MASTER OF BUSINESS ANALYTICS

By doing a Master of Business Analytics you’ll develop the skills to use data to better understand the world around you, opening doors to new exciting job prospects. In this degree, you will learn cutting-edge techniques, and rigorous foundations in statistical thinking, probabilistic modelling and computational techniques.

The Master of Business Analytics is a hands-on program, where you will learn how to solve problems, analyse and interpret data, as well as collect, tidy, wrangle and build recipes with fresh and local data that tell you about your world. You’ll also have an opportunity to make web apps and interactive graphics to communicate interesting patterns and stories. Flexibility is also provided to undertake more in-depth computational or theoretical study in areas of particular interest.

Your instructors are world experts in the field of data-driven decision making, with active and globally connected research programs. And as part of a small and elite program, you’ll work closely with your instructors, resulting in more personalised assistance with your career development.

Course structure

The course is structured in three parts. Part A. Advanced preparatory, Part B. Mastery knowledge and Part C. Application studies. All students complete Part B and C. Depending upon prior qualifications, you may receive credit for Part A.

- **Part A.** Advanced preparatory
  - 24 credit points
  - Introduction to data analysis
  - Statistical thinking
  - Introduction to machine learning
  - Applied forecasting

- **Part B.** Mastery knowledge
  - 48 credit points
  - Wild-caught data
  - Collaborative and reproducible practices
  - Exploratory data analysis
  - Communicating with data
  - High dimensional data analysis
  - Advanced statistical modelling
  - Business analytics creative activity (12 points)

- **Part C.** Application studies
  - 24 credit points
  - Four elective units.
  - Students are recommended to complete the following electives:
    - Bayesian time series econometrics
    - Data exploration and visualisation
    - Data in society
    - Data analysis for semi-structured data
    - Introduction to databases

- Algorithms and programming foundations in python
- Mathematical foundations for data science

CUSCOS: 0100564
COURSE CODE: B6022
Where could it lead?
This degree will prepare you for a career as a statistician or data scientist. Your skill set will be relevant across all industries, giving you the freedom to join an area that inspires you. This is also an area of rapidly increasing demand across the corporate, government and non-profit sectors within Australia and internationally. According to the CareerCast Jobs Rated Report, the expected growth in available jobs in this area is around 20-30%. The same report rates all jobs based on the working environment, income, outlook and stress, and lists Data Scientist as the #1 job in 2019 and Statistician as the #2 job in 2019.

Why choose Monash Business School?
A degree from Monash Business School comes with global recognition, to help you launch a successful career wherever you land. We hold the prestigious ‘triple accreditation’ with the world’s three major business school accreditation bodies – putting us in the top 1% of business schools worldwide.

But that’s not the only reason our graduates stand out. In an industry characterised by disruption, we’ll challenge you to broaden your outlook, think more creatively and put innovative ideas to the test.

Entry requirements
An Australian bachelor degree (or equivalent) with a Weighted Average Mark (WAM) of 65 or an equivalent GPA as determined by the School, including at least one unit in statistics.

Applicants must prepare a Candidate Statement in which they are required to demonstrate that they possess the motivation and academic skills required to successfully complete the program.

ELIGIBILITY
(in equivalent Australian qualification terms) Duration (years)¹
Bachelor degree² (or equivalent) 2
Bachelor degree² (or equivalent) in a related field 1.5

¹. Even if you are eligible for a shorter course duration you may elect to complete the longer duration.
². With a WAM of 65.

ENGLISH LANGUAGE REQUIREMENTS
All applicants must demonstrate English language proficiency at the required standard

> IELTS (Academic): 6.5 overall, no band lower than 6.0, or equivalent approved English test; OR
> Tertiary study undertaken in an English medium institution; OR
> Other acceptable measures include a combination of approved qualifications and residence/work experience within an English speaking country
> See https://www.monash.edu/admissions/english-language-requirements

Don’t meet the English language requirements?
Apply for the Monash Bridging Program
monashcollege.edu.au/courses/english/monash-english-bridging

"I’m a very curious person, so I love to learn new things. I did a lot of research on what to do to further my studies. Wanting to understand where I can learn more. That’s when I came across the world of data.

One day while watching Netflix I came across The Great Hack, a documentary about how data is used for negative outcomes. Data gives you that power, but it is up to you how to use it. You can use it to do the right thing and for social good.

I chose Monash because the classes consist of small groups of people being taught by world class statisticians, they have time to give you individual attention. That is one of the great things about Monash, the staff are very supportive."

AARATHY BABU
Master of Business Analytics

"We must give statistics students the skills to dive into the data ocean. Yes, there are sharks and jellyfish and rip tides, but we can not be paralyzed by all the potential dangers. Students will go swimming with or without us, and all we can do is prepare them as best we are able. The academics I work with at Monash certainly follow this principle, guiding their students to take wild-caught data through the full process of analysis and effective communication of findings."

HADLEY WICKHAM (CHIEF SCIENTIST, RSTUDIO)