

# Master of Applied Data Science (MADS) Postgraduate Diploma in Applied Data Science (PGDipADS)

## Key facts about the programme

- 1 Work-integrated learning postgraduate qualification
- 2 Graduates can apply from undergraduate degrees from most disciplines
- 3 Designed to meet world-wide shortage for data scientists
- 4 Data science research centres



## What does this programme cover?

Data science has become the world's fastest growing profession, as organisations all over the world recognise the value of 'Big Data' – the vast amounts of data generated and collected by people and organisations every second that can reveal patterns, trends, and associations on a large scale.

UC's Master and Postgraduate Diploma in Applied Data Science programmes are designed to accommodate students from a range of backgrounds who want to enhance or build their data science capabilities.

### Compulsory courses:

- Data Analytics and Business Intelligence Systems in Organisations
- Digital Humanities Research Methods
- Official Statistics
- Big Data

Elective course options include:

- Biological Sciences
- Computer Science
- Digital Humanities
- Economics
- Environmental Science
- Finance
- Geography
- Geology
- Mathematical Sciences
- Physics
- Psychology
- Statistics

### Master's Project

The project can either be research or done with industry. The industry project brings students to work in interdisciplinary teams, as data scientists do, with the project providing a focus on teamwork, communication, and management skills.

The PGDipADS has the same course content as the MADS degree, with one less paper (15 points) and does not require the project papers (30 points).

## AT A GLANCE

### Start dates

February  
July

### Months to complete

MADS  
Full-time ..... 1 year  
Part-time ..... up to 2 years  
PGDipADS  
Full-time ..... 1 year  
Part time ..... 2 Years

### Features

Industry project ..... Yes

### Scholarship

For more information on scholarships go to [www.canterbury.ac.nz/get-started/scholarships/](http://www.canterbury.ac.nz/get-started/scholarships/)



‘I founded my own data science consulting company to apply theory to real-world problems. I’m responsible for determining how to solve problems in a client’s domain. In my first year of consultancy I worked on projects in online advertising, sociology, sports analysis, marketing, and media broadcasting. My experience allows me to help students who want to be part of the ‘big data revolution’

**James Williams**

UC graduate

Founder / Data Scientist / Software Engineer, Isogonal Limited  
Lecturer, University of Canterbury

### What are the entry requirements?

- A relevant bachelor’s degree with a UC equivalent B average in 300 level courses
- Dean of Science approval

### What careers can this lead to?

Data science is an exciting field to get into and one of the world’s faster growing employment sectors, making it a great career choice. As a data scientist, you’ll analyse past and current data to provide predictions and valuable insights into everything from social behaviours to the natural environment. Data scientists are the bridge between IT experts and analysts.

MADS and PGDipADS go on to work in:

- Technology companies
- Consulting and research firms
- Science organisations
- Government agencies
- Manufacturing and retail sectors
- Professional services
- Healthcare
- Finance and insurance
- Start-up businesses

### Average starting salary

- \$105,000 – \$133,000\*

### Enrolment information

#### How to apply

Apply online through myUC:  
<https://myuc.canterbury.ac.nz>

#### When to enrol

Applications need to be received five weeks before the programme starts.

#### Who to contact

Te Kura Pāngarau | School of Mathematics and Statistics

T: +64 3 369 2233

E: [MathStatsEnquiries@canterbury.ac.nz](mailto:MathStatsEnquiries@canterbury.ac.nz)

[www.canterbury.ac.nz](http://www.canterbury.ac.nz)

### Learn from the best

UC is the top university in the country for the proportion of researchers that teach, so you will be taught by scientists who are at the forefront of advances in their field. Learn from internationally recognised experts in biology, computing, data science, geography, linguistics, mathematics and more. We collaborate with a range of specialist, internationally recognised organisations working in the data science area; including:

- Geohealth
- Geospatial Research Institute



### Purpose-built facilities

UC’s laboratories, research centres, and field stations are internationally renowned. Added to this is the Ernest Rutherford building, which embraces the Ngāi Tahu cultural narrative of Whatukura in its design, and ensures students are at the forefront of contemporary science. Learning and research spaces in the centre have state-of-the-art equipment, high-tech computing systems and technology.

\*[www.careers.govt.nz](http://www.careers.govt.nz)