

# Master of Artificial Intelligence C6007) – 2022

## Industry experience stream

### Year 1 (48 credit points)

<b>First Semester</b>	<b>FIT9131</b> Programming foundations in java	<b>FIT9136</b> Algorithms and programming foundations in Python	<b>FIT9137</b> Introduction to computer architecture and networks	<b>MAT9004</b> Mathematical foundations for data science and AI
<b>Second Semester</b>	<b>FIT5047</b> Fundamentals of artificial intelligence	<b>FIT5125</b> IT research methods	<b>FIT5197</b> Statistical data modelling	<b>Artificial Intelligence core unit *</b>

### Year 2 (48 credit points)

<b>First Semester</b>	<b>Artificial Intelligence core unit *</b>	<b>Artificial Intelligence core unit *</b>	<b>Artificial Intelligence core unit *</b>	<b>Artificial Intelligence core unit *</b>
<b>Second Semester</b>	<b>FIT5120</b> Industry experience project (12 points) [Completion of 72 points, Co-requisite: FIT5122]		<b>FIT5122</b> IT professional practice [Co-requisite: FIT5120]	<b>Level 5 Elective</b>

## Research stream\*\*

### Year 1 (48 credit points)

<b>First Semester</b>	<b>FIT9131</b> Programming foundations in java	<b>FIT9136</b> Algorithms and programming foundations in Python	<b>FIT9137</b> Introduction to computer architecture and networks	<b>MAT9004</b> Mathematical foundations for data science and AI
<b>Second Semester</b>	<b>FIT5047</b> Fundamentals of artificial intelligence	<b>FIT5125</b> IT research methods	<b>FIT5197</b> Statistical data modelling	<b>Artificial Intelligence core unit *</b>

### Year 2 (48 credit points)

<b>First Semester</b>	<b>FIT5126</b> Masters thesis part 1 [FIT5125, Co-requisite: FIT5127]	<b>FIT5127</b> Masters thesis part 2 [Co-requisite: FIT5126]	<b>Artificial Intelligence core unit *</b>	<b>Artificial Intelligence core unit *</b>
<b>Second Semester</b>	<b>FIT5228</b> Masters thesis part 3 [FIT5127, Co-requisite: FIT5229]	<b>FIT5229</b> Masters thesis final [Co-requisite: FIT5228]	<b>Artificial Intelligence core unit *</b>	<b>Level 5 Elective</b>

	FOUNDATION		CORE MASTER'S STUDIES		ADVANCED PRACTICE
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### \*Artificial Intelligence core units:

FIT5201 Machine learning	FIT5219 Advanced learning and cognitive systems
FIT5202 Data processing for big data	FIT5220 Solving discrete optimisation problems
FIT5215 Deep learning	FIT5221 Intelligent image and video analysis
FIT5216 Modelling discrete optimisation problems	FIT5222 Planning and automated reasoning
FIT5217 Natural language processing	FIT5226 Multi agent systems and collective behaviour
FIT5218 Human-centric AI	FIT5230 Malicious AI

### \*\* 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 of these units.
- Applications for the Research stream must be submitted by 31 January (for S1 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>

### Notes

<b>Credit points</b>	Unless specified, all units are worth 6 credit points Master of Artificial Intelligence 16 units x 6cp = Total of 96 credit points
<b>Year Level Requirements</b>	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.
<b>Unit requisites</b>	All pre-requisite and co-requisite requirements must be undertaken in order to be able to enrol into a specific unit
<b>Duration of degree</b>	2 years full-time, 4 years part-time
<b>Time limit</b>	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.
<b>Monash University handbook</b>	Students should follow the course requirements for the year the course was commenced <a href="https://handbook.monash.edu/browse/By%20Faculty/FacultyofInformationTechnology">https://handbook.monash.edu/browse/By%20Faculty/FacultyofInformationTechnology</a>