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Master of Data Science

LA TROBE UNIVERSITY

Master of **Data Science**

Some of society's most important challenges are also the most difficult to solve. The more data we gather in an attempt to understand these challenges, the more complex they become. This is where the role of data scientists have become so important, and why we've designed our Master of Data Science.

Why study a Master of Data Science?

La Trobe's Master of Data Science will give you the technical and practical expertise needed for a rewarding career interpreting and working with data. Developed in partnership with researchers and industry, you can choose from three data-discipline streams. Be set to master the data for any issue, in any industry.

What will I learn?

Study advanced subjects in computer science, mathematics and statistics, then choose one of:

Big data and cloud computing

- Work at the forefront of the Big Data and cloud industries by using your scientific data findings to help organisations plan strategically.
- Big Data and cloud computing are ever-evolving fields, so the demand for specialists is only set to increase.

Analytical science

- Develop a high level of proficiency in data-analysis, modern statistical software, meta-analysis, analysis of repeated measures data and models for bioinformatics.
- Choose elective subjects such as advanced statistics, health sciences and business and computing technologies.

Bioinformatics

- Learn about the collection, classification, storage and analysis of biological and biochemical information using computers – specifically in relation to molecular genetics and genomics.

Career Outcomes

Data science is a highly-employable field with a global demand. As a graduate, you can expect to find work as a:

- Data scientist
- Bioinformatician
- Machine-learning engineer
- Business intelligence analyst
- Statistician

Course details

Location/course code

Melbourne Campus (Bundoora) (SMDS)

CRICOS code

092396B

Annual tuition fee

$31 000 per 120 credit points[5]

Duration

2 years full-time

Intake

Semester 1 (March 2020)
Semester 2 (July 2020)

Accreditation

The qualification awarded on graduation is recognised in the Australian Qualifications Framework (AQF) as Level 9.

Advanced Standing

Advanced Standing is assessed on a case by case basis and in line with the La Trobe University Credit policy.

Prerequisites

Academic entry requirement

An Australian Bachelor's degree or international equivalent.[6]

English language requirement

IELTS (Academic) score of 6.5 with no individual band score less than 6.0.

Scholarships

Find out more about our scholarships:
latrobe.edu.au/scholarships

Key features

- Work placement opportunities are available with leading organisations.
- Small class sizes and highly qualified teaching staff provide an intimate learning experience.

We offer a leading **career ready** program that develops professional skills.[1]

La Trobe is in the top **1.2%** of universities worldwide.[2]

Our graduates have an employer satisfaction rating of **86.6%**[3]

Working in Australia, the average pay for a senior data analyst is **A$93 000** per year.[4]

For further enquiries

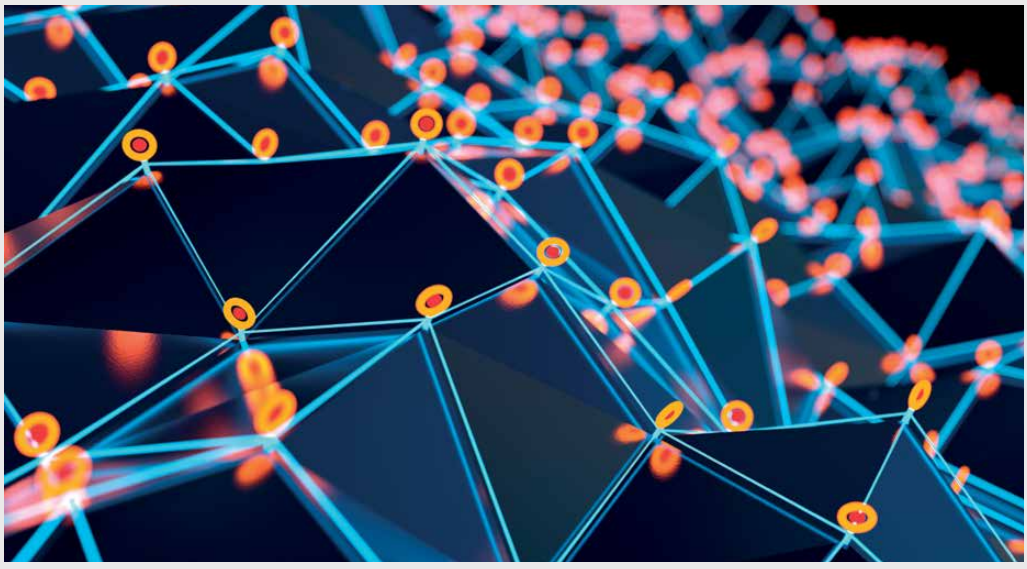
For more information about entry requirements, scholarships and how to apply, visit:

latrobe.edu.au/int-smds

Sample course structure[7]

Teaching period	Subject name	Subject code	Credit points
TE-SEM-1	Academic Integrity Module (online)*	**LTU0AIM**	0
TE-SEM-1 or TE-SEM-2	Database Fundamentals	**CSE4DBF**	15
TE-SEM-1 or TE-SEM-2 or TE-SUM-1	Object-Oriented Programming Fundamentals	**CSE4OOF**	15
TE-SEM-1	Mathematics for Data Science	**MAT4MDS**	15
TE-SEM-1	Probability and Statistics for Data Science	**STM4PSD**	15
TE-SEM-1	Big Data Management on the Cloud	**CSE5BDC**	15
TE-SEM-2	Data Exploration and Analysis	**CSE5DEV**	15
TE-SEM-1	Machine Learning	**CSE5ML**	15
TE-SEM-2	Data Mining	**CSE5DMI**	15
TE-SEM-2	Web Development on the Cloud	**CSE5WDC**	15
TE-SEM-1	Analysis of Repeated Measures	**STA5ARM**	15
TE-SEM-1 or TE-SEM-2 or TE-SUM-1	Industry Placement	**STM5IPL**	30
TE-SEM-1 or TE-SEM-2 or TE-SUM-1	Four elective subjects on data science applications in statistics, computer science, business or health sciences		60

* LTU0AIM is a not-for-credit subject that you are required to complete at the commencement of your first semester. The subject is designed to enhance your knowledge and awareness of issues concerning academic integrity.



'Demand for data scientists has more than tripled over last five years. The Master of Data Science is a distinct degree that combines advanced techniques from statistics, computer science and mathematics and real-world applications. We work with our industry and research partners to incorporate cutting-edge methodologies and real-world data analysis problems in the course. Students choose from a number of elective subjects from other departments to master specific applications of data science methods. It equips students with career-ready skills to analyse large complex data.'

Dr Andriy Olenko, Associate Professor
Masters of Data Science Program Director

1. La Trobe's Career Ready Advantage means you develop the skills employers want.
2. Time Higher Education (THE), 2019, World University Rankings 2019 ; Consejo Superior de Investigaciones Científicas (CSIC), 2019, Ranking Web of Universities.
3. Quality Indicators for Learning and Teaching (QILT), 2018, 2017 Employer Satisfaction Survey.
4. payscale.com/research/AU/Job=Senior_Data_Analyst/Salary
5. 120 credit points represents full-time study for one year
6. Meeting minimum prerequisites does not guarantee an offer of a place. Entry into all La Trobe courses is based on competitive selection and there may be limited places available.
7. Sample course structure is indicative and subject to change depending on location, offer year or chosen specialisations, majors, minors and electives. Structures are not finalised until October, so the sample is based on the most recently approved structure. For more information, refer to the Handbook.

QS STARS™ RATING SYSTEM
2019 ★★★★★

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at La Trobe University

You've done the research and read the guide.
Now get in touch for expert course advice.

Postgraduate webinars

Attend one of our digital information sessions to learn more about this course and connect with our expert academics.

Register now to secure your place:
latrobe.edu.au/pg-webinars

One-on-one advice

Book a one-on-one consultation to discuss your study options. Available over the phone, via video conference or in person at a campus near you.

Book a meeting:
latrobe.edu.au/consult

Want to know more? Get in touch

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1300 135 045

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CRICOS Provider 00115M. Published by La Trobe University, September 2019.

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CRICOS Provider 00115M DC36455 09/19