## **CYBER SECURITY, MAJOR** (0066)

Western Sydney University Major Code: 0066

Previous Code: M3116.1

Location

Available to students in other Western Sydney University programs? No

The Cyber Security major aims to develop graduates with sound skills in the discipline of information systems security. Today, the widespread use of networked systems means protecting these systems from various attacks is more important than ever. Cyber Security is an essential aspect of today's information systems. This major covers fundamental information security knowledge and security protocols from basic cryptography algorithms to their applications in computer systems and networked systems. Students will learn fundamental security concepts, practical implementation of the security application programs as well as ethical hacking techniques to protect cyber security.

## Students must complete 80 credit points as follows.

Subject	Title	Credit Points	
COMP 2008	Computer Organisation	10	
COMP 2009	Data Structures and Algorithms	10	
INFO 3002	Ethical Hacking Principles and Practice	10	
INFO 3006	Information Security	10	
INFO 3007	Network Security	10	
Select one of the following:			
COMP 3015	Operating Systems Programming		
COMP 2019	Systems Programming 1		
Select two from the following:			
COMP 3007	Computer Networks and Internets		
INFO 3001	Computer Security		
INFO 3015	Internet of Things and Smart Environments		
COMP 3033	Quantum Computing and Communication		
COMP 3020	Social Web Analytics		
Total Credit Points			

**Related Programs** 

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Campus	Mode	Advice	Bachelor of Computer Science (3506) (https://
Parramatta Campus -	Internal	CDMS@westernsydney.	eduhagok.westernsydney.edu.au/programs/bachelor-computer-science/)
Victoria Road			Bachelor of Computer Science (Advanced) (3634) (https://
Penrith Campus	Internal	CDMS@westernsydney.	eduhagok.westernsydney.edu.au/programs/bachelor-computer-science-
			advanced/)

## **Major Structure Current**

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.

Students must complete 80 credit points as follows.

Subject	Title	Credit Points
COMP 2008	Computer Organisation	10
INFO 3002	Ethical Hacking Principles and Practice	10
INFO 3007	Network Security	10
Select one of the following:		
COMP 3015	Operating Systems Programming	
COMP 2019	Systems Programming 1	
Select one of the following:		
COMP 2009	Data Structures and Algorithms	
COMP 2030	Data Structures and Algorithms (Advanced)	
Select one of the following:		
INFO 3006	Information Security	
INFO 3021	Information Security (Advanced)	
Select two from the following:		
COMP 3007	Computer Networks and Internets	
COMP 2027	Cyber Security	
INFO 3015	Internet of Things and Smart Environments	
COMP 3033	Quantum Computing and Communication	
COMP 3020	Social Web Analytics	
Total Credit Points		

## Major Structure 2022 - 2023

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