Master of Analytics

2019
Postgraduate

With data-driven decisions now a fundamental part of business operations, this program provides you with the platform to be a business-ready problem solver.

Analytics is the science and art of analysing data to make better informed decisions.

It builds on the tradition of statistics and operations research, bringing together tools and expertise from computer science, engineering and business.

This blend of disciplines makes analytics unique in its capacity to solve critical real-world problems. You will learn how to use data to make informed decisions that make significant contributions to the success of organisations, providing a rewarding and valued career path.

The Master of Analytics prepares you for statistical analysis in the business world. With a diverse range of electives there is a focus on work-integrated learning.

Career outlook

Graduates are employed by a variety of scientific, commercial and government enterprises, most commonly as data scientists, statisticians, business analysts, consultants, modellers and researchers.

Employment in marketing has grown exponentially over recent years, followed closely by finance, consulting and business intelligence.

With the increasing availability of data available from sources including smartphones, smartwatches and the internet, there will always be analytics opportunities to derive insights.

Learning and teaching

The Master of Analytics is delivered through a mixture of lectures, practicals, online materials, computer lab sessions, individual and group projects.

Classes are usually held once a week in the evening over a two-hour period.

You will learn the fundamentals of statistics and computer programming and tools including SQL, SAS Enterprise Guide, SAS Enterprise Miner, Python, Java, Julia, CPLEX, Gurobi and Arena, as identified by our industry partners.

You will also have the opportunity to apply for placements or internships and have them count towards the program in the second year.

Industry connections

The program focuses on providing you with analytics experience and work-integrated learning (WIL).

Recent international student placements include:

- Bosch Corporation, Japan
- Continental, Germany
- Siemens, Germany.

All analytics students have a capstone experience with our industry partners, working on real data. You'll do industry projects and develop your analytical capabilities by solving problems hands-on.

Professional recognition

Graduates can apply for membership of these organisations:

- Statistical Society of Australia Inc. (SSAI)
- Australian Society for Operations Research (ASOR)
- American Statistical Association (ASA)
- Institute for Operations Research and the Management Sciences (INFORMS)
- Institute of Analytics Professionals of Australia (IAPA).

Program snapshot

Program code: MC242

Exit points

After completing 96 credit points of study approved by the program manager, you may exit with a graduate diploma.

Duration

Full-time: 2 years
Part-time: 4 years

Location

City campus

Program Manager

Dr. Mali Abdollahian
Tel. +61 3 9925 2248
Email: mali.abdollahian@rmit.edu.au

How to apply

Direct to RMIT University:
rmit.edu.au/programs/apply/direct

Fees

To learn how to calculate fees visit:
rmit.edu.au/programs/fees/postgraduate

rmit.edu.au/programs/mc242

Program structure

The Master of Analytics consists of 192 credit points. You can specialise in computer science, economics, finance, logistics or marketing, or gain a broader understanding of all fields.

Program elective examples

- Advanced Programming Techniques
- Algorithms and Analysis
- Analysis of Large Data Sets
- Artificial Intelligence
- Business Systems Analysis and Design
- Data Mining
- Design and Analysis of Experiments
- Digital Strategy
- Econometric Techniques
- Economic Analysis for Business
- Fixed Income Securities and Credit Analysis
- Forecasting
- Globalisation and Business IT
- Information Systems Risk Management
- Information Theory for Secure Communications
- Intelligent Web Systems
- Knowledge and Data Warehousing
- Mathematical Modelling and Decision Analysis
- Measurement and Improvement
- Methods and Models of Operations Research
- Multivariate Analysis Techniques
- Planning and Control
- Project Management
- Quantitative Methods in Finance
- Questionnaire and Research Design
- Regression Analysis
- Risk Management and Feasibility
- Social Media and Networks Analytics
- Sports Analytics
- Statistical Inference
- Statistics of Quality Control and Performance Analysis.

Year 1	Introduction to Statistics	Database Concepts	Database Preprocessing	Program elective
	Science elective	Science elective	Program elective	Program elective
Year 2	Applied Research Project	Program elective	Program elective	Program elective
	Program elective	Program elective	Program elective	Program elective

■ Compulsory courses   ■ Program electives   ■ Science electives

Please note: This is an example of the program structure and program electives. Courses may change and may not be available each semester.

Entry requirements

You must have one of the following:

- A bachelor degree.

OR

- At least 10 years of relevant work experience.

International qualifications are assessed according to the Australian Qualifications Framework (AQF).

Credit and exemptions

If you have successfully completed one of the following qualifications majoring in analytics, statistics, operations research or a relevant discipline you will be eligible for exemptions as follows:

Qualification level	Exemptions
Bachelor degree Graduate certificate (AQF Level 7 or equivalent)	Up to 48 credit points (equivalent to one semester of full-time study)
Bachelor degree (honours) Graduate diploma Master PhD (AQF Level 8 or higher)	Up to 96 credit points (equivalent to two semesters of full-time study)

If you have successfully completed one of the following qualifications majoring in economics, finance, logistics, marketing, supply chain management, engineering (management), information technologies, information security, computer science, geospatial science or a relevant discipline you may be eligible for exemptions as follows:

Qualification level	Exemptions
Bachelor degree Graduate certificate Bachelor degree (honours) Graduate diploma Master PhD (AQF Level 7 or higher)	Up to 48 credit points (equivalent to one semester of full-time study)