 years in which to complete this award from the time they first commence. Periods of intermission are counted toward the time limit.
Monash University Handbook	Students should follow course map in conjunction with the course requirements for the year the course was commenced http://monash.edu/pubs/handbooks/courses/index-byfaculty-it.html