UNSW Science
Graduate Certificate in Data Science (Online)

The Graduate Certificate provides you with the skills that employers demand in a fast-tracked model. The program covers the foundational skills of Data Science as applied in computer science, economics and mathematics. It also includes programming, statistics and data systems. Completing these courses will give you a strong foundation and the advanced knowledge in data science that are in high demand.

<table>
<thead>
<tr>
<th>Faculty: UNSW Science</th>
<th>Duration: This program can be completed in eight months</th>
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<tbody>
<tr>
<td>Program: Graduate Certificates in Data Science</td>
<td>Study mode: 100% Online</td>
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<td>Program Code: 7446</td>
<td>Study Load: Each course is seven weeks long and has an orientation - usually the week before the course begins. UNSW Online advises a minimum of 15-20 hours of study per week</td>
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<td>Units of Credit: 24 Units of credit</td>
<td>Program intakes: Six intakes annually (not all courses will be offered at every intake)</td>
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<td>Courses: 4 courses</td>
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Learning Outcomes

PLO 1: Apply in depth knowledge of statistics, computer science, applied mathematics and business strategies, in data preparation, manipulation, analysis and interpretation.
  • Scholars

PLO 2: Prepare, analyse, interpret and present data to inform business decision making.
  • Leaders
  • Scholars

PLO 3: Collaborate effectively in disciplinary and interdisciplinary teams.
  • Leaders

PLO 4: Demonstrate cultural, professional and ethical competence to become a responsible Data Scientist and a global citizen.
  • Professionals
  • Global Citizens

PLO 5: Apply enquiry-based learning, including, analysis and critical thinking, reflection and problem solving, to become a lifelong learner and an innovative and self-directed professional.
  • Leaders
  • Professionals

PLO 6: Communicate effectively in written and oral formats to engage specialist and non-specialist audiences.
  • Leaders
  • Scholars
  • Professionals
Graduate Capabilities

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

Program Structure

Students must complete 24 UOC when taken as a standalone program

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course</th>
<th>UOC</th>
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<tbody>
<tr>
<td>ZZEN9021</td>
<td>Principles of Programming</td>
<td>6</td>
</tr>
<tr>
<td>ZZEN9311</td>
<td>Database Systems</td>
<td>6</td>
</tr>
<tr>
<td>ZZSC5905</td>
<td>Statistical Inference for Data Scientists</td>
<td>6</td>
</tr>
<tr>
<td>ZZSC9001</td>
<td>Foundations of Data Science</td>
<td>6</td>
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Admission Requirements

Minimum Entry Requirement

Applicants require a Bachelor (pass) degree in a cognate discipline (computer science, mathematics or similar) or equivalent or a Bachelor (Honours) degree in any discipline or equivalent, with at least three level 3 and above courses in Mathematics and Statistics. The standard entry cut-off is 65% equivalent as per the UNSW PG coursework entry score calculator. Applicants with a degree from non-cognate area who has at least five years experience in a data science or data analytics role may be considered for entry to the program.

English language proficiency requirement

Please see unsw.edu.au/english-requirements-policy

UNSW Recognition of Prior Learning (Coursework Programs)

Procedure applies to all programs. Please see gs.unsw.edu.au/policy/rplprocedure

Recognition of Achievement

In accordance with UNSW Policy and Procedure, Pass with Distinction is awarded in all eligible Bachelor Pass programs and Award with Excellence is awarded in all coursework Masters programs. Approval of Academic Board is required for a particular program to opt out.

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:
Resources and Availability Requirements

As a student in the Data Science program, you will undertake courses which may contain a digital exam. These exams will always take place during the examination period which you can view in your key dates. These exams will also very likely take place during business hours (Sydney AU time) so as to ensure the appropriate level of support can be given to students during the exam. You may also be required to purchase extra equipment such as a “Graphics Tablet” device in order to complete the exam – this equipment can vary in cost but estimate indicative cost is $100 (AUD). This would be a one-off cost, and equipment may be reusable across multiple courses.

You may also be required to purchase a text book in order to complete a course in your program. Details of the text book and where it can be purchased will always be supplied in your course outline. Whenever possible, the textbook will be made available in e-book format, or for free via the library. Costs may vary, but estimate indicative cost is $100 (AUD).

Key dates

You should be aware of your key dates. Please click here.

Class Timetable

Please visit the Class Timetable to view course offering information. timetable.unsw.edu.au/