MASTER OF DATA SCIENCE (C6004)
– 2017 RE-ENROLMENT COURSE MAP FOR STUDENTS COMMENCING 2016 –
ADVANCED DATA ANALYTICS STREAM

1. FOUNDATION UNITS (24 PTS)

Students must complete:

a) four foundation units (24 points):

☐ FIT9131 Programming foundations	☐ FIT9132 Introduction to databases

☐ MAT1830 Discrete mathematics for computer science or MAT2003 Continuous mathematics for computer science OR MAT9004 Mathematical foundations for data science*

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

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☐ FIT9059 Algorithms and Data Structures **OR** FIT5211 Algorithms and Data Structures

2. CORE UNITS (48 PTS)

Students must complete:

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

☐ FIT5145 Introduction to data structures	☐ FIT5196 Data wrangling
☐ FIT5197 Modelling for data analysis	

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b) four units (24 points):

☐ FIT5147 Data exploration and visualisation	☐ FIT5148 Distributed and big data processing
☐ FIT5149 Applied data analysis	☐ FIT5201 Data analysis

c) one unit (6 points) selected from the approved Data Science elective list below.

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

☐ FIT5046 Mobile and distributed computing systems	☐ FIT5047 Intelligent systems
☐ FIT5087 Archival systems	☐ FIT5088 Information and knowledge management systems
☐ FIT5097 Business intelligence modelling	☐ FIT5106 Information organisation
☐ FIT5107 Managing business records	☐ FIT5139 Advanced distributed and parallel systems
☐ FIT5146 Data curation and management	☐ FIT5166 Information retrieval systems
☐ FIT5195 Business intelligence and data warehousing	☐ FIT5201 Data analysis
☐ FIT5204 Heritage informatics	☐ FIT5205 Data in society
☐ FIT5206 Digital continuity	☐ FIT5207 Data for sustainability

3. ADVANCED PRACTICE (24 PTS)

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

RESEARCH UNITS†	INDUSTRY UNITS‡
☐ FIT5125 IT Research methods	☐ FIT5120 Industry experience studio project **(12 points)**
☐ FIT5126 Masters thesis part 1	☐ FIT5122 Professional practice
☐ FIT5127 Masters thesis part 2	☐ one unit from the approved Data Science elective list above
☐ FIT5128 Masters thesis final	

† 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