

**WESTERN SYDNEY**  
UNIVERSITY



POSTGRADUATE STUDY



Master of Data Science

# MASTER OF DATA SCIENCE

## DATA SCIENCE WILL ENHANCE YOUR CAREER ASPIRATIONS, WHATEVER YOUR DOMAIN OF EXPERTISE



28%

IBM PREDICTS DEMAND FOR DATA SCIENTISTS WILL RISE 28% BY 2020<sup>1</sup>



\$140,000

AVERAGE AUSTRALIAN DATA SCIENCE SALARY<sup>2</sup>

Data is ubiquitous in this information age; those who can extract information from data have tremendous power. Data Scientists can model past events to determine associations, causes and effects, and they can simulate environments to forecast future trends. Their repertoire of analytical skills consists of designing simple exploratory models for computing statistics, to complex machine learning models resembling artificial intelligence, that allow machines to produce creativity.

A Data Scientist's knowledge and skills come from the domains of Mathematics, Statistics and Computing, providing the ability to solve problems and provide machine learning using state of the art technology.

### WHAT YOU'LL STUDY

This degree equips its graduates with the skills and knowledge for designing experimental studies, building and fitting models for analysis, visualisation, estimation and prediction, machine learning for prediction and analysis of complex data relationships, and storage and retrieval of big data. These skills are essential for the analysis of customer transactions and behaviour, scientific investigations, financial trends, and online behaviour.

Our graduates will have the knowledge and skills required to operate effectively in a data-driven world.

More information on course structures and units is available from the online University Handbook. Visit [westernsydney.edu.au/handbook](http://westernsydney.edu.au/handbook)

### CAREER OPPORTUNITIES

A Master of Data Science can lead to many careers involving data analytics. Examples are data scientist, data analyst, quant analyst in the fields of Banking, Insurance, Finance, Advertising, Retail, Telecommunications, Market research, Consulting, Scientific Research, Bioinformatics, Sports science, Education and Government analytics.

Data science is a crucial component for any business involved in information technology, especially large companies such as Google, Facebook and Amazon.

Graduates with data science skills combined with their undergraduate qualifications will find more diverse employment opportunities.

<sup>1</sup> Hays Quarterly Report, Hays, January-March 2016

<sup>2</sup> Is Australia at a technology tipping point?, Accenture, 2016

### MASTER OF DATA SCIENCE

Course Code	3735
CRICOS Code	089442E
Duration	2F
Location	Parramatta
Intakes	March and July
Admission	Applicants must have successfully completed an undergraduate degree, or higher, in any discipline.
Units	Big Data, Visualisation, Programming for Data Science, The Nature of Data, Data Science, Advanced Statistical Methods, Predictive Analytics, Master Project 1 and 2, Social Media Intelligence, Genomic Data Science, Advanced Machine Learning, Four Electives.

Key: F = Full-time

# WHY POSTGRADUATE STUDY AT WESTERN SYDNEY?

## You've come a long way. Go further.

Located in the heart of one of Australia's fastest growing economic regions, Western Sydney University offers unlimited potential to students with the drive, ambition and will to succeed.

Ranked amongst the top two per cent of universities on the globe, Western Sydney is a world-class university with a growing international reach and reputation for academic excellence and impact-driven research.

To take your career to the next level, you need more than classrooms, more than theory. That's why we offer a combination of on campus learning environments, with real-life, on-the-ground, hands-on opportunities for skill development in professional and community settings. We value academic excellence, integrity and the pursuit of knowledge.

We equip our students with the means to do more than just advance their careers. We are unlocking the potential of the next generation of global citizens, leaders and change-makers.

## PROGRESS. UNLIMITED.

### HOW TO APPLY

International students apply direct to Western Sydney University.  
[westernsydney.edu.au/international/apply](https://westernsydney.edu.au/international/apply)

Applicants must meet minimum academic entry and English proficiency requirements.  
[westernsydney.edu.au/international/entryrequirements](https://westernsydney.edu.au/international/entryrequirements)

International students are also required to have genuine access to sufficient funds while studying in Australia. Funds should be sufficient to contribute to the cost of travel, tuition, school costs for any dependants, and living costs.  
[westernsydney.edu.au/international/fees](https://westernsydney.edu.au/international/fees)

### FURTHER INFORMATION

For further details about courses, including course structure, unit descriptions, work placement requirements (if applicable), visit [handbook.westernsydney.edu.au](https://handbook.westernsydney.edu.au)

For information about studying at Western Sydney University, including assessment methods, course progression and attendance requirements, accommodation options and living in Australia, visit [westernsydney.edu.au/studyandlife](https://westernsydney.edu.au/studyandlife)



**TOP 2%**  
OF UNIVERSITIES  
WORLDWIDE\*



**#1 UNI**  
IN SYDNEY FOR EMPLOYER  
SATISFACTION\*\*



**5 STARS**  
FOR INNOVATION AND  
TEACHING^

\*Times Higher Education Rankings 2018

\*\*Employer Satisfaction Survey 2018 (85.6% satisfaction rating)

^QS Top Universities: QS Stars University Ratings 2018

### DISCLAIMER

Western Sydney University reserves the right to withdraw or vary courses listed within this publication. In the event that the course or courses are to be changed, or in the event of cancellation, applicants will be advised to the address specified on their application.

CRICOS provider code: 00917K

## **CONTACT US**

To discuss your study goals and  
career options, contact us on  
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**[westernsydney.edu.au](http://westernsydney.edu.au)**