Overview

This program aims to produce professionals who are skilled in the manipulation and interpretation of large amounts of data. The Graduate Diploma has been developed to train scientists to meet the current, and future, strong demand for Data Scientists and Data Analysts. Graduates will have broad and advanced knowledge and skills in Data Science across the three areas of mathematics and statistics, computer science, and economics.
**Faculty**
Faculty of Science

**Campus**
Kensington

**Study Level**
Postgraduate

**Typical duration**
1 Years

**Delivery Mode**
Face-to-face

**Intake Period**
Term 1, Term 3

**Academic Calendar**
3+ Calendar

**Minimum Units of Credit**
48

**Award type**
Graduate Diploma

**Award(s)**
Graduate Diploma in Data Science and Decisions - GDDataSci

**CRICOS Code**
0100703
Learning Outcomes

1. Be able to apply advanced mathematical and computational techniques and business sensibilities to real-world problems involving complex data sets.
   
2. Demonstrate a high level understanding of the significance of science, technology, economics and social factors in modern society, and of the contributions they can make in improving material conditions.
   
3. Demonstrate an understanding of the role of speculation in the selection and solution of problems, the construction of hypotheses, and the design of experiments.
   
4. Demonstrate knowledge and skills in formulating problems involving both qualitative and quantitative data.
   
5. Be able to read critically and with understanding, to think logically, and to communicate clearly by written and oral means.
   
6. Be able to analyse information critically in a mathematical setting.
   
7. Be able to prepare, process, interpret and present data using appropriate qualitative and quantitative techniques.
   
8. Be able to apply the highest ethical standards to their professional and personal lives.
   
9. Demonstrate advanced and integrated knowledge of statistics, computer science, applied mathematics, and business strategies, and examine their applications in data science.

Graduate Capabilities:
For more information on Graduate Capabilities, please click on this link.
Program Structure

Students must complete 48 UOC as a standalone program.

Core Courses

Students must take 48 UOC of the following courses.

COMP9311 | 6 UOC
Database Systems

DATA9001 | 6 UOC
Fundamentals of Data Science

ECON5103 | 6 UOC
Business Economics

ECON5111 | 6 UOC
Economics of Strategy

MATH5855 | 6 UOC
Multivariate Analysis

MATH5905 | 6 UOC
Statistical Inference

One of the following:
COMP9020 | 6 UOC
Foundations of Computer Science

COMP9021 | 6 UOC
Principles of Programming

One of the following:
COMP9417 | 6 UOC
Machine Learning and Data Mining
Enrolment Disclaimer

Unless advised otherwise by your program authority, you should follow the rules for the handbook for the year you commenced your program. You are also 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.
Related Programs

Graduate Diploma in Health Data Science - GradDipHDS
5372 Health Data Science

Faculty: Faculty of Medicine
Campus: Kensington
Units of Credit: 48
Typical Duration: 1 Years

Read More

Graduate Certificate in Data Science and Decisions - GCDaSci
7959 Data Science and Decisions

Faculty: Faculty of Science
Campus: Kensington
Units of Credit: 24
Typical Duration: 0.7 Years

Read More
Admission Requirements

Entry Requirements

To gain entry to this program, students must:

1. Have completed a Bachelor of Mathematics OR a Bachelor of Science with a major in mathematics, statistics or Computer Science OR a Bachelor of Data Science and Decisions OR a suitable cognate degree as determined by the program authority

AND

2. Have sufficient Mathematics and/or Statistics and/or Data Science background, as indicated by an average of 70 or above in appropriate level III university courses

Notes

Prospective international students should note they will need to meet the University's English language requirements (http://www.unsw.edu.au/english-requirements-policy).

For more information about admission requirements for various UNSW programs, visit the following website(s):

Domestic Students
International Student
### Pathways

#### Post Graduate

**Doctor of Philosophy - PhD**

**1540 Economics**

Faculty: UNSW Business School  
Campus: Kensington  
Units of Credit: 144  
Typical Duration: 3 to 4 Years

[Read More]

**Doctor of Philosophy - PhD**

**1880 Mathematics**

Faculty: Faculty of Science  
Campus: Kensington  
Units of Credit: 144  
Typical Duration: 3 to 4 Years

[Read More]

**Doctor of Philosophy - PhD**

**1885 Computer Science**

Faculty: UNSW Canberra at ADFA  
Campus: Canberra  
Units of Credit: 144  
Typical Duration: 3 to 4 Years

[Read More]

**Master of Science - MSc**

**2920 Mathematics**

Faculty: Faculty of Science  
Campus: Kensington  
Units of Credit: 96  
Typical Duration: 2 Years

[Read More]

**Articulation Arrangements**
Other program(s) within articulated suite:

Graduate Certificate in Data Science and Decisions - GCDataSci

7959 Data Science and Decisions

Faculty: Faculty of Science
Campus: Kensington
Units of Credit: 24
Typical Duration: 0.7 Years

Read More
Professional Outcomes

Career Opportunities

Additional Information

Recognition of Prior Learning

RPL for work experience in a data sciences area as per the UNSW RPL policy and procedure will be considered for course credit, but not admissions. At least two years experience in a relevant position, such as data scientist, computer scientist, software engineer.
Program Fees

At UNSW fees are generally charged at course level and therefore dependent upon individual enrolment and other factors such as student's residency status. For generic information on fees and additional expenses of UNSW programs, click on one of the following:

- Domestic Students
- Commonwealth Supported Students
- International Students
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