Master of Analytics

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

This course guide contains information on:

- Master of Analytics (8437)
- Graduate Diploma in Analytics (5437)
- Graduate Certificate in Analytics (7457)
- Graduate Certificate in Human Resource Analytics (7543)
- Graduate Certificate in Marketing Analytics (7450)

Table of contents

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.

#1 Business School in Australia

UNSW Business School has been named the AFR BOSS Best Business School for 2023 for the second consecutive year.

First in Australia for Information Systems and Technology

UNSW ranks 1st in Australia and 10th worldwide for Information Systems and Technology*.

Association for Information Systems, 2024

Most employable students

Voted as having the most employable students at the AFR Top 100 Future Leaders Awards, 2020, 2021, 2022, 2023 and 2024.

Top 20 worldwide

UNSW is ranked 19th overall in the world.

QS World University Rankings, 2025

"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

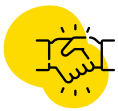
Master of Analytics

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

Graduates of this program benefit from substantial financial rewards due to the high standard and reputation of their education. UNSW graduates continue to lead the way in graduate outcomes* both financially and in their careers, reflecting the exceptional return on investment (ROI) and the university's renowned reputation for outstanding career outcomes.

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.

**QILT Graduate Outcomes Survey, 2023*

Program overview

Masters

The Master of Analytics program includes 12 online courses— 8 core courses and a choice of 4 specialisations in Human Resource Analytics or Marketing Analytics. Alternatively, you can opt for a general path, selecting electives that align with your career goals and interests.

You can also choose to study graduate certificates in Analytics, Marketing Analytics and Human Resource Analytics, or the Graduate Diploma in Analytics. The master's program includes content from these certificates and diploma, plus additional electives and a capstone project.

Pathways

Follow the program pathway: Certificate to Diploma to Master's in 12 subjects.

Core courses

All specialisations must complete the following 8 core courses:

1. Introductory Data Analysis
2. Analytics and Business
3. Managing People, Analytics, and Change
4. Data and Ethics
5. Data Visualisation and Communication
6. Predictive Analytics
7. Database Management
8. Principles of Programming

These courses have a pre-requisite: Introductory Data Analysis.

Specialisations

All specialisations must complete the 8 core courses.

We offer the following three specialisations:

1. General Analytics
2. Marketing Analytics
3. Human Resource Analytics

1. General Analytics

In addition to the core courses, you will complete the General Analytics Capstone course and your choice of 3 electives from the below list:

Electives (choose 3)

1. Human Resources Analytics
2. Analytics and Consulting
3. Financial Modelling
4. Decision Making in Analytics
5. Foundations of Marketing Analytics
6. Social Media & Digital Analytics
7. Managing Customer Analytics
8. General Analytics Capstone

These electives have a pre-requisite: Introductory Data Analysis.

2. Marketing Analytics

In addition to the core courses, complete the following 3 specialisation core courses and capstone course:

1. Foundations of Marketing Analytics
2. Social Media & Digital Analytics
3. Managing Customer Analytics
4. Marketing Analytics Capstone

These courses have a pre-requisite: Introductory Data Analysis.

36 units of credit required.

Specialisations

All specialisations must complete the 8 core courses.

3. Human Resource Analytics

In addition to the core courses, complete the following 2 specialisation core courses and choose 2 electives from the list below:

Specialisation Core Courses

1. Human Resources Analytics
2. Human Resource Information Systems

Electives (choose 2)

1. Managing Yourself and Others
2. Career Navigator
3. Strategic Consulting Project
4. Human Resource Policies and Practices
5. Employee Wellbeing and Engagement
6. Sustainability and Human Resources
7. Attracting, Evaluating and Retaining Talent
8. Diversity, Equity and Inclusion
9. Strategic Rewards and Performance Management
10. Change Management
11. Organisational Development
12. Leadership Development
13. Introductory Data Analysis

This course has a pre-requisite: Introductory Data Analysis.

Disclaimers

Pathway options: If you start in a Graduate Certificate and wish to articulate to tthe Graduate Diploma and then to the Master's, ensure you follow the study pathways and required courses for your chosen specialisation. Consult with an advisor for personalised guidance.

Completion time: The duration for completion depends on individual study paths, recognition of prior learning (RPL), leave, and course availability. Speak to a Student Advisor for more information.

SCHEDULE A CALL →

Program overview

Graduate Diploma

Graduate Diploma in Analytics

Students must complete 8 courses from the following list:

1. Human Resources Analytics
2. Introductory Data Analysis
3. Analytics and Business
4. Managing People, Analytics, and Change
5. Data and Ethics
6. Data Visualisation and Communication
7. Analytics and Consulting
8. Financial Modelling
9. Decision Making in Analytics
10. Predictive Analytics
11. Foundations of Marketing Analytics
12. Social Media & Digital Analytics
13. Managing Customer Analytics
14. Database Management
15. Principles of Programming

These courses have a pre-requisite: Introductory Data Analysis.

Program overview

Graduate Certificate

Graduate Certificate in Analytics

Students must complete 4 courses from the following list:

1. Human Resources Analytics
2. Introductory Data Analysis
3. Analytics and Business
4. Managing People, Analytics, and Change
5. Data and Ethics
6. Data Visualisation and Communication
7. Analytics and Consulting
8. Financial Modelling
9. Decision Making in Analytics
10. Predictive Analytics
11. Foundations of Marketing Analytics
12. Social Media & Digital Analytics
13. Managing Customer Analytics
14. Database Management
15. Principles of Programming

These courses have a pre-requisite: Introductory Data Analysis.

Program overview

Graduate Certificate

Graduate Certificate in Human Resource Analytics

Students must complete 3 courses of the following Human Resource Analytics core courses and 1 elective course:

Core Courses

1. Human Resources Analytics
2. Human Resource Information Systems
3. Introductory Data Analysis

Electives (choose 1)

1. Career Navigator
2. Strategic Consulting Project
3. Human Resource Policies and Practices
4. Employee Wellbeing and Engagement
5. Sustainability and Human Resources
6. Attracting, Evaluating and Retaining Talent
7. Diversity, Equity and Inclusion
8. Strategic Rewards and Performance Management
9. Change Management
10. Human Resource Strategies
11. Organisational Development
12. Managing People and Organisations
13. Managing Yourself and Others
14. Leadership Development
15. Introduction to Employment Law

This course has a pre-requisite: Introductory Data Analysis.

Program overview

Graduate Certificate

Graduate Certificate in Marketing Analytics

Pre-requisite Course

Introductory Data Analysis

Complete at least two of:

1. Social Media & Digital Analytics
2. Foundations of Marketing Analytics
3. Managing Customer Analytics

If completing only 2 of the above marketing analytics courses, complete 1 of:

1. Managing People, Analytics and Change
2. Analytics and Business
3. Data and Ethics
4. Principles of Programming
5. Predictive Analytics
6. Database Management
7. Data Visualisation & Communication

These courses has a pre-requisite: Introductory Data Analysis.

Knowledge areas

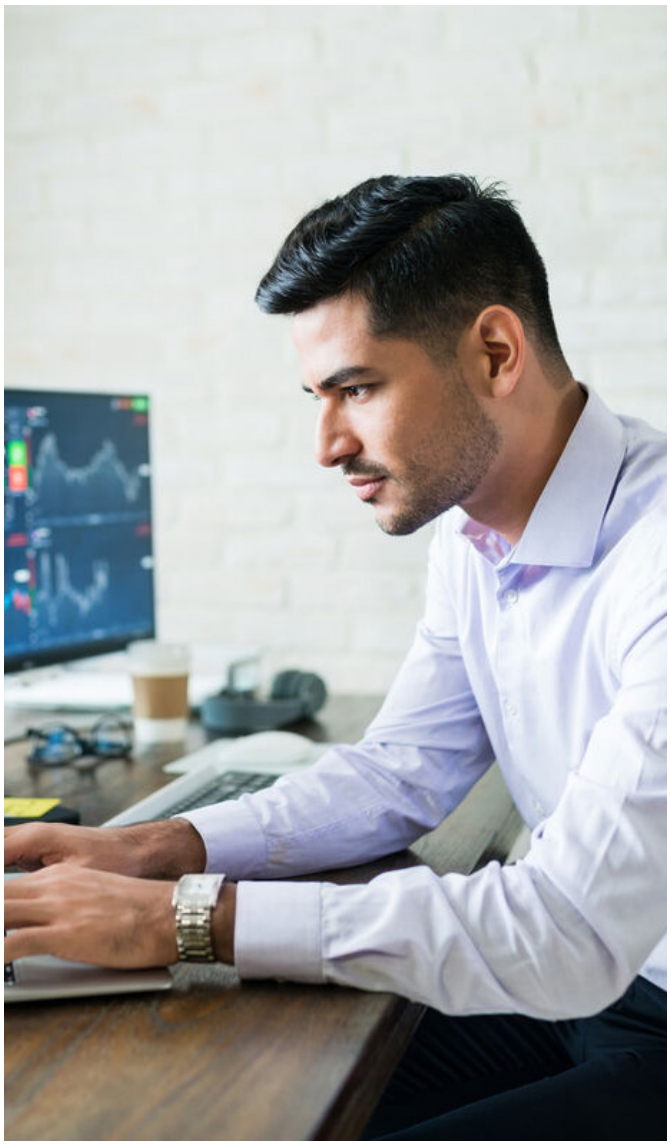
Comprehensive and applied

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 working with an ever-increasing variety and volume of data. In this program, you'll learn how to gather, analyse and extract insights from data using the latest tools and techniques. You'll gain advanced knowledge of programming languages such as Python and R; data analysis and visualisation software such as Tableau and PowerBI; database management software such as Oracle, including the database querying language SQL; cloud-based technologies such as Amazon Web Services and Google Cloud Solutions; and a variety of analysis and modelling techniques.

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

2025 Indicative domestic program fees^

Master of Analytics	Program code: 8437	12 courses	$61,500
Graduate Diploma in Analytics	Program code: 5437	8 courses	$40,000
Graduate Certificate in Analytics	Program code: 7457	4 courses	$20,000
Graduate Certificate in Human Resource Analytics	Program code: 7543	4 courses	$20,000
Graduate Certificate in Marketing Analytics	Program code: 7450	4 courses	$20,000

^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 2025 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.

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.

Relevant experience includes handling non-routine, unstructured tasks, engaging in problem-solving, managing a small team, leading projects, or overseeing resource management. Experience in a professional role over time is also considered relevant.

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

Eligibility for admission does not guarantee offer of a place.

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 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

Jihwan Moon

Stream Coordinator for UNSW Online - Marketing Analytics Programs

Jihwan Moon's research focuses on how firms effectively communicate with consumers and how firms and consumers make decisions in uncertain environments. His research interests are in the areas of pricing, data privacy, signaling, healthcare, sustainability, etc. His research goal is to understand the underlying mechanism of firms' competitive strategies, develop analytical models to establish theories, and empirically test these theories.

In UNSW, he has taught several courses including Strategic Marketing, Marketing Analytics, and Pricing Analytics. He helps students (1) gain practical knowledge and develop analytical skills from real-life examples that can be applied in many different industries, (2) be familiar with firms' decision processes employing quantitative techniques, and (3) obtain critical and analytical thinking skills from tangible applications.

Get in touch

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

studyonline.unsw.edu.au

1300 974 990

future-student@studyonline.unsw.edu.au

Have a question?

Book a 15-minute chat with a Student Advisor

Book now →

Apply to UNSW Online

If you're ready to apply, then we're ready to guide you through the application process.

Visit the UNSW website to start your application or book a call with our Student Enrolment Advisors to discuss entry requirements and any questions you may have.

Apply now →

≡ Course description

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

This course provides the conceptual foundations for ethical data analytics practice. You will learn to consider data analytics in the context of the broader social, economic and value systems within which data analytics takes place. You will identify ethical concerns and apply ethical thinking tools and frameworks to resolve actual ethical dilemmas. This course also provides you with an understanding of key regulatory frameworks and legal principles related to data generation, manipulation and use.

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 visuals 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*

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*

Analytics Capstone^

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.

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.

^Course to be completed last or second last (min 36 UOC)

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.

studyonline.unsw.edu.au

1300 974 990

future-student@studyonline.unsw.edu.au

Have a question?
Book a 15-minute chat with a Student Advisor

SCHEDULE A CALL →