ARTIFICIAL INTELLIGENCE, MAJOR (0031)

Western Sydney University Major Code: 0031

Previous Code: M3134.1

Available to students in other Western Sydney University programs?
No

Advanced development of Artificial Intelligence (AI) and Robotics has resulted in increased AI applications in many industries as well as our everyday life. This major aims to introduce students to the foundations of AI as well as its modern practical applications. The major delivers solid knowledge, skills, techniques and practical applications in robotic programming, problem solving, expert systems, logic reasoning, knowledge representation, data visualization, data mining and machine learning. The objective of this major is to equip the students with AI capabilities that are in high demand in many aspects of modern industries and modern living.

Location

Campus	Mode	Advice
Parramatta Campus - Victoria Road	Internal	A/Prof Yun Bai (https://directory.westernsydney.ed search/email/y.bai@westernsydney.edu.a
Penrith Campus	Internal	A/Prof Yun Bai (https://directory.westernsydney.edu.au/ search/email/y.bai@westernsydney.edu.a

Major Structure 2022 - 2023

If you commenced in 2024 or later please refer to the Structure 2024 tab for details.

This major is only available to students in Bachelor of Computer Science or Bachelor of Computer Science (Advanced).

Students must complete 80 credit points as follows.

Subject	Title	Credit Points
COMP 2009	Data Structures and Algorithms	10
INFS 3003	Artificial Intelligence	10
COMP 3027	Robotic Programming	10
COMP 3032	Machine Learning	10
COMP 2025	Introduction to Data Science	10
Then select three of the following:		30
COMP 3013	Mobile Applications Development	
COMP 2020	Technologies for Web Applications	
COMP 2026	Visual Analytics	
COMP 3006	Computer Graphics	
COMP 3015	Operating Systems Programming	
COMP 3020	Social Web Analytics	
COMP 3012	Introduction to Cloud Computing	
COMP 3003	Cloud Computing Architecture	
Total Credit Points		**80**

Equivalent Subjects

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

MATH 2009 Introduction to Data Science, replaced by COMP 2025 Introduction to Data Science

MATH 2014 Visual Analytics, replaced by COMP 2026 Visual Analytics

Major Structure 2024

This major structure applies to students who commenced in 2024 or later. If you commenced prior to 2024 please refer to the Structure 2022-23 tab for details.

This major is only available to students in Bachelor of Computer Science or Bachelor of Computer Science (Advanced).

Students must complete 80 credit points as follows.

Subject	Title	Credit Points
COMP 3027	Robotic Programming	10
COMP 3032	Machine Learning	10
COMP 2025	Introduction to Data Science	10
Select three of the following:		30
COMP 3013	Mobile Applications Development	
COMP 2026	Visual Analytics	
COMP 3006	Computer Graphics	
COMP 3015	Operating Systems Programming	
COMP 3020	Social Web Analytics	
COMP 3012	Introduction to Cloud Computing	
COMP 3003	Cloud Computing Architecture	
COMP 2021	Software Engineering Fundamentals	
COMP 3028	Software Construction	
COMP 3033	Quantum Computing and Communication	
Select one of the following:		10
COMP 2009	Data Structures and Algorithms	
COMP 2030	Data Structures and Algorithms (Advanced)	
Select one of the following:		10
INFS 3003	Artificial Intelligence	
INFS 3020	Artificial Intelligence (Advanced)	
Total Credit Points		**80**

Related Programs

Bachelor of Computer Science (3506) (https://hbook.westernsydney.edu.au/archives/2023-2024/programs/bachelor-computer-science/)

Bachelor of Computer Science (Advanced) (3634) (https://hbook.westernsydney.edu.au/archives/2023-2024/programs/bachelor-computer-science-advanced/)