Program

Data Science and Decisions

7959  |  24 Units of Credit

Overview

This program aims to produce professionals who are skilled in the manipulation and interpretation of large amounts of data. It 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.
<table>
<thead>
<tr>
<th><strong>Faculty</strong></th>
<th>Faculty of Science</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Campus</strong></td>
<td>Kensington</td>
</tr>
<tr>
<td><strong>Study Level</strong></td>
<td>Postgraduate</td>
</tr>
<tr>
<td><strong>Typical duration</strong></td>
<td>0.7 Years</td>
</tr>
<tr>
<td><strong>Delivery Mode</strong></td>
<td>Face-to-face</td>
</tr>
<tr>
<td><strong>Intake Period</strong></td>
<td>Term 1, Term 3</td>
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<tr>
<td><strong>Academic Calendar</strong></td>
<td>3+ Calendar</td>
</tr>
<tr>
<td><strong>Minimum Units of Credit</strong></td>
<td>24</td>
</tr>
<tr>
<td><strong>Award type</strong></td>
<td>Graduate Certificate</td>
</tr>
<tr>
<td><strong>Award(s)</strong></td>
<td>Graduate Certificate in Data Science and Decisions - GCDataSci</td>
</tr>
<tr>
<td><strong>CRICOS Code</strong></td>
<td>0100702</td>
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Learning Outcomes

1. Be able to analyse information critically in a mathematical setting.
   - Scholars
   - Professionals
   - Leaders

2. Demonstrate an understanding of the role of speculation in the selection and solution of problems, the construction of hypotheses, and the design of experiments.
   - Scholars
   - Professionals
   - Leaders

3. Demonstrate knowledge and skills in formulating problems involving both qualitative and quantitative data.
   - Scholars
   - Professionals

4. Be able to apply advanced mathematical and computational techniques and business sensibilities to real-world problems involving complex data sets.
   - Leaders
   - Scholars

5. Be able to apply the highest ethical standards to their professional and personal lives
   - Professionals
   - Global Citizens

6. Be able to prepare, process interpret and present data using appropriate qualitative and quantitative techniques.
   - Scholars
   - Professionals

7. Be able to read critically and with understanding, to think logically, and to communicate clearly by written and oral means.
   - Professionals
   - Scholars
   - Leaders

8. 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.
   - Professionals
   - Global Citizens

   - Leaders
   - Professionals
   - Scholars

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

Students must complete 24 UOC as a standalone program.

Core Courses

Students must take 24 UOC of the following courses.

**DATA9001 | 6 UOC**  
Fundamentals of Data Science

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

**COMP9021 | 6 UOC**  
Principles of Programming

One of the following:  
**ECON5103 | 6 UOC**  
Business Economics

**ECON5111 | 6 UOC**  
Economics of Strategy

One of the following:  
**MATH5855 | 6 UOC**  
Multivariate Analysis

**MATH5905 | 6 UOC**  
Statistical Inference

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 Data Science and Decisions - GDataSci

5959 Data Science and Decisions

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

Read More

Graduate Certificate in Health Data Science - GradCertHDS

7372 Health Data Science

Faculty: Faculty of Medicine
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 65 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

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 Diploma in Data Science and Decisions - GDataSci*

**5959 Data Science and Decisions**

Faculty: Faculty of Science
Campus: Kensington
Units of Credit: 48
Typical Duration: 1 Years
Professional Outcomes

Career Opportunities

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