

# Master of Analytics



Fast-track your path to a rewarding and dynamic data analytics career



This course guide contains information on:

- Master of Analytics
- Graduate Diploma in Analytics
- Graduate Certificate in Analytics

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# Learn at UNSW. A world leader.



## Globally recognised degrees

UNSW Business School is accredited by the Association to Advance Collegiate Schools of Business (AACSB) International and the EFMD Quality Improvement System (EQUIS), signifying our programs' world-class standard and industry-relevant content.



## Second for Business and Management

UNSW is ranked 2nd in Australia and within the top 42 globally for Business and Management Studies.

*QS World University Rankings by Subject, 2023*



## First for Accounting and Finance

UNSW is ranked 1st in Australia and 21st worldwide for Accounting and Finance.

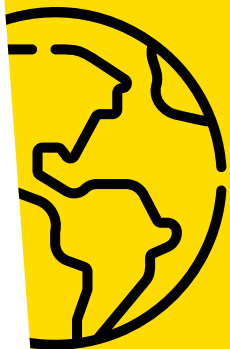
*QS World University Rankings by Subject, 2023*



## Most employable students

Voted as having the most employable students at the AFR Top100 Future Leader Awards. 2020, 2021, 2022 and 2023.

*AFR, Top 100 Future Leaders Awards 2023*



## Top 20 worldwide

UNSW is ranked equal 19th overall in the world.

*QS World University Rankings, 2024*

"This course was really well structured and provided great insights into business analytic consulting. I really enjoyed the content and getting an insider view of the consulting industry from those working within it. I would highly recommend it."

**- Master of Analytics student**



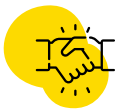
# Master of Analytics

Big data has disrupted the skills and knowledge required of employees, across functions, to deliver value to their organisations. The demand for professionals with data analytics capabilities who can skilfully apply data-driven decisions is increasing exponentially.

The online Master of Analytics program is designed for ambitious working professionals that are looking to develop advanced analytics capabilities and apply data-driven decisions. This program provides students with the expertise to influence business decisions, leverage career opportunities and gain skills that can be applied across all industries.

Depending on your career goals, tailor your program studies with a specialisation in either General Analytics, Human Resource Analytics or Marketing Analytics.

UNSW's Master of Analytics is one of the most comprehensive postgraduate qualifications in data analytics offered 100% online and accelerated, so you can graduate in as little as two years without compromising your career. Providing you with the skills employers demand, it's your fast track to a rewarding and dynamic career in data analytics.



## Be in demand

Gain the most relevant and applied skills that are in high demand by employers, and unlock endless career opportunities across industries for existing and future (even those yet to be imagined) roles.



## Accelerated and Online

With UNSW Online's accelerated and immersive education experience, the Master of Analytics program is the quickest way to get a postgraduate qualification in Analytics, you'll be able to take advantage of new career opportunities sooner.



## A Great ROI

In addition to leveraging a high market demand for talent, graduates of this program can also expect to be remunerated for the standard and reputation of the education they've received. UNSW undergraduates and postgraduates are in the top 5% for starting salaries and earn the highest median starting salary of any university in NSW.\*



## Quality and Reputation

Have confidence that you are learning from one of the most highly awarded and ranked Universities globally, with the highest academic standards, and joining a hugely successful and diverse Alumni community of over 300,000.

\* Graduate Outcomes Survey, 2019

# Program overview

The Master of Analytics program encompasses 12 online courses - eleven core, with the choice selecting from Human Resource Analytics or Marketing Analytics specialisations.

Alternatively, you can also continue without a specialisation, and choose more broadly from all of the electives to tailor your program to your career goals and interests.

There is also the option to study the Graduate Certificate in Analytics or the Graduate Diploma in Analytics. The master's program includes the content of the Graduate Certificates and the Graduate Diploma, together with further electives and a capstone project.

## Core courses

- Principles of Programming\*
- Managing People, Analytics and Change\*
- Introductory Data Analysis\*
- Analytics and Business\*
- Predictive Analytics\*#
- Data and Ethics\*
- Database Management\*
- Data Visualisation and Communication\*#

## Specialisations

Tailor the rest of your master's program by selecting one of the below specialisations.

### Human Resource Analytics

#### Core courses

- Human Resource Analytics#\*
- Human Resource Information Systems
- Elective course
- Elective course

#### Electives

Master of Analytics (Human Resource Analytics) students can select two courses from the below to fill their elective space.

- Organisational Development
- Leadership Development
- Employee Wellbeing and Engagement
- Sustainability and Human Resources
- Diversity, Equity and Inclusion
- Human Resource Policies and Practice
- Managing People and Organisations
- Managing Yourself and Others
- Attracting, Evaluating and Retaining Talent
- Managing Pay and Performance
- Change Management
- Career Navigator (students must have completed 6 courses before completing)
- Strategic Consulting Project^

### General Analytics

#### Core courses

- **Capstone:** General Analytics<sup>†</sup>
- Elective course
- Elective course
- Elective course

#### Electives

Master of Analytics (Analytics) students must complete three courses (18 UOC) from the below list to fill their elective space.

- Human Resource Analytics#\*
- Analytics and Consulting
- Financial Modelling\*#
- Decision Making in Analytics\*#
- Foundations of Marketing Analytics\*#
- Social Media & Digital Analytics\*
- Managing Customer Analytics\*#

### Marketing Analytics

#### Core courses

- Managing Customer Analytics\*#
- Social Media & Digital Analytics\*
- Foundations of Marketing Analytics\*#
- **Capstone:** Marketing Analytics<sup>†</sup>

\*Courses available for those studying the Graduate Certificate in Analytics or Graduate Diploma in Analytics programs. Select a combination of any four courses to make up your Graduate Certificate. Or choose a combination of any eight courses to make up your Graduate Diploma.

<sup>†</sup>Completion of 36 units of credit (UOC)

## Prerequisites

Certain courses (denoted by # or ^) require corresponding prerequisites below:

- # Introductory Data Analysis
- ^ Career Navigator



# Knowledge areas

## Comprehensive and applied

Gain the most comprehensive set of analytical skills demanded by industry to prepare you for a myriad of opportunities across various industries and roles. You'll build a solid foundation in data analytics as you are introduced to programming in Python, statistical methods and qualitative data analysis.

Develop highly technical programming-language and cloud-based-systems skills to become an expert in the design and implementation of successful organisational change programs. Integrate your knowledge and skills acquired throughout the program in a professional context by collaborating on an industry project in your capstone course.

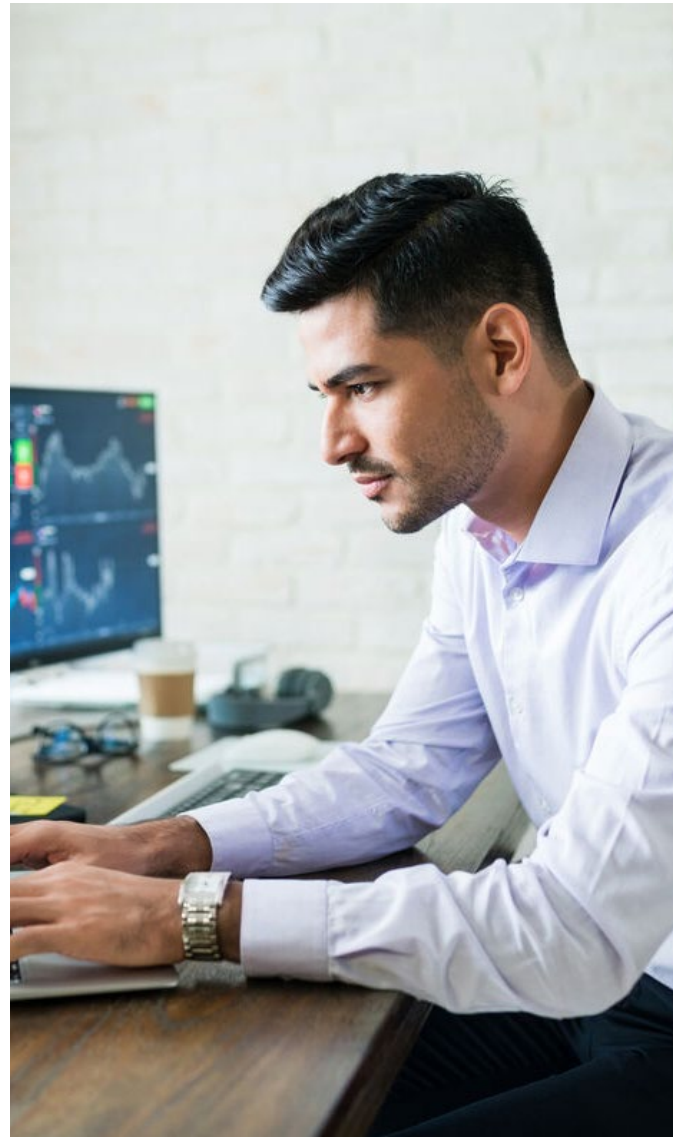
Depending on your career goals, tailor your program studies with a specialisation in either General Analytics, Human Resource Analytics or Marketing Analytics.

UNSW's Master of Analytics is one of the most comprehensive postgraduate qualifications in data analytics offered 100% online and accelerated, so you can graduate in only two years without compromising your career. Providing you with the skills employers demand, it's your fast track to a rewarding and dynamic career in data analytics.

## Technical and analytical skills

Businesses are dealing with an ever-increasing array of data, in terms of both volume and sources. Understand how to source, analyse and apply data insights using the latest tools and techniques available.

You'll gain advanced knowledge of core analytical concepts for managing big data, including programming languages, query languages, database systems and cloud-based solutions, modelling techniques, and visualization tools.



Specifics include but are not limited to; Python, R, Tableau, AWS, Google Cloud Solutions, HDFS, S3, MapReduce, Spark, PigLatin, Jaql, Hive, NoSQL systems, HBase, and text analysis.

This program has been designed to showcase the most up-to-date techniques and tools available, ensuring you're at the top of your game when using data-analytical technologies and systems.



## Customer relationship management

In pursuing Marketing Analytics electives, you will learn to identify and utilise advanced

analytical tools to navigate data-rich environments, and critically review the consumer lifecycle to deliver data-driven insights for digital marketing solutions.

Learn to integrate customer relationship management (CRM) with big data analytics in applications ranging from attracting, retaining and nurturing customer relationships. Explore the impact of social media and digital technology on marketing and develop a comprehensive understanding of analytical methods that can be used to convert this data to marketing insights.

Develop the skills to clearly and effectively communicate the business value of customer data, while also gaining practical marketing analytics experience. In your marketing analytics capstone, you will apply your understanding of key concepts and methods at a collaborating firm and be placed in the driver's seat to deliver the solution to a real marketing analytics problem that will ultimately make a meaningful difference to the company.

## Strategic influencing skills

This program makes strategic influencing skills a priority and will give you the know-how to influence innovation to conduct better business, no matter the industry you choose to work in.

Gain the skills to take complex information and translate it into simple and powerful data stories that influence stakeholders, while also learning to navigate the ethical dilemmas of data. Develop your ability to influence people and drive change using analytics, including stakeholder and people management, power and influence, working in cross-functional teams, and designing and implementing organisational change programs.

Understand the key concepts, practices and issues in engaging and providing analytics-based consulting services, from the perspectives of both clients and consultants. You'll learn how to examine the value propositions of consulting, how consultants engage with organisations and key stakeholders, and how they help these clients to analyse and solve business problems.

Skills developed throughout the program will enable students to understand and apply key concepts and themes to contexts in start-ups and within existing businesses innovating in this area.

## Strengthen HR strategy through analytics

Uncover the new frontier of HR strategy with the Master of Analytics (Human Resource Analytics). By studying this specialisation, you will develop a contemporary toolkit of analytical techniques to guide organisations to make data-informed decisions that enrich the employee experience and support strategic objectives.

Deepening your understanding of essential analytical concepts and HR initiatives, you'll gain the ability to identify, understand, and apply data to shape workplaces to become high performing and people-focused.

With an emphasis on HR Information Systems, you will learn how to use different analytical approaches to advance sustainable HR solutions and drive growth within organisations.

Drawing on advanced HR practice and technical analytics, the online Master of Analytics (Human Resource Analytics) from UNSW will prepare you for a rewarding career across a range of industries.





# The UNSW Online experience

- We are here to support you, every step of the way, to graduate from one of the world's leading universities. Our online learning environment has been designed to seamlessly fit into your already busy schedule and you'll be able to access course resources on any device, at any time.
- Our academics are some of the best in the world and, even though you're studying online, you can expect your learning experience to be the same high standard as that of our on-campus students.
- Throughout your study journey, you will be able to turn to your Student Success Advisor, who is committed to assisting you from enrolment through to graduation. They are on-hand for all non-academic queries by phone or email.
- You will also have access to Career Success – a curated, self-paced module that provides a framework for thinking about, and taking action to implement, an effective career plan. You will also have access to Career Success – a curated, self-paced module that provides a framework for thinking about, and taking action to implement, an effective career plan. Through Career Success, you will have access to tools like Career AI (powered by VMock) and CaseCoach, and guides on crafting the perfect LinkedIn profile, resume, and cover letter.



# Program details

## 2024 Indicative domestic program fees<sup>^</sup>

Master of Analytics	Program code: 8437	12 courses	\$58,000
Graduate Diploma in Analytics	Program code: 5437	8 courses	\$38,500
Graduate Certificate in Analytics	Program code: 7457	4 courses	\$19,000

<sup>^</sup>All prices are listed in Australian dollars and may exceed the indicative figures listed. Total program fee is determined by individual course selection.

All prices are listed in Australian dollars and may exceed the indicative figures listed. Visit our [Fees page](#) for up-to-date information inclusive of 2024 indicative International program fees. Fees are subject to annual review by the University and may increase annually, with the new fees effective from the start of each calendar year. Indicative fees are a guide for comparison only based on current conditions and available data. You should not rely on indicative fees.

## Program intakes (Hexamesters)

### Six intakes annually:

January, March, May, July, September, October.

## Program duration

Each course is seven weeks long, plus Orientation week. UNSW Online advises a minimum of 15-20 hours of study per week. The program can be completed in as little as two years.

## Nested qualifications

The Master of Analytics also includes a Graduate Certificate in Analytics and a Graduate Diploma in Analytics. The Graduate Certificate and the Graduate Diploma are both an entry and exit point of the program. For those who do not qualify for direct entry into the masters program, you may be eligible for entry into the Graduate Certificate. You can articulate from this into the masters program (upon successful completion of the Graduate Certificate and Graduate Diploma). Alternatively, if for whatever reason you choose not to continue to complete the masters program, you can exit with a Graduate Certificate or Graduate Diploma.



Graduate Certificate

**4 Courses**

or continue studying



Graduate Diploma

**+4 Courses**

or continue studying



Masters

**+4 Courses**

Study plans and completion times might vary depending on elective choice, RPL, leave and subject availability. For more information, speak with a Student Advisor.



# Entry requirements

## UNSW's Admission Entry Calculator

To assist us in assessing your previous study and eligibility for this program, we recommend using the [UNSW Admissions Entry Calculator](#) as a guide. This calculator converts and scales the grading schemes across the world into a percentage that applies to UNSW entry requirements.

## Masters

A recognised bachelor's degree (or equivalent qualification) with a Weighted Average Mark (WAM) of 65 as determined by the UNSW Admissions Entry Calculator.

## Graduate Diploma

A recognised bachelor degree (or equivalent qualification) with WAM of 65 as determined by the UNSW Admissions Entry Calculator; or successfully completed the Graduate Certificate in Analytics.

## Graduate Certificate

A recognised bachelor degree (or equivalent qualification) in any discipline; or

A minimum of 3 years relevant or professional experience in analytics, clerical or administrative work in a commercial, non-for-profit or public service organisation or other analytics-related positions.

## English Language

You may need to provide evidence of your English language proficiency to study at UNSW, depending on your educational background and citizenship. UNSW requires a minimum level of English language competency for enrolment. English language skills are essential for webinar comprehension and the completion of coursework, assignments and examinations.

If English is not your first language, you will need to provide proof of your English proficiency prior to receiving an offer to study at UNSW. You can do this by providing evidence that you meet one or more of the following criteria:

- [English language tests and university English courses](#)
- [Prior study in the medium of English](#)
- [Other qualifications](#)
- [English waivers](#)



## Recognition of Prior Learning (RPL)

Your previous studies can be acknowledged as credit towards your online postgraduate studies provided that they meet relevant course requirements. If you are eligible for admission and you have undertaken previous studies at another institution, you may be eligible to apply for Recognition of Prior Learning (RPL).

Students can apply for RPL during the program application process and must ensure all relevant supporting documents are submitted for assessment if requested by Admissions, including course outlines from the same year they completed the relevant course/s as content may change over time. Courses successfully completed within the past ten years can be used for credit transfer within a program as provided within the program rules and the University rules on credit.

If completed similar courses in previous undergraduate study, Master of Analytics students can claim up to 4 courses (24 units of credit) of RPL advanced standing. If students have completed postgraduate studies in addition to completed undergraduate studies, they can claim a maximum of 6 courses (36 units of credit) of RPL advanced standing for the Master of Analytics program.

■ [Find out more about RPL and credit transfer at UNSW](#)



# Academic leadership



## Dr Andrew Dhaenens

Stream Coordinator for UNSW Online - Human Resource Management Programs

Dr Andrew Dhaenens is a Lecturer in the School of Management & Governance. With an industry background in human resources, his research primarily studies workplace relationships working on various projects related to organisational change, developmental networks, work arrangements and turnover.

Alongside Prof Karin Sanders, he leads UNSW Business School's Hybrid Work Leadership (HWL) research lab. HWL is an applied and translational research lab on the topic of hybrid and flexible work arrangements. HWL has specific expertise in learning organisations and activities, human resource management and employee work relationships to generate industry deliverables and promote research outcomes which better organisations via their employee work arrangements.

Andrew's work on HR and careers has been featured across many popular media outlets (print, radio, and television) including Sydney Morning Herald, SkyNews, 2GB, Qantas Magazine, Canberra Times, HRM Magazine, 2CC Talking Canberra, Australian Financial Review and The New Daily.



**“Our suite of online Human Resource Management programs at UNSW has been designed to provide a unique and flexible opportunity for aspiring HR leaders to gain a comprehensive understanding of the topics at the forefront of HR.**

**From employee development to workplace culture, students will gain strategic insights across data-driven approaches and employee initiatives needed to advance their careers and add value to their organisations ahead.”**

# Academic leadership



## Dr George Joukhadar

Stream Coordinator for UNSW  
Online - Analytics Programs

Since joining UNSW, George has shaped the learning experience by engaging with how students learn. He has a passionate belief in the potential of all his students and has a particular interest in the role of assessment to support students learning. George co-leads the Students Feedback and Digital Assessment CoP at UNSW.

George's current research delves into the evolving landscape of technology, focusing on exploring novel ways for organisations to enhance their efficiency and productivity by utilising emerging digital tools. Recognising the need for digital sustainability, George balances the benefits of digital transformation with environmental and social responsibility. His research aims to shape a future where technology and sustainability coexist, transforming society for the better.



**“In an era where businesses, organisations, and governments rely heavily on data for decision-making, our analytics graduates are in high demand across various industries. They play a pivotal role in helping businesses make informed choices, optimise processes, and gain a competitive edge.**

**Studying analytics promotes critical thinking, problem-solving, and quantitative reasoning skills, which are valuable not only in professional settings but also in addressing broader societal challenges. As our world becomes increasingly data-centric, a strong foundation in analytics is an invaluable asset for students seeking to shape a brighter and more data-savvy future.”**



# Academic leadership



**Dr Terrence Chong**

Stream Coordinator for UNSW  
Online - Analytics Programs

Dr Terrence Chong has over 15 years of experience in web development, specialising in the creation of websites from scratch. His expertise includes content creation for websites (content marketing), targeted promotion of websites through social media (social media marketing), search engines (search marketing, search engine optimisation), and generating traffic and income via affiliate marketing. Additionally, he has extensive hands-on experience analysing online customer engagement and behaviours using the Google Analytics platform. Furthermore, he has utilised the Google Ads and Facebook Ads platforms to optimise ad campaigns and enhance conversion rates.

Dr. Chong's research primarily focuses on the impact of artificial intelligence (AI) on service and customer outcomes. He investigates how businesses employ AI technologies, such as humanoid chatbots and machine learning, to create value for both firms and customers. One of his ongoing research projects involves analysing social media posts within Facebook groups to examine online brand community engagement.

# Get in touch

Our Student Enrolment Advisors are here to help you with all your program and enrolment queries.



[studyonline.unsw.edu.au](https://studyonline.unsw.edu.au)



1300 974 990



[future-student@studyonline.unsw.edu.au](mailto:future-student@studyonline.unsw.edu.au)



## Have a question?

Book a 15-minute chat with a Student Advisor

SCHEDULE A CALL →



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# Introductory Data Analysis

## Course overview

A key foundational step for business analytics is understanding the ways in which data can be presented and analysed. Introductory Data Analysis provides a solid basis from which data analysis techniques can be applied to solve business problems and support evidence based decision-making, with a specific focus on the use of Microsoft Excel.

This course will cover methods such as charts, descriptive statistics, probability distributions, confidence intervals, hypothesis testing, and basic regression models. These methods will be the foundations for more advanced courses using statistical and econometric methods.

# Analytics and Business

## Course overview

Business analytics entails the use of data to support decision making in business. The field has emerged as a crucial element of contemporary business practice. With the volume and range of information available to organisations growing exponentially, the ability to harness this information for evidence-based management has become a key capability.

This course presents the fundamentals of implementing and managing business analytics in organisations, including:

- decision making;
- business analytics concepts and frameworks;
- technologies and tools required for descriptive analytics, predictive analytics, and prescriptive analytics;
- frameworks for putting analytics to work;
- technologies and tools required for business analytics;
- the governance, oversight and business value gained from business analytics within organisations;
- the ethical and social implications of business analytics;
- future directions for business analytics.

# Data and Ethics

## Course overview

Data analytics takes place within an information supply chain comprising upstream sources and downstream uses of data. Within this supply chain are multiple participants, interests and power relationships, yet firms that collect and analyse data are often invisible to users. The use of data by many types of organisations has already given rise to a range of practices and outcomes that are clearly harmful to individuals or groups, leading to broad public concerns and legal ramifications.

It is therefore incumbent on data professionals to consider the ethical implications of their data generation and use activities. This includes issues such as: what questions should be asked about data and its sources?; how do downstream users of data protect or impact individuals and groups?; what are the rights of various stakeholders, including consumers?; and who owns data, particularly within secondary markets?. Consideration of these implications gives rise to questions around the ethics of data (how data is generated, recorded and shared), and the ethics of algorithms (how data is interpreted), the ethics of practices (responsible data analytics).

This course will consider these issues and provides students with a set of thinking tools to help them navigate ethical dilemmas and guide decisions and behaviours. The role of organisational and industry cultures in shaping ethical (or unethical) data analytics practices will also be considered.

# Managing People, Analytics and Change

## Course overview

This course provides an understanding of the ways in which data analytics can be used to manage people and change, and also the essential role of people in analytics. Using an evidence-based approach, students explore the people-related elements of a business's analytics and technology strategies, including stakeholder and people management, power and influence, and working in cross-functional teams. We look at the ways in which data analytics both drives and supports change in organisations. Students also develop skills in designing and implementing successful organisational change processes.

# Principles of Programming

## Course overview

This course provides an introduction to programming in Python and covers the following essentials:

- Program design and implementation in a high-level language, with procedural and object-oriented constructs and some functional features;
- Fundamental programming techniques, data structures and algorithms;
- Debugging and testing;
- Simulation;
- Applications in different areas, including those involving graphical user interfaces and animations.

# Predictive Analytics\*

## Course overview

A critical aspect of data analytics is to generate predictions which are used as inputs into decision making. Predictive analytics applies statistical models and machine learning methods to data to give insight into potential futures. This course exposes students to predictive analytics methods to develop students' ability to use analytics to drive decision making. To develop these skills, students will learn predictive analytics methodological theory (e.g., linear and logistic regression, classification and regression trees, and neural networks). Students will then build and interpret a variety of predictive models to analyse data describing problems with real-world relevance. Emphasis will be placed on using predictive analytics robustly to create value.

*\*Pre-requisite: completion of Introductory Data Analysis*



# Database Management

## Course overview

This course will provide students with an understanding of the key concepts, principles and characteristics of Big Data, databases and database management systems, as well as the associated analytical tools and technologies for developing solutions to large-scale business problems. Students will develop conceptual and practical knowledge of database structures and systems, through the study of data modelling, relational design, query and programming languages and normalisation theory. The course will prepare students for future database challenges including database security and integrity.

# Data Visualisation and Communication\*

## Course overview

Data visualisation and communication are increasingly important as complements to the study of data analytics. The ability to present visual access to the huge amounts of data that business creates is an essential skill for any analyst. The creation of easily digestible visual graphics is often the simplest and most powerful tool to enable communication of business insights derived from data.

This course introduces statistical and visualisation tools for the exploratory analysis of data. Students learn what makes an effective data visualisation and how to create interactive data visualisations. Visualisation in R, Tableau and other tools, including cutting-edge graphical, immersive techniques are used. There is a strong focus on developing the skill of data storytelling: students learn to combine data, its visualisation, and a narrative to create a powerful story to drive change.

*\*Pre-requisite: completion of Introductory Data Analysis*





# Business Analytics and Consulting

## Course overview

This course focuses on the key concepts, practices and issues in engaging and providing analytics-based consulting services, from the perspectives of both clients and consultants. Students learn how to examine the value propositions of consulting, how consultants engage with organisations and key stakeholders, and how they help these clients to analyse and solve business problems. The course seeks to familiarise students with the consulting process, common consulting frameworks and the benefits and limitations related to their use, and current trends in consulting in relation to the opportunities and challenges brought about by rapidly advancing technologies.

# Financial Modelling\*

## Course overview

Financial Modelling explores the techniques used by analysts in the business environment to facilitate financial decision-making processes within uncertain contexts. This course aims to engender skills and confidence to effectively create and use financial models, helping students to better understand and communicate the practical value of financial models, and to build this literacy for their future work. Students develop and extend their skills in high-level critical thinking, problem-solving, and analysis. They also develop a set of practical tools and techniques to help them make effective judgements about an organisation's current financial situation and future performance, based on best-practice financial modelling principles.

*\*Pre-requisite: completion of Introductory Data Analysis*



# Decision Making in Analytics\*

## Course overview

Businesses are dealing with an ever-increasing array of data, in terms of both volume and sources. This presents businesses with opportunities to harness insights from this data to support decision making. This course introduces students to a range of decision-making techniques and strategies, drawing on leading business practices. Using an applied approach, a range of business problems and decisions in areas such as marketing, human resources, and finance are considered.

Students are shown how to design and implement application systems to support evidence-based decision making in organisational contexts. The course includes a range of business intelligence and data analytics solutions based on online analytical processing (OLAP) models and technologies. Students also evaluate a number of contemporary modelling approaches and their integration.

# Social Media and Digital Analytics

## Course overview

This course explores the impact of the social media and digital technology on marketing. This course introduces students to the analytic methods that can be used to convert social media and digital data to marketing insights. Students will examine the impact of social media and digital technology on customer acquisition, customer retention, customer development and customer relationship management. This course provides learners with the foundational skills of social media and digital analytics including the creation of monitors and common analytical metrics.

This course also aims to enable students to analyse social media and digital data and to develop relevant marketing strategies in a digital world. Furthermore, the course introduces students to the underlying theories of social media and digital technology as well as practical experiences relevant for business. On successful completion of the course, students are expected to gain good analytical skills and marketing insights regarding social media and digital technology.

*\*Pre-requisite: completion of Introductory Data Analysis*



# Foundations of Marketing Analytics\*

## Course overview

Foundations of Marketing Analytics will help to develop students' capabilities of using advanced analytical tools to address marketing problems – key skills that numerous companies have stated they look for in marketers, particularly in challenging business environments.

Students are exposed to a range of statistical tools and techniques, from classical statistical tools to emerging big data techniques. The emphasis is not on formulae of statistical tools, but on how to apply and interpret a range of statistical techniques to help answer marketing-related questions.

The course is organised around daily marketing problems. Students are strongly encouraged to start thinking as marketers by asking questions of their data, setting their own direction for the analysis in the project and thinking about how a company could utilise the results in practice.

# Managing Customer Analytics\*

## Course overview

To understand consumers and build up a relationship with customers is the first step of every marketing decision. To be effective, marketing managers should know how to identify what target customers need, where they go for shopping and how to interact with them in a marketplace. This course integrates customer relationship management (CRM) and big data analytics in applications ranging from attracting new consumers, retaining customers, and encouraging referrals to re-inviting infrequent or lost customers using prediction, recommendation, and natural language processing.

Students will exercise hands-on data analytics and then tackle real-world customer problems. No prior knowledge of R is required.

*\*Pre-requisite: completion of Introductory Data Analysis*



# General Analytics Capstone<sup>^</sup>

## Course overview

This course is designed as a capstone core course in the Master of Analytics program. The capstone project is the culminating experience of the program and provides students with the opportunity to apply and integrate their knowledge and skills in an actual professional context. Students undertake a range of applied professional tasks and collaborate on an industry project. The course combines theory and practice to encourage active engagement and self-reflection, and to enhance students' learning for professional practice.

# Marketing Analytics Capstone<sup>^</sup>

## Course overview

Marketing data available to firms grow exponentially. Firms that possess the marketing analytical skills to navigate data-rich environments and to utilise such data are taking the lead while firms that do not have those skills are increasingly left behind. Currently, marketing analytics skills are very scarce on the job market, yet increasingly high in demand. One key challenge in the world of marketing analytics is to make the transition from applying academic concepts and methods to case studies only, to generating real-life solutions for companies.

This course equips students to make this transition by putting them in the driver seat for the solution of a real marketing analytics problem that makes a difference. Through the course, students are being optimally prepared for the job market as they solve a case study in marketing analytics.

<sup>^</sup>Course to be completed last or second last (min 36 UOC)







# Human Resource Analytics

## Course overview

Across a variety of different fields, organisations are increasingly using data and the insights that can be gained from this data to help inform decisions and shape their strategies. There are significant opportunities for analytics to inform the effective management of human resources across a broad range of dimensions. This course introduces the areas where analytics can support various aspects of human resource management and examines how data is being used to help organisations improve the performance of their people. Students will get hands on experience applying data analytics techniques to HR data sets and develop an understanding of how HR analytics can be best integrated into HR strategy, policies, and practices.

# Human Resource Information Systems

## Course overview

The application of information technology has revolutionised the way in which organisations operate and has had a significant impact on the evolving human resource management function. Human Resource (HR) plays a strategic role in ensuring the practices of an organisation align with its goals to achieve sustained long-term success. In this course, students will critically analyse the administrative and strategic value of a Human Resource Information Systems (HRIS), as relevant to local and global organisations, and identify and examine the issues relating to the use of HRIS in contemporary business settings. By evaluating the technologies and methodologies of HRIS, students will identify opportunities for data collection and analysis, and will construct and present HRIS solutions for the automation and effective cost management of HR information.

For information on the below courses, check out our Master of Human Resource Management program guide.

- Organisational Development
- Leadership Development
- Employee Wellbeing and Engagement
- Sustainability and Human Resources
- Diversity, Equity and Inclusion
- Human Resource Policies and Practice
- Managing People and Organisations
- Managing Yourself and Others
- Attracting, Evaluating and Retaining Talent
- Managing Pay and Performance
- Change Management
- Career Navigator
- Strategic Consulting Project

[Access Human Resource Management program guide](#)



# Get in touch

Our Student Enrolment Advisors are here to help you with all your program and enrolment queries.



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## Have a question?

Book a 15-minute chat with a Student Advisor

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