Master of Data Science (C6004) – 2025 (with Foundation units)

Industry experience stream – February Intake [2 Years]

Year 1 (48 credit points)

February Semester (S1)	**FIT9132** (S1) Introduction to databases	**FIT9136** (S1, S2) Introduction to Python programming	**FIT5125** (S1, S2) IT research and innovation methods	**MAT9004** (S1, S2) Mathematical foundations for data science and AI
July Semester (S2)	**FIT5145** (S1, S2) Foundation of data science [FIT9136]	**FIT9137** (S2) Introduction to computer architecture and networks	**FIT5196** (S2) Data wrangling [FIT9136]	**FIT5057** (S1, S2) Project management

Year 2 (48 credit points)

February Semester (S1)	**FIT5147** (S1) Data exploration and visualisation	**FIT5197** (S1) Statistical data modelling [FIT9136 and MAT9004]	**Data Science elective unit***	**Level 5 Elective**
July Semester (S2)	**FIT5120** (S1, S2) Industry experience studio project (12 points) [Completion of 72 points, Co-requisite: FIT5122]		**FIT5122** (S1, S2) Professional practice [Co-requisite: FIT5120 or FIT5127]	**FIT5202** (S2) Data processing for big data [FIT5145]

**Research stream – February intake [2 Years]

Year 1 (48 credit points)

February Semester (S1)	**FIT9132** (S1) Introduction to databases	**FIT9136** (S1, S2) Introduction to Python programming	**FIT5125** (S1, S2) IT research and innovation methods	**MAT9004** (S1, S2) Mathematical foundations for data science and AI
July Semester (S2)	**FIT5145** (S1, S2) Foundation of data science [FIT9136]	**FIT9137** (S2) Introduction to computer architecture and networks	**FIT5196** (S2) Data wrangling [FIT9136]	**FIT5057** (S1, S2) Project management

Year 2 (48 credit points)

February Semester (S1)	**FIT5126** (S1, S2) Masters thesis part 1 [FIT5125]	**FIT5147** (S1) Data exploration and visualisation	**FIT5197** (S1) Statistical data modelling [FIT9136 and MAT9004]	**Data Science elective unit***
July Semester (S2)	**FIT5127** (S1, S2) Masters thesis part 2 [FIT5126]	**FIT5128** (S1, S2) Masters thesis final [Co-requisite: FIT5127]	**FIT5122** (S1, S2) Professional practice [Co-requisite: FIT5120 or FIT5127]	**FIT5202** (S2) Data processing for big data [FIT5145]

	FOUNDATION		CORE MASTER'S STUDIES		ADVANCED PRACTICE

** 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 S 1 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#tabs 3708338-02

List of elective units offered at the School of Information Technology, Monash University Malaysia

The following electives are offered at both the Australia and Malaysia campuses. If you intend to apply for the global intercampus program, please refer to the course handbook for electives which are offered specifically at the Australia campus. In addition to the Data Science elective unit, you can utilize the Level 5 FIT elective slots in the course map to enrol for Data Science elective unit.

Apart from the listed electives below, you may opt to enrol for Level 5 electives offered by other courses at Monash University, provided that you fulfill the unit prerequisites.

Level 5 FIT elective

FIT5047	Fundamentals of artificial intelligence
FIT5160	Business process modelling, design and simulation
FIT5206	Digital continuity
FIT5215	Deep learning
FIT5216	Modelling discrete optimisation problems
FIT5217	Natural language processing
FIT5226	Multi agent systems and collective behaviour

Data Science elective unit*

FIT5201	Machine learning
FIT5230	Malicious AI

The placement and offering of units may be rearranged or revised based on school resources or faculty planning.

If you opt for an overseas exchange program, you may need to either overload a semester, undertake a summer unit or extend an additional semester in order to complete your course. Please consult the course coordinator.

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Industry experience stream – February Intake [2 Years]

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