

Program Code: 8646

Faculty: Science

Study Level: Postgraduate

Delivery Mode: Fully online

Academic Calendar: Hexamester

Award Type: Master

Units of Credit: 72

Campus: N/A - Online

Typical Duration: 2 Years F/T

Intake Period: 6 annually; Jan, Mar, May, Jul, Sept & Oct (not all courses will be offered at every intake)

Minimum Units of Credit: 72

The Master of Data Science degree explores more ways to organise, identify, analyse and ultimately use data to inform strategies, redefine ambiguous questions and find answers that make a genuine impact. Students will develop advanced technical and mathematical skills to unpick complexities and make sense of the numbers.

Depending on where you wish to direct your Data Scientist career, you can specialise in areas such as machine learning, database systems or statistics. Study for this degree is fully online and features nine core courses and three elective courses which can be completed in two years. UNSW's online learning environment has been designed to seamlessly fit into your busy schedule and you'll be able to access course resources on any device, at any time.

Learning outcomes

PLO 1.

Prepare, analyse, interpret and present data to provide useful insights for business decision making.

PLO 2.

Demonstrate cultural, professional and ethical competence to become a responsible Data Scientist and a global citizen.

PLO 3.

Research and 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.

PLO 4.

Collaborate and lead interdisciplinary teams

PLO 5.

Communicate effectively in written and oral formats to engage specialist and non-specialist audiences.

PLO 6.

Synthesise, evaluate and integrate a complex body of knowledge underpinning data science practice including statistics, computer science, applied mathematics and business strategies..

Graduate capabilities

For more information on Graduate Capabilities, please click on this [link](#).

Program structure

Students must complete 72 UOC as a standalone program.

Core 1 Courses

Students must take 24 UOC of the following courses.

Course code	Course	UOC
ZZEN9021	Principles of Programming	6
ZZSC9001	Foundations of Data Science	6
ZZSC5905	Statistical Inference of Data Scientists	6
One of the following:		
ZZBU5611	Strategic Decision Making	6
ZZEN9311	Database Systems	6

Core 2 Courses

Students must take 12 UOC of the following courses:

Course code	Course	UOC
ZZSC8506	Regression Analysis for Data Scientists	6
ZZSC5836	Data Mining and Machine Learning	6

Core 2 Electives

Students must take at least 30 UOC of the following courses.

Course code	Course	UOC
ZZBU5611	Strategic Decision Making*	6
ZZBU6505	Data and Ethics	6
ZZBU6507	Data Visualisation and Communication	6
ZZEN9311	Database Systems*	6
ZZEN9313	Big Data Management	6
ZZSC5855	Multivariate Analysis for Data Scientists	6
ZZBU6510	Decision Making in Analytics	6
ZZEN9444	Neural Networks, Deep Learning	6
ZZSC5960	Bayesian Inference and Computation for Data Scientists	6

*Can be selected if you have not already taken as a Core 1 Course

Research Project

Students must take 6 UOC of the following courses.

Course code	Course	UOC
ZZSC9020	Data Science Project	6

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.

Admission requirements

Entry Requirements

A completed Graduate Diploma in Data Science with a WAM of 65 or higher, may be considered.

OR

A completed undergraduate degree in Data Science or cognate discipline (e.g. Computer Science, Economics, Mathematics, Statistics)

AND

have sufficient Data Science background as indicated by an average of 70 or above across three Level III courses in Mathematics and/or Statistics and/or Computer Science and/or Econometrics.

Progression Requirements

For more information on university policy on progression requirements please visit [Academic Progression](#).

Pathways

Students can start with the Graduate Certificate in Data Science (7446) and articulate into the Graduate Diploma in Data Science (5646) if they achieve a WAM of at least 65 for the Graduate Certificate in Data Science (7446).

Students can articulate into the Master of Data Science (8646) if they achieve a WAM of at least 65 in the Graduate Diploma in Data Science (5646).

Students who enrol in the Master of Data Science can exit with a Graduate Certificate in Data Science upon completion of 24 UOC from the Core 1 Courses list.

Students who enrol in the Master of Data Science can exit with a Graduate Diploma in Data Science upon completion of 48 UOC with 24 UOC from the Core 1 Courses list, 12 UOC from the Core 2 Courses list and 12 UOC from the Core 2 Electives list.

Additional information

Further Information

Please note that these requirements may be subject to change. Students are advised to follow requirements according to the year they commenced.

[Timetables](#)

Contact

Contact UNSW Online's Student Enrolment Advisors

E: future-student@studyonline.unsw.edu.au

Ph: 1300 974 990

W: <https://studyonline.unsw.edu.au/contact>

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](#)

[International Students](#)