

MASTER OF ARTIFICIAL INTELLIGENCE (RESEARCH) (8128)

Approved Abbreviation: MAI(Res)

Western Sydney University Program Code: 8128

AQF Level: 9

CRICOS Code: 108298B

Students should follow the program structure for the session start date relevant to the year they commenced. This program applies to students who commenced in Spring 2022 or later.

The Master of Artificial Intelligence (Research) exposes students to advanced topics and research in Artificial Intelligence (AI). The program is comprised of an extensive coursework component that is then followed by a full-time-equivalent year of supervised AI research training. The primary objective of this program is to provide students with an opportunity to establish solid AI foundations and broad knowledge of AI technologies and applications and to develop sound research skills appropriate to the AI discipline. It also provides a pathway to PhD research studies by engaging students in AI research projects within the university or in collaboration with external industry partners. Upon completion of this program, students will be gaining employment opportunities in IT, software engineering, and automation industries with a strong AI focus.

Study Mode

Two and a half years full-time and five years part-time.

Location

Campus	Attendance	Mode	Advice
Parramatta - Victoria Road Campus	Full time	Internal	Associate Professor Dongmo Zhang (https://directory.westernsydney.edu.au/search/profile/6599/)
Parramatta - Victoria Road Campus	Part time	Internal	Associate Professor Dongmo Zhang (https://directory.westernsydney.edu.au/search/profile/6599/)

To be eligible for admission, you must have successfully completed

- A Bachelor Honours degree or a Master degree in any discipline, or a Bachelor degree in Information Technology, Information Systems or Computer Science or equivalent. Degrees in other disciplines containing at least 8 units in Information Technology or other relevant disciplines such as data science, engineering, communications technology, may also be eligible.
- Achievement of a threshold Admission Average Mark (AAM) equal to or above the minimum of 65;
- Applicants who do not meet the AAM equal to or above the minimum of 65 will be considered in exceptional circumstances, and applicants whose most recent qualification is 5+ years old shall provide additional evidence of relevant work experience or professional training, or evidence of seniority and standing in an

area of endeavour and provide written support from the potential supervisor. Examples of evidence may include; work as a research assistant or laboratory technician, the writing of policy, consultancy involving the writing of reports, production of creative output, and publication of peer reviewed journal articles. Applications will be reviewed and approved by the relevant Director and the Dean of the School.

Applicants seeking admission on the basis of work experience must support their application with a Statement of Service for all work experience listed on the application.

Statement of Service form (https://www.westernsydney.edu.au/content/dam/digital/pdf/Statement_of_Service.PDF)

Additional Information

To be eligible for up to 40 credit points of advanced standing, you must have successfully completed

- An undergraduate degree in Information and Communication Technologies (ICT), Computing or Information Systems; or
- An undergraduate degree in any discipline and a Graduate Certificate or Graduate Diploma in Information and Communication Technologies (ICT).

Advanced standing from foundation subjects are subject to approval by the relevant Director of Academic Programs (DAP).

Qualification for this award requires the successful completion of 200 credit points as per the recommended sequence below.

Full-time start-year intake

Course	Title	Credit Points
Year 1		
1H session		
HUMN 4001	Researcher Development 1: Reading, Writing, and the Business of Research	10
HUMN 4003	Writing Beyond the Academy: Knowledge Translation and Public Audience Communication	10
Credit Points		20
Autumn session		
COMP 7022	Natural Language Processing	10
COMP 7019	Applied Machine Learning	10
Credit Points		20
2H session		
HUMN 4002	Researcher Development 2: Proposing and Justifying Research	10
Credit Points		10
Spring session		
INFO 7002	Advanced Topics in Artificial Intelligence	10
COMP 7020	Artificial Intelligence Ethics and Organisations	10
INFO 7016	Postgraduate Project A	10
Credit Points		30
Year 2		
Autumn session		
INFO 7017	Postgraduate Project B	10
Select three subjects from the Alternate Subject List (see below)		30

Research Quarter 3 & 4 sessions

Please note COMP 9003 is a year-long subject studied in Research Quarters, 20cp per Quarter 40

COMP 9003	Higher Degree Research Thesis - Artificial Intelligence	
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Credit Points 80

Year 3**Research Quarter 1 & 2 sessions**

Please note COMP 9003 is a year-long subject studied in Research Quarters, 20cp per Quarter 40

COMP 9003	Higher Degree Research Thesis - Artificial Intelligence	
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Credit Points 40

Total Credit Points 200

Full-time mid-year intake

Course	Title	Credit Points
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Year 1**2H Session**

HUMN 4001	Researcher Development 1: Reading ,Writing, and the Business of Research	10
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Spring Session

INFO 7002	Advanced Topics in Artificial Intelligence	10
COMP 7020	Artificial Intelligence Ethics and Organisations	10
INFO 7016	Postgraduate Project A	10

1H Session

HUMN 4002	Researcher Development 2: Proposing and Justifying Research	10
HUMN 4003	Writing Beyond the Academy: Knowledge Translation and Public Audience Communication	10

Autumn Session

COMP 7022	Natural Language Processing	10
COMP 7019	Applied Machine Learning	10
Credit Points		80

Year 2**Spring session**

INFO 7017	Postgraduate Project B	10
Select three subjects from the Alternate Subject List (see below)		30

Research Quarter 1 & 2 sessions

Please note COMP 9003 is a year-long subject studied in Research Quarters, 20cp per Quarter 40

COMP 9003	Higher Degree Research Thesis - Artificial Intelligence	
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Credit Points 80

Year 3**Research Quarter 3 & 4 sessions**

Please note COMP 9003 is a year-long subject studied in Research Quarters, 20cp per Quarter 40

COMP 9003	Higher Degree Research Thesis - Artificial Intelligence	
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Credit Points 40

Total Credit Points 200

Alternate Subject List

Subject	Title	Credit Points
Select three of the following		
COMP 7021	Knowledge Representation and Reasoning	10
COMP 7003	Big Data	10
COMP 7004	Cloud Computing	10
INFO 7015	Applied Cybersecurity	10
COMP 7007	Information Security Management	10
COMP 7006	Data Science	10
COMP 7028	Hands-on Quantum Computing	10
COMP 7008	Internet of Things	10
INFS 7008	Systems and Network Security	10
COMP 7011	Multimedia Communication Systems	10
COMP 7017	Wireless Networking	10