

MASTER OF ARTIFICIAL INTELLIGENCE (3765)

Approved Abbreviation: MArtifIntel

Western Sydney University Program Code: 3765

AQF Level: 9

CRICOS Code: 0101783

This program applies to students who commenced in 2022 or later.

Students should follow the program structure for the session start date relevant to the year they commenced.

Commencement 2020 - 3765.1 Master of Artificial Intelligence (<https://handbook.westernsydney.edu.au/hbook/course.aspx?course=3765.1>)

The Master of Artificial Intelligence provides students with a broad range of Artificial Intelligence (AI) topics ranging from foundations to state-of-the-art technologies and applications. Students will learn how AI is driving digital disruption, how to work in this dynamic and fast evolving field, and how it is changing every facet of life and society. This course focuses on the most important and up to date AI topics and trends including but not limited to: intelligent agents, machine learning, knowledge representation and reasoning, natural language understanding and processing, AI ethics and governance as well as relevant specialisation areas in computing and data sciences.

Early Exits

Students may exit this program on completion of 40 credit points with a 3767 Graduate Certificate in Artificial Intelligence (exit only) (<https://hbook.westernsydney.edu.au/archives/2022-2023/programs/graduate-certificate-artificial-intelligence-exit-only/>) or on completion of 80 credit points with a 3766 Graduate Diploma in Artificial Intelligence (exit only) (<https://hbook.westernsydney.edu.au/archives/2022-2023/programs/graduate-diploma-artificial-intelligence-exit-only/>)

Study Mode

Two years full-time or four years part-time.

Program Advice

Professor Yan Zhang (Yan.Zhang@westernsydney.edu.au)

Prospective students should visit the following websites for general enquiries about this program.

Enquire about this program (<https://enquiry.westernsydney.edu.au/courseenquiry/>) | Local Admission (<https://www.westernsydney.edu.au/future/>) | International Admission (<https://www.westernsydney.edu.au/international/home/apply/admissions/>) |

Location

Campus	Attendance	Mode	Advice
Parramatta	Full Time	Internal	See above
Campus - Victoria Road			
Parramatta	Part Time	Internal	See above
Campus - Victoria Road			
ATMC-Melbourne	Full Time	Internal	See above

Accreditation Note

Accreditation of the Master of Artificial Intelligence will be sought from the Australian Computer Society in 2022 to coincide with the

completion of the degree by the first cohort of graduates. The program is designed to meet the guidelines of the Australian Computer Society.

Work Integrated Learning

Western Sydney University seeks to enhance student learning experiences by enabling students to engage in the culture, expectations and practices of their profession or discipline. This program includes a placement or other community-based unpaid practical experience.

There is a mandatory work component required for completion of this program. Please contact the Program Advisor listed above for information.

International students should also refer to the link below for more information and a link to the Commonwealth Register of Institutions and Courses for Overseas Students (CRICOS).

Work Integrated Learning (WIL) for international students (https://www.westernsydney.edu.au/currentstudents/current_students/services_and_facilities/international_student_support/working_in_australia/work_integrated_learning/)

Admission

Minimum admission requirements to this course are:

- Undergraduate 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.
- Undergraduate degree in any discipline AND at least one year full time equivalent work experience in Information Technology, Information Systems or Computer Science or other relevant work experience OR
- Graduate Certificate in Information Technology Information Systems or Computer Science or equivalent OR
- Graduate Diploma in any discipline AND at least two years full time equivalent in Information Technology, Information Systems or Computer Science or other relevant work experience

Additional Information

Applications from Australian and New Zealand citizens and holders of permanent resident visas may be made via the Universities Admissions Centre (UAC) or directly through the Western Portal. Use the links below to apply via UAC or Western Sydney University. Applications made directly to Western Sydney do not have an application fee.

<http://www.uac.edu.au/>
<https://westernsydney.uac.edu.au/ws/>

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to the University should also use the information provided on the UAC website.

<http://www.uac.edu.au/>

All other International applicants must apply directly to the University via the International Office.

International students applying to the University through the International Office can find details of minimum English proficiency requirements and acceptable proof on their website.

International Office (<http://www.westernsydney.edu.au/international/>)

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and Western Sydney University.

Program Structure

If you commenced in Spring 2023 or later please refer to the Spring 2023 tabs for details.

Students must complete twelve 10 credit point core subjects (total of 120 credit points).

Subject	Title	Credit Points
INFO 7002	Advanced Topics in Artificial Intelligence	10
INFO 7015	Applied Cybersecurity	10
COMP 7019	Applied Machine Learning	10
COMP 7020	Artificial Intelligence Ethics and Organisations	10
COMP 7003	Big Data	10
COMP 7007	Information Security Management	10
COMP 7021	Knowledge Representation and Reasoning	10
COMP 7022	Natural Language Understanding	10
COMP 7013	Network Technologies	10
INFO 7016	Postgraduate Project A	10
INFO 7017	Postgraduate Project B	10
COMP 7016	Visualisation	10

Additional Requirement

Subject	Title	Credit Points
INFO 7004	ICT Practicum	0
Students must also choose between a program-specific testamur major, or complete 40 credit points of subjects selected from any major for a generic award (total 40 credit points).		
Cybersecurity, Testamur Major (T003) (https://hbook.westernsydney.edu.au/archives/2022-2023/majors-minors/cybersecurity-pg-testamur-major/)		
Data Analytics, Testamur Major (T004) (https://hbook.westernsydney.edu.au/archives/2022-2023/majors-minors/data-analytics-pg-testamur-major/)		
Digital Futures, Testamur Major (T005) (https://hbook.westernsydney.edu.au/archives/2022-2023/majors-minors/digital-futures-pg-testamur-major/)		
Networking, Testamur Major (T009) (https://hbook.westernsydney.edu.au/archives/2022-2023/majors-minors/networking-pg-testamur-major/)		
Web and Mobile Computing, Testamur Major (T010) (https://hbook.westernsydney.edu.au/archives/2022-2023/majors-minors/web-mobile-computing-pg-testamur-major/)		

Recommended Sequence

If you commenced in Spring 2023 or later please refer to the Spring 2023 tabs for details.

Qualification for this award requires the successful completion of 160 credit points which include the subjects listed in the recommended sequence below.

Autumn Intake

Course	Title	Credit Points
Year 1		
Autumn session		
COMP 7016	Visualisation	10
COMP 7022	Natural Language Understanding	10
COMP 7019	Applied Machine Learning	10
COMP 7003	Big Data	10
At this point, students can exit with a Graduate Certificate in Artificial Intelligence		
		40
Spring session		
COMP 7013	Network Technologies	10
INFO 7002	Advanced Topics in Artificial Intelligence	10
COMP 7020	Artificial Intelligence Ethics and Organisations	10
Select one subject from your Major or one Alternate subject from any specialisation for a generic award.		10
At this point, students can exit with a Graduate Diploma in Artificial Intelligence		
		40
Year 2		
Autumn session		
COMP 7007	Information Security Management	10
INFO 7016	Postgraduate Project A	10
Select two subjects from your Major or two Alternate subjects from any specialisation for a generic award.		20
		40
Spring session		
COMP 7021	Knowledge Representation and Reasoning	10
INFO 7015	Applied Cybersecurity	10
INFO 7017	Postgraduate Project B	10
Select one subject from your Major or one Alternate subject from any specialisation for a generic award.		10
		40
Total Credit Points		
		160
Additional Requirement		
Subject	Title	Credit Points
INFO 7004	ICT Practicum	0
Spring Intake		
Course	Title	Credit Points
Year 1		
Spring session		
COMP 7013	Network Technologies	10
INFO 7002	Advanced Topics in Artificial Intelligence	10
COMP 7020	Artificial Intelligence Ethics and Organisations	10
Select one subject from your Major or one Alternate subject from any specialisation for a generic award.		10
At this point, students can exit with a Graduate Diploma in Artificial Intelligence		
		40

Autumn session

COMP 7016	Visualisation	10
COMP 7022	Natural Language Understanding	10
COMP 7019	Applied Machine Learning	10
COMP 7003	Big Data	10

At this point, students can exit with a Graduate Certificate in Artificial Intelligence

The subjects listed below count towards completion of this program for students who passed these subjects in 2021 or earlier.

MATH 7011 Predictive Analytics, replaced by COMP 7023 Predictive Analytics

Specialisations

Cybersecurity, Testamur Major (T003) (<https://hbook.westernsydney.edu.au/archives/2022-2023/majors-minors/cybersecurity-pg-testamur-major/>)

Data Analytics, Testamur Major (T004) (<https://hbook.westernsydney.edu.au/archives/2022-2023/majors-minors/data-analytics-pg-testamur-major/>)

Digital Futures, Testamur Major (T005) (<https://hbook.westernsydney.edu.au/archives/2022-2023/majors-minors/digital-futures-pg-testamur-major/>)

Networking, Testamur Major (T009) (<https://hbook.westernsydney.edu.au/archives/2022-2023/majors-minors/networking-pg-testamur-major/>)

Web and Mobile Computing, Testamur Major (T010) (<https://hbook.westernsydney.edu.au/archives/2022-2023/majors-minors/web-mobile-computing-pg-testamur-major/>)

Credit Points**40****Year 2****Spring session**

COMP 7021	Knowledge Representation and Reasoning	10
INFO 7015	Applied Cybersecurity	10
INFO 7016	Postgraduate Project A	10
Select one subject from your Major or one Alternate subject from any specialisation for a generic award.		10

Credit Points**40****Autumn session**

COMP 7007	Information Security Management	10
INFO 7017	Postgraduate Project B	10
Select two subjects from your Major or two Alternate subjects from any specialisation for a generic award.		20

Credit Points**40****Total Credit Points****160****Additional Requirement**

Subject	Title	Credit Points	
INFO 7004	ICT Practicum	0	Graduate Diploma in Artificial Intelligence (https://hbook.westernsydney.edu.au/archives/2022-2023/programs/graduate-diploma-artificial-intelligence-exit-only/)

Alternate Subjects for Generic Award

Subject	Title	Credit Points	
INFO 7014	Advanced Topics in Cybersecurity	10	Graduate Certificate in Artificial Intelligence (https://hbook.westernsydney.edu.au/archives/2022-2023/programs/graduate-certificate-artificial-intelligence-exit-only/)
COMP 7002	Advanced Topics in Networking	10	
INFO 7003	Advanced Topics in User System Interaction	10	
COMP 7004	Cloud Computing	10	
INFO 7018	Cloud Systems Development	10	
HUMN 7012	Cyber Justice (PG)	10	
COMP 7006	Data Science	10	
COMM 7003	Foundations of Media Arts Production (PG)	10	
CULT 7004	Global Digital Futures	10	
COMP 7008	Internet of Things	10	
COMP 7009	Mobile Computing	10	
COMM 7009	Mobile Media	10	
COMP 7011	Multimedia Communication Systems	10	
COMP 7024	Programming for Data Science	10	
COMM 7011	Researching Convergent Media	10	
COMP 7025	Social Media Intelligence	10	
INFS 7006	Software Testing and Automation	10	
INFS 7008	Systems and Network Security	10	
MATH 7016	The Nature of Data	10	
COMP 7017	Wireless Networking	10	
INFO 7013	Web Engineering	10	

Equivalent Subjects

Subject	Title	Credit Points
INFO 7002	Advanced Topics in Artificial Intelligence	10
INFO 7015	Applied Cybersecurity	10
COMP 7019	Applied Machine Learning	10
COMP 7020	Artificial Intelligence Ethics and Organisations	10
COMP 6003	Computer Vision	10
COMP 7007	Information Security Management	10
COMP 7021	Knowledge Representation and Reasoning	10
COMP 7022	Natural Language Understanding	10

COMP 7013	Network Technologies	10	Year 2
INFO 7016	Postgraduate Project A	10	Autumn session
INFO 7017	Postgraduate Project B	10	COMP 7007 Information Security Management 10
COMP 7016	Visualisation	10	INFO 7016 Postgraduate Project A 10
Total Credit Points		120	Select two subjects from your Major or two Alternate subjects from any specialisation for a generic award. 20

Additional Requirements

Subject	Title	Credit Points	Credit Points	40
INFO 7004	ICT Practicum	0	Spring session	
Students must also choose between a specialisation-specific award or complete 40 credit points of units selected from any specialisation for a generic award (total 40cps).			COMP 7021 Knowledge Representation and Reasoning 10	
Cybersecurity, Testamur Major (T003) (https://hbook.westernsydney.edu.au/archives/2022-2023/majors-minors/cybersecurity-pg-testamur-major/)			INFO 7015 Applied Cybersecurity 10	
Data Analytics, Testamur Major (T004) (https://hbook.westernsydney.edu.au/archives/2022-2023/majors-minors/data-analytics-pg-testamur-major/)			INFO 7017 Postgraduate Project B 10	
Digital Futures, Testamur Major (T005) (https://hbook.westernsydney.edu.au/archives/2022-2023/majors-minors/digital-futures-pg-testamur-major/)			Select one subject from your Major or one Alternate subject from any specialisation for a generic award. 10	
Networking, Testamur Major (T009) (https://hbook.westernsydney.edu.au/archives/2022-2023/majors-minors/networking-pg-testamur-major/)			Credit Points	40
Web and Mobile Computing, Testamur Major (T010) (https://hbook.westernsydney.edu.au/archives/2022-2023/majors-minors/web-mobile-computing-pg-testamur-major/)			Total Credit Points	160

Cybersecurity, Testamur Major (T003) (<https://hbook.westernsydney.edu.au/archives/2022-2023/majors-minors/cybersecurity-pg-testamur-major/>)

Data Analytics, Testamur Major (T004) (<https://hbook.westernsydney.edu.au/archives/2022-2023/majors-minors/data-analytics-pg-testamur-major/>)

Digital Futures, Testamur Major (T005) (<https://hbook.westernsydney.edu.au/archives/2022-2023/majors-minors/digital-futures-pg-testamur-major/>)

Networking, Testamur Major (T009) (<https://hbook.westernsydney.edu.au/archives/2022-2023/majors-minors/networking-pg-testamur-major/>)

Web and Mobile Computing, Testamur Major (T010) (<https://hbook.westernsydney.edu.au/archives/2022-2023/majors-minors/web-mobile-computing-pg-testamur-major/>)

Recommended Sequence

This sequence applies to students who commenced in Spring 2023 or later. If you commenced prior to Spring 2023 please refer to the Sequence 2022 - Autumn 2023 tab for details.

Qualification for this award requires the successful completion of 160 credit points as per the recommended sequence below.

Autumn Intake

Course	Title	Credit Points	Credit Points	40
Year 1			Autumn session	
Autumn session			COMP 7016 Visualisation 10	
COMP 7016	Visualisation	10	COMP 7022 Natural Language Understanding 10	
COMP 7022	Natural Language Understanding	10	COMP 7019 Applied Machine Learning 10	
COMP 7019	Applied Machine Learning	10	COMP 7013 Network Technologies 10	
COMP 7013	Network Technologies	10	At this point, students can exit with a Graduate Certificate in Artificial Intelligence	
			Credit Points	40
Spring session			Year 2	
COMP 6003	Computer Vision	10	Spring session	
INFO 7002	Advanced Topics in Artificial Intelligence	10	COMP 7021 Knowledge Representation and Reasoning 10	
COMP 7020	Artificial Intelligence Ethics and Organisations	10	INFO 7015 Applied Cybersecurity 10	
Select one subject from your Major or one Alternate subject from any specialisation for a generic award.		10	INFO 7016 Postgraduate Project A 10	
At this point, students can exit with a Graduate Diploma in Artificial Intelligence			Select one subject from your Major or one Alternate subject from any specialisation for a generic award. 10	
			Credit Points	40
Autumn session			Autumn session	
COMP 7007	Information Security Management	10	COMP 7007 Information Security Management 10	
INFO 7017	Postgraduate Project B	10	INFO 7017 Postgraduate Project B 10	

Select two subjects from your Major or two Alternate subjects from any specialisation for a generic award.	20	Graduate Diploma in Artificial Intelligence (https://hbook.westernsydney.edu.au/archives/2022-2023/programs/graduate-diploma-artificial-intelligence-exit-only/)
Credit Points	40	

Total Credit Points	160
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Additional Requirement

Subject	Title	Credit Points
INFO 7004	ICT Practicum	0

Alternate Subjects for Generic Award

Subject	Title	Credit Points
INFO 7014	Advanced Topics in Cybersecurity	10
COMP 7002	Advanced Topics in Networking	10
INFO 7003	Advanced Topics in User System Interaction	10
COMP 7004	Cloud Computing	10
INFO 7018	Cloud Systems Development	10
HUMN 7012	Cyber Justice (PG)	10
COMP 7006	Data Science	10
COMM 7003	Foundations of Media Arts Production (PG)	10
CULT 7004	Global Digital Futures	10
COMP 7008	Internet of Things	10
COMP 7009	Mobile Computing	10
COMM 7009	Mobile Media	10
COMP 7011	Multimedia Communication Systems	10
COMP 7024	Programming for Data Science	10
COMM 7011	Researching Convergent Media	10
COMP 7025	Social Media Intelligence	10
INFS 7006	Software Testing and Automation	10
INFS 7008	Systems and Network Security	10
MATH 7016	The Nature of Data	10
COMP 7017	Wireless Networking	10
INFO 7013	Web Engineering	10

Specialisations

Cybersecurity, Testamur Major (T003) (<https://hbook.westernsydney.edu.au/archives/2022-2023/majors-minors/cybersecurity-pg-testamur-major/>)

Data Analytics, Testamur Major (T004) (<https://hbook.westernsydney.edu.au/archives/2022-2023/majors-minors/data-analytics-pg-testamur-major/>)

Digital Futures, Testamur Major (T005) (<https://hbook.westernsydney.edu.au/archives/2022-2023/majors-minors/digital-futures-pg-testamur-major/>)

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Web and Mobile Computing, Testamur Major (T010) (<https://hbook.westernsydney.edu.au/archives/2022-2023/majors-minors/web-mobile-computing-pg-testamur-major/>)

Exit Awards

Students may exit with the 3766 - Graduate Diploma in Artificial Intelligence (80 credit points) or 3767 - Graduate Certificate in Artificial Intelligence (40 credit points) on completion of the relevant subjects as specified in the program structure. Please refer to the links below for details.