**Specialisation**

**Computer Science**

**COMPA1**

Computers are now ubiquitous, and critical to the functioning of all enterprises in modern industrial societies, from commerce to health and education. They now also play an important social role, opening new avenues for people to connect and to engage in public discourse. The demand for computing professionals capable of managing existing computing infrastructure or, more importantly, creating the next generation of computing applications, will continue to grow into the future.

This stream provides a solid grounding in the fundamentals of the computing discipline (programs, algorithms, design, systems, software engineering) and then allows students to choose from a wide range of electives in later years. The flexibility of the stream allows students to take a broad range of courses, or to focus on one particular area of computing.

This is the default plan for students in the 3778 BSc in Computer Science program or in dual degrees involving Computer Science.
**Faculty**
Faculty of Engineering

**School**
School of Computer Science and Engineering

**Study Level**
Undergraduate

**Minimum Units of Credit**
96

**Specialisation Type**
Major
Available in Program(s)

Program(s) in which this major is available

Bachelor of Science - BSc
3778 Computer Science
Faculty: Faculty of Engineering
Campus: Kensington
Units of Credit: 144
Typical Duration: 3 Years
**Specialisation Structure**

Students must complete 96 UOC.

**Core Courses**

Students must take 66 UOC of the following courses.

- **COMP1511**  | 6 UOC  
  Programming Fundamentals

- **COMP1521**  | 6 UOC  
  Computer Systems Fundamentals

- **COMP1531**  | 6 UOC  
  Software Engineering Fundamentals

- **COMP2511**  | 6 UOC  
  Object-Oriented Design & Programming

- **COMP2521**  | 6 UOC  
  Data Structures and Algorithms

- **COMP3900**  | 6 UOC  
  Computer Science Project

- **COMP4920**  | 6 UOC  
  Management and Ethics

- **MATH1081**  | 6 UOC  
  Discrete Mathematics

One of the following:

- **MATH1131**  | 6 UOC  
  Mathematics 1A
MATH1141 | 6 UOC
Higher Mathematics 1A

One of the following:
MATH1231 | 6 UOC
Mathematics 1B

MATH1241 | 6 UOC
Higher Mathematics 1B

One of the following:
COMP3121 | 6 UOC
Algorithms and Programming Techniques

COMP3821 | 6 UOC
Extended Algorithms and Programming Techniques

**Computing Electives**

Students must take at least 30 UOC of the following courses.

any level 3 Computer Science course

any level 4 Computer Science course

any level 6 Computer Science course

any level 9 Computer Science course

**Enrolment Disclaimer**

You are responsible for ensuring you enrol in courses according to your program requirements. myUNSW enrolment checks that you have met enrolment requirements such as pre-requisites for individual courses but not that a course will count towards your program requirements. Do not assume that because you have enrolled in a course that the course will be credited towards your program.
Pre-2019 Handbook Editions

Access past handbook editions (2018 and prior)

Pre-2019 Handbook Editions
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Authorised by Deputy Vice-Chancellor (Academic)
CRICOS Provider Code 00098G
ABN: 57 195 873 179