RMIT Online

Master of Business Analytics and AI Strategy

Connect data, analytics and AI to unlock better business solutions

This brochure also includes information on:
The Graduate Certificate in Business Analytics
The Graduate Certificate in Data Science

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Are you ready for the future?

Organisations across sectors are struggling to respond to the possibilities of data, analytics and AI. Often, the solution has been to “hire a data analyst.” But without data-literate leaders, data teams can struggle to apply their insights to business and gain traction with executives across organisations.

What’s needed is a rare type of leader who can blend data, analytics, AI and strategy to drive better business outcomes, advocate for AI and data analytics at the executive level, and drive digital strategy. A leader who can influence and implement analytics and or AI-driven strategies while fostering cross-functional partnerships to unlock the full potential of data, analytics and AI.

To address this gap, RMIT Online’s Master of Business Analytics and AI Strategy has been designed to equip business professionals with the skills to become data-literate leaders who can bridge data, analytics, AI and business strategy. Be the essential link that businesses need to thrive in the digital age.

Program overview

Become a business professional with the technical credibility to bridge the gap between data, AI and business strategy to drive better business solutions.

Master of Business Analytics and AI Strategy

We have designed this program for business professionals who wish to gain technical foundations and develop advanced communication techniques to lead strategy and be influential at all organisational levels.

You will learn how to:

- Apply knowledge of data, analytics, AI and strategy together with business acumen and communication skills to solve business problems
- Expand your knowledge of data, analytics and AI and leverage it strategically across different sectors or industries.
- Develop people and strategy skills to influence and advocate for data, analytics and AI among executives and/or leadership team.
- Lead analytics and or AI-centred teams to strategically drive business outcomes.
- Ensure ethical and responsible use and management of data, analytics and AI in business environment.

Graduate Certificate in Business Analytics

The Graduate Certificate in Business Analytics is designed to help aspiring decision-makers learn how to diagnose and evaluate business problems and opportunities, using data and analytics.

You will learn how to:

- Analyse and synthesise various data from multiple sources to diagnose issues
- Draw on data to identify, predict and recommend business solutions
- Select and apply concepts and techniques in descriptive, predictive and prescriptive analytics to inform decisions and solve problems
- Visualise and communicate findings and decisions for stakeholders
- Justify the reasoning behind data-driven decisions

Graduate Certificate in Data Science

This program is designed to introduce business professionals to the critical foundations of data that employers are demanding right now.

You will learn how to:

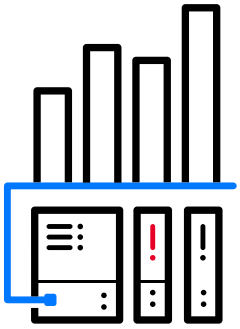
- Apply a breadth of technical skills, including programming, analytics, data wrangling and visualisation
- Expand your knowledge of data and how it can be leveraged across sectors and industries

Benefit from RMIT's practical and industry-based perspective

Gain a hands-on blend of technical and communication skills infused with RMIT's excellence in technology, design and innovation.

Gain influence at the executive level

Know how to engage and influence executive stakeholders and advocate for the value of data, analytics and AI up, down and across organisations.



Be in demand as the link between between data, analytics, AI and business strategy

This unique, first-to-market program will give you the highly sought-after combination of business acumen, technical and communication skills to lead analytics and/or AI teams and solve business problems.

The RMIT Online student experience

- A flexible student experience allows you to use study tools anywhere at anytime.
- Our cutting-edge learning environment means you don't have to be a computer whizz to use it.
- Industry-experienced academics will guide you every step of the way.
- Online doesn't mean you're alone – connect with fellow students to share ideas, organise study groups and support one another.
- One-on-one support and assistance from your personal advisor keeps you motivated and helps you reach your goals.
- Build your professional network through the connections you make while studying.
- Graduate with a globally-recognised degree without compromising your life or career trajectory.

What can you expect from each course?

Initial communication

Use the online forum to introduce yourself to other students and your course instructors. You can also form study groups and find information about course topics, teachers, set reading, key assignment dates and grading considerations.

Learning content format

You'll engage with a variety of learning materials, including video, text-based content, animations and more. Each week's content is presented and linked to learning objectives, and overall course goals. This means you can monitor your progress and prepare for upcoming topics and concepts.

Synchronised study sessions

These sessions are available for you to review and clarify your understanding of the content. With at least one session per seven-week course, they are scheduled well in advance so you can fit them into your schedule. Times are rotated to accommodate students in multiple time zones, and they are recorded so you can watch them again.

Discussion boards

Discussion boards are open for the duration of each course, helping to promote critical thinking and interaction. Instructors use tagging/reply features to ensure that all students receive important program and course notifications. Discussions are created and moderated by the course or section instructor and, depending on the course, are included in participation grades.

Assessment

All RMIT postgraduate programs include rigorous assessments in the form of case studies, reports, online discussion interaction and engagement. The aim is to ensure your learning is valuable, authentic and applicable to your work. With RMIT Online, you will not have any traditional, on-campus exams. However, you may have tests, quizzes or other online assessments.

Program structure

Master of Business Analytics and AI Strategy

Stage A:

Complete the following four courses:

- Business Analytics
- Visualising and Communicating Insights in Business
- Predictive and Perspective Analytics in Business
- Digital Strategy

Stage B:

Complete the following four courses:

- Consumer Analytics
- Data Architecture, Ethics and Governance
- Analytics, Strategy and Change
- Financial Analytics for Managerial Decisions

Stage C:

Complete the following four courses:

- Leading in the Age of Digital Disruption
- Shaping Organisations with Artificial Intelligence
- Machine Learning for Decision Makers
- Data Science Strategy Consulting Project

Stage D:
(16 course masters only):

Choose 4 courses from a minor or 4 courses from an optional list from the following areas:

- Data Science
- Design Thinking
- Digital Transformation
- Sustainable Enterprise
- Project Management

Graduate Certificate in Business Analytics

- Business Analytics
- Visualising and Communicating Insights in Business
- Predictive and Prescriptive Analytics in Business
- Digital Strategy

Graduate Certificate in Data Science

- Practical Data Science with Python
- Applied Analytics
- Data Visualisation & Communication
- Data Wrangling

Fees

Total tuition fees for 2025 are $67,200^ (16-course masters) / $4,200^ per course, **or** $50,400^ (12-course masters) / $4,200^ per course (see entry requirements).

Graduate Certificate is $16,800^/ $4,200^ per course.

See our fees page for further information. Fees are listed in Australian dollars and apply to 2025 only. Fees are adjusted on an annual basis; these fees should only be used as a guide. FEE-HELP is available.

^ Plus a capped Student Services and Amenities Fee (SSAF) based on your credit point enrolment load.

Program intakes

Six intakes annually
January, March, May, July, August and October.

Program duration

Masters (12 courses)
2 years part-time.*

Masters (16 courses)
2.7 years part-time.*

Graduate Certificate (4 courses)
8 months part-time.*

Each course is seven weeks in duration and requires a minimum of 15–20 hours of study per week.

Nested qualifications

Our Master of Business Analytics and AI Strategy encompasses the Graduate Certificate in Business Analytics and a Graduate Diploma in Business Analytics and AI Strategy (exit point only). Should you need to exit the program early, you can still earn a postgraduate qualification by successfully completing specified courses.

The graduate certificate is also a pathway to the Master of Business Analytics and AI Strategy program for some students (see entry requirements).

Ready to apply?

We recommend speaking with one of our Enrolment Advisors before applying for this program. Alternatively, you can apply by logging in and following the instructions in the Application Portal. Click here to apply. To ensure you select the right program in your application, please use the below program codes:

MC74KP25 - Master of Business Analytics and AI Strategy

GC193KP21 - Graduate Certificate in Business Analytics

GC173KP19 - Graduate Certificate in Data Science

**Completion time dependent on individual study path and course availability. Please speak to a Student Advisor for more information.*

Entry requirements

Master of Business Analytics and AI Strategy

12 course Master of Business Analytics and AI Strategy

- An Australian Bachelor degree (AQF 7) or equivalent from a recognised tertiary institution in Business.
- An Australian Graduate Certificate, Graduate Diploma or Master's degree or equivalent in Business OR IT OR Engineering (or a related discipline).
- Successful completion of the RMIT Graduate Certificate in Business Analytics

16 course Master of Business Analytics and AI Strategy

- An Australian Bachelor degree or equivalent in any non-business discipline.

^Upon successful completion of the Graduate Certificate in Business Analytics you will have the opportunity to progress to the Master degree.

We offer Recognition of Prior Learning, or the recognition of previous study or learning. This means you can apply for credit and reduce the number of courses you need to complete. Your application will be decided on a case-by-case basis. RMIT aims to grant as much credit as possible at the time of offer, so it's important to provide as much evidence of prior study or work experience as possible with your application. Speak to our Enrolment Advisors to find out more.

Graduate Certificate in Business Analytics & Graduate Certificate in Data Science

- A bachelor's degree or equivalent, or higher-level qualification, in any discipline from a recognised tertiary institution*; or
- An alternate entry requirement. If you don't have the formal bachelor's or higher qualification listed above, you will be required to submit a curriculum vitae (CV) if you have the following: at least five years full-time experience working in an analyst or management role in business, information technology or information systems with a portfolio of evidence demonstrating analysis and report writing.

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

**If your qualification was completed more than 10 years ago you will need to provide evidence of ongoing professional work and/or professional development in the same discipline as the program for which you are seeking entry.*

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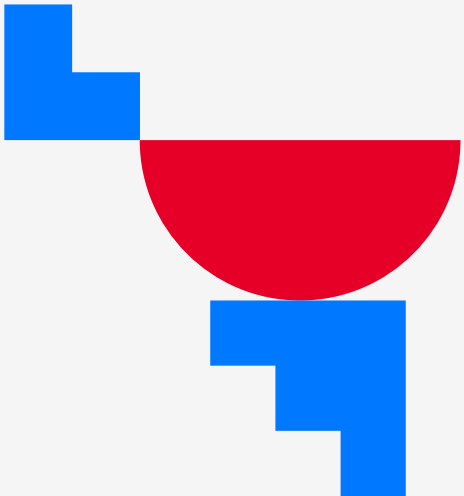
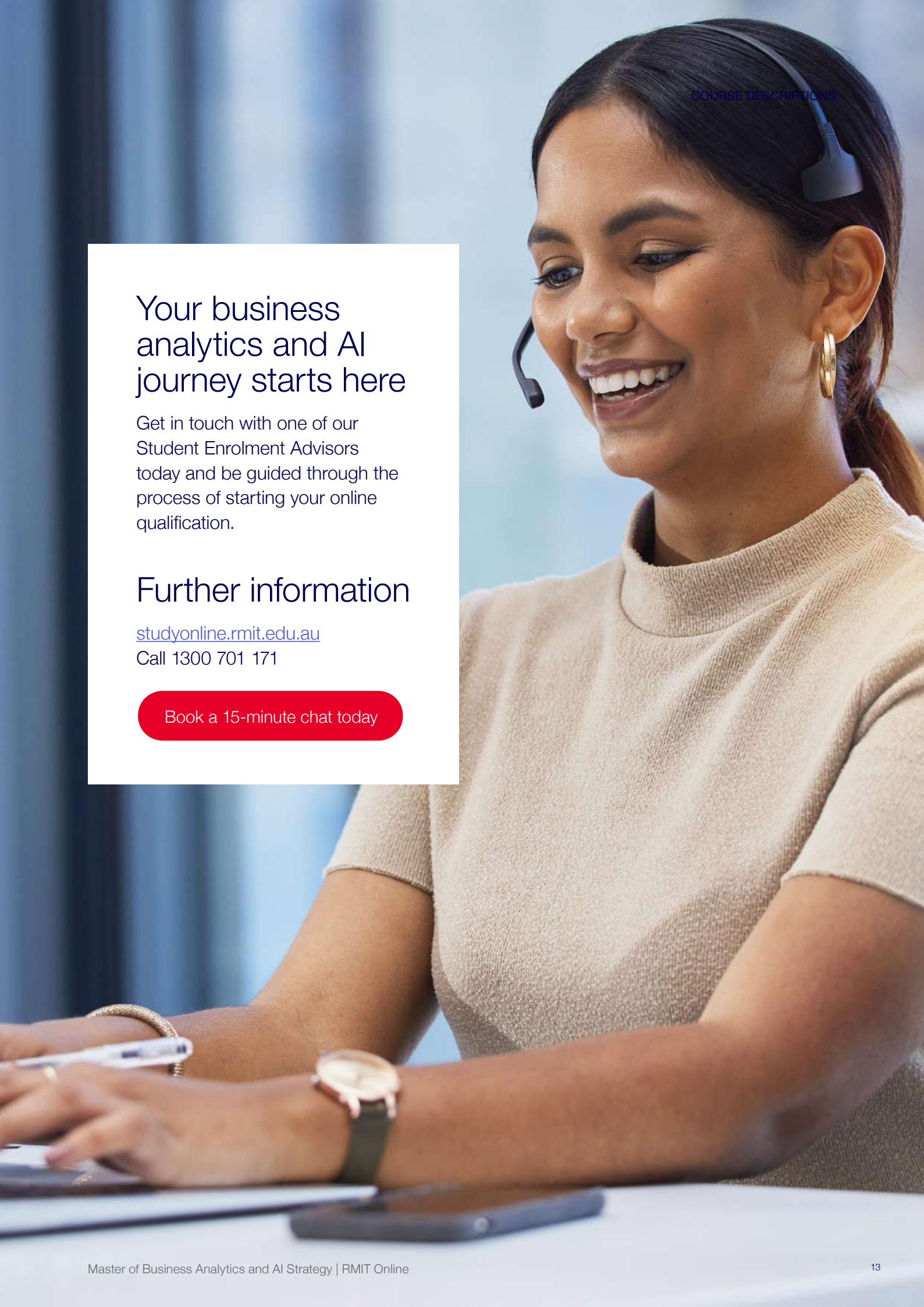
Entrance requirements for international applicants

All non-Australian residents and overseas full-fee-paying students are required to meet RMIT English language requirements. For more information on these requirements and acceptable English Language tests, please see rmit.edu.au/international/english-equivalent

Australian student visas

RMIT Online's Master of Business Analytics and AI Strategy does not meet Australian student visa requirements. For an Australian student visa, you must have an on-campus place in a program of study. For more details on RMIT's on-campus programs, visit rmit.edu.au.





Your business analytics and AI journey starts here

Get in touch with one of our Student Enrolment Advisors today and be guided through the process of starting your online qualification.

Further information

studyonline.rmit.edu.au
Call 1300 701 171

Book a 15-minute chat today

Business Analytics

Course overview

This course introduces you to the concepts, fundamentals and tools of business analytics. You will critically examine how data can be used to drive decision-making through statistical and quantitative analysis, explanatory and predictive modelling and fact-based management. You will also develop, evaluate and analyse core analytic techniques and skills that are frequently applied in business. No matter what your business focus, you and/or your business will be a future user of analytics.

Learning outcomes

- Evaluate the key concepts of business analytics and assess the results generated to deliver positive outcomes.
- Outline the relationship of the business analytics process within the organisation's decision-making process.
- Access relevant business data and pre-analyse the data to the exact specifications and variables.
- Examine and apply appropriate business analytic techniques and methods to inform responsive, evidence-based decision making to improve performance.

Visualising and Communicating Insights in Business

Course overview

Data visualisation and its communication are increasingly important in business analytics. The design of effective visualisations that communicate business insights extracted from data can support stakeholders for data-driven business decision-making. Understanding and evaluating different types of data is critical in determining the appropriate types of techniques for creating visualisation.

You will learn how to develop different types of visualisations from various data sources and craft your narrative for stakeholders' needs based on insights extracted from the visualisations.

Learning outcomes

- Apply concepts, best practices and ethical guidelines related to data visualisation and storytelling and propose appropriate visualisation techniques for synthesised data from multiple sources.
- Design insightful and engaging visualisations and craft evidence-based narratives to meet the needs and requirements of a target audience.
- Justify the selection of the appropriate visualisation techniques for different varieties of data.
- Critically analyse and evaluate different data visualisations and storytelling techniques that effectively visualise and communicate data in hand.

Predictive and Prescriptive Analytics in Business

Course overview

This course introduces you to concepts and techniques using data in predictive and prescriptive analytics to make operational, tactical and strategic decisions in business. In this course you will go beyond descriptive analytics and build models that provide optional or realistic scenarios and predict outcomes. You will further develop prescriptive analytics, a type of data analytics that recommends decisions or a strategy. You will also learn how to interpret prediction outcomes, and their limitations and level of accuracy as well as communicating decisions and recommendations with ethical considerations.

Learning outcomes

- Justify the use of predictive and prescriptive techniques by identifying and addressing authentic problems in business.
- Develop and interpret predictive models for business scenarios using appropriate tools and techniques.
- Develop and justify prescriptive decision models for business settings using appropriate tools and techniques.
- Recommend and communicate data-driven decisions to stakeholders, acknowledging confidence levels and ethical considerations.

Digital Strategy

Course overview

Business organisations increasingly depend on Information Technology (IT). However, many business managers regularly complain that their IT investments and solutions often fall short of expectations. They face problems in planning, evaluating, implementing and reviewing IT decisions. Processes and procedures for managing IT are at times absent and in other cases either inadequate or not working properly. There are also issues of misalignment between IT and business, articulating the right level of IT investment and measuring IT performance. Central to overcoming these problems is an appreciation IT strategy.

This course will enhance your appreciation of IT strategy both in theory and in practice and equip you with the skill to investigate, formulate and implement an IT strategy in an organisational work context.

Learning outcomes

- Demonstrate broad and critical understanding of IT strategy development, implementation and value issues (such as IT and business alignment, IT capability, strategic relevance of emerging IT, change management) and provide a conceptually and theoretically sound explanation about these issues.
- Critically and systematically document, review and evaluate business objectives and the role of IT in achieving them.
- Analyse and evaluate the IT capabilities and alignment of organisations as well as the strategic implications of emerging IT, market and institutional trends and synthesise those in terms of strengths, weaknesses, opportunities and threats for a business.
- Develop IT strategic objectives and identify solutions based on industry and technology trends that improve IT capabilities, IT and business alignment, and business performance.
- Formulate an IT strategy implementation roadmap by recognising change management issues.
- Apply industry relevant IT strategic planning frameworks, tools, methodologies and processes to evaluate IT management problems and create IT strategies.

Consumer Analytics

Course overview

This course introduces students to the capabilities of data science and analytics tools to solve problems at the interface of organisations and consumers. You will make the kinds of proposals, reports and presentations that are used in a real-world context. You will also critically evaluate the published literature, and use case studies and real data to profile consumers to design creative analytics solutions that improve a product or service and/or measure the effectiveness of marketing strategies.

This course includes a Work-Integrated Learning experience. You will undertake and be assessed on structured activities that allow you to learn, apply and demonstrate your professional or vocational practice, and be involved in authentic engagements with partner organisations that includes industry feedback.

Learning outcomes

- Design approaches to using data science tools for consumer profiling, predicting behaviour and optimising for profitability and/or outcomes.
- Interpret consumer friction points to identify organisational opportunities that can be solved by data science tools and approaches before communicating recommended solutions to identified stakeholders.
- Critically evaluate the published literature and case studies from a range of industries and organisations to design relevant analytics to improve product or service design and/or marketing strategy.
- Model consumer behaviour data types and select applications to inform strategic decisions – e.g. increase revenue, profit, marketing efficiency, or improve product or service design and delivery.

Data Architecture, Ethics and Governance

Course overview

This course focuses on the architecture, ethics and governance of data for use in the data science context. During this course, you will learn to identify appropriate behaviours and practices using ethical frameworks and policies, and how to comply with governance and legislation. You will learn how data ethics is informed and applied in a variety of settings, and you will apply this to industry standards on sourcing, storing and giving informed consent to use big data. You will also learn about appropriate architectures to enable ethical and effective management and use of data.

Learning outcomes

- Formulate data architecture solutions to match data characteristics – e.g. size, complexity – leveraged by the organisation to support data storage and ongoing analytics processes.
- Assess the risks associated with storage strategies and mechanisms for maintaining the security of big data.
- Assess data quality – based on source, time and how it's created – and determine the impact on the findings/results based on an ethical analysis approach.
- Evaluate data governance schemes for an organisation or project to manage data quality and validity.
- Critically review global industry-standard regulatory constraints on data privacy – sourcing, storage and use of data – to develop your professional practice.
- Critically interpret industry-informed, evidence-based best practice in privacy, informed consent and associated ethical and/or legal aspects of data analytics.
- Propose stakeholder management strategies to influence key decisionmakers to advocate for the implementation of ethical data management practices.

Analytics, Strategy and Change

Course overview

This course focuses on the characteristics of data-driven organisations along with the motivations, obstacles and interventions that bring change. You will explore approaches to influencing stakeholders to support the implementation of a change-management plan. You will learn practical change-management skills through the design of transformation plans and stakeholder engagement strategies. You will also explore strategic approaches to managing analytics and data as well as team development.

Learning outcomes

- Establish the characteristics of a data-driven organisation and critically reflect on the obstacles and enablers to achieving strategically appropriate data science and analytics organisational capability.
- Undertake planning for transformation, project management and stakeholder engagement activities fit for a specified organisation or industry.
- Identify opportunities for intervention and develop change-management strategies based on learning from leading organisations in the context of the digital economy.
- Design people-based organisational capacity, including cultural and management approaches, operating structures, career paths and skills development for a data science team.
- Develop communication strategies and approaches suitable for changing environments and diverse stakeholders.

Financial Analytics for Managerial Decisions

Course overview

In today's environment, business, finance and accounting professionals need to analyse an increasing volume of data in meaningful ways to make sustainable strategic decisions. Good decisions depend on accurate and well-presented information drawn from both domestic and international sources and more importantly, the ability to synthesise and draw conclusions from that data. Financial Analytics for Managerial Decisions will develop your ability to interpret and analyse both internal and external financial information so that, as a business leader, you can make effective and sustainable decisions in a global context. To develop not only your technical expertise but also your interpersonal and problem-solving skills, you will participate in teamwork and a business simulation.

Learning outcomes

- Analyse, interpret and critically evaluate global financial information from a variety of sources to develop sustainable business proposals.
- Create effective business reports, advice and tables tailored to specific business needs.
- Show effective, appropriate and persuasive collaboration and communication skills through engagement with case interviewing and problem-solving in a business simulation.
- Select, communicate and advocate effective strategies using design thinking to address complex business problems and opportunities.
- Apply ethical standards to the role and conduct of financial reporting.

Leading in the Age of Digital Disruption

Course overview

Digital innovations are increasingly impacting workplaces and raising a host of leadership issues. There are major implications for the future of work organisation, and this course is designed to equip students to understand the key issues and develop the skills required to lead organisations and employees within this new work context.

The course will examine key contemporary literature relevant to leadership in the age of digital disruption. You will be connected with new conversations exploring issues arising from the digital revolution, including lessons learnt from digital start-ups, the future of the organisation of work, virtual leadership and leadership of boundary-spanning activities. The course will also discuss privacy and other ethical issues related to digital disruption.

Learning outcomes

- Critique the literature by discussing the effect of digital disruption on leadership.
- Critically evaluate the processes and skills best suited to effective leadership in the age of digital disruption.
- Analyse workforce development requirements for a start-up, and design and construct a workforce development plan.

Shaping Organisations with Artificial Intelligence

Course overview

This course introduces students to the capabilities, limitations and biases of AI tools and how they may be applied to solve business or organisational problems. You will develop key artefacts throughout this course, including slide decks, literature and case study reviews and implementation plans. During this course, you will learn how to engage in research and apply findings from cutting-edge literature and case studies to selecting and using AI tools. By the end of the course, you will be able to articulate a range of business or organisational problems that can be solved using AI.

Learning outcomes

- Map data science approaches to business functionality and data characteristics to solve data-informed business problems.
- Critically evaluate literature to identify solutions for business and organisational problems.
- Propose and justify a strategy to translate proven evidence-based approaches to new contexts and propose organisational capabilities to be developed, augmented or automated with AI techniques.
- Critically evaluate the consequences of automation within and across organisations and sectors from an organisational leadership perspective.
- Logically and comprehensively analyse ethical perspectives related to designing, training and using AI to understand impact, minimise bias and improve the validity of outcomes.

Machine Learning for Decision Makers

Course overview

This course introduces students to the capabilities, limitations and biases of machine learning, and how it may be applied to predict outcomes and subsequently solve business or organisational problems. In this course, you will create a heuristic design, use case studies and develop presentations. You will learn how to research heuristics and tools to select and apply machine learning to a business or organisational problem, and to effectively present insights to executive stakeholders that can help automate decision making, allowing teams to focus on higher-order decisions.

Learning outcomes

- Select and justify a heuristic to support the selection of the appropriate tool to solve a range of business problems.
- Analyse and recommend an appropriate analytical approach – e.g. machine learning techniques, AI models, deep learning – based on a range of problem-specific parameters – e.g. problem recognition, testing hypotheses, reproducibility and applicability of models – to solve data science problems.
- Evaluate and identify relevant data analysis options for managing and incorporating big data into decision making within an organisation.
- Use critical reflection to verify that the approach, reproducibility and accuracy of inputs and outputs of data science algorithms are ethical, valid and sustainable.
- Interpret the outputs of machine learning and effectively communicate this to decision makers in a range of contexts.
- Use machine learning applications and/or analyse the outputs to provide additional clarity to support strategic decision making for an executive group.

Data Science Strategy Consulting Project

Course overview

This is the capstone unit of the Master of Business Analytics and AI Strategy. The aim of this course is to develop your ability to act as a consultant who can translate an organisation's desire to derive business value from data science initiatives into reality. This course introduces you to proposing real-world data science strategies to influence decision makers to meet organisational goals and objectives. You will create proposals, reports, prototypes and plans to be used in a real-world context and with leading companies in RMIT's industry partner network. During the course, you will analyse data science tools and approaches to business problems and learn how to clearly communicate complex analysis to key stakeholders using reports and presentations.

This course includes a Work-Integrated Learning experience. You will undertake and be assessed on structured activities that allow you to learn, apply and demonstrate your professional or vocational practice, and be involved in authentic engagement with partner organisations that includes industry feedback.

This course also provides you with a capstone experience that will provide you with the opportunity to integrate, critically reflect on and consolidate what you have learned in your program.

Learning outcomes

- Critically evaluate big data in a real-world scenario to identify opportunities.
- Develop and present analysis and design strategies for key stakeholders – specialist and nonspecialist.
- Develop and apply a research-informed approach to identify and propose solutions to an emerging business concern or opportunity.
- Critically assess business problems and use specialist knowledge in data handling, analysis approaches, tools and techniques, including AI, machine learning and visualisation to propose solutions to solve business problems and confirm the validity of inferences and assumptions.
- Propose innovative, viable and sustainable solutions for an organisation while considering the costs involved.
- Justify proposed design solutions for computational architecture and/or data science approaches within an established or emerging context.

Practical Data Science with Python

Course overview

The course gives you a set of practical skills for handling data that comes in a variety of formats and sizes, such as texts, spatial and time-series data. These skills cover the data analysis lifecycle from initial access and acquisition, modelling, transformation, integration, querying, application of statistical learning and data mining methods and presentation of results. This includes data wrangling, the process of converting raw data into a more useful form that can be subsequently analysed. The course is hands-on using Python in the iPython interactive computing framework.

Learning outcomes

- Use industry and evidence-based tools and approaches to transform raw data into a format suitable for a data science pipeline.
- Identify scenarios where a machine learning approach may support effective data analysis.
- Extract an interpretation and visualisation of data using exploratory data analysis in Python.
- Construct and document an experimental methodology for the analysis of data.
- Select appropriate models and apply simple machine learning tools and feature selection strategies for a defined data science problem.
- Apply professional standards to allow reproducibility of analysis.

Applied Analytics

Course overview

This course will introduce you to fundamental statistical concepts and modern statistical practices used in analysis. You will study statistical data investigations, summary statistics, data visualisation and probability as a measure for uncertainty. You will then build upon these topics and learn about sampling, sampling distributions and confidence intervals as the basis for statistical inference and decision making. The course will finish with a series of modules looking at common hypothesis-testing methods for different types of data. There is an emphasis on conceptual understanding, interpretation of statistical output and the use of statistical technology, namely R, for statistical computation in an analytical or data science context.

Learning outcomes

- Plan a statistical data investigation by selecting the appropriate approach for solving a problem, considering a range of analytical approaches including the issues and pitfalls in applying these techniques and biases introduced through data collection.
- Use relevant open-source environments and tools (e.g. R) to perform fundamental statistical analyses–descriptive analysis, hypothesis testing, ANOVA, correlation and linear regression–and to support communication and visualisation of key results.
- Communicate results accurately and in a way that prevents or minimises potential bias and errors in sampling data.

Data Visualisation & Communication

Course overview

Learn how to create compelling data visualisations that tell the story behind the data and help stakeholders solve real-world problems. The classic saying, 'seeing is believing', effectively articulates the importance of data visualisation. Whether you are exploring vast datasets, communicating your data analysis in meaningful ways, or presenting the story behind your data to influence your audience, data visualisation is the most powerful tool at your disposal. As an interdisciplinary field, data visualisation continues to be heavily influenced by research in visual perception and psychology, statistics, computer science, art and many other fields. The course will begin with a focus on refining the problem to be solved between you and your stakeholder. Next, you will design visualisations appropriate to the information in the data and the problem to be solved. You will explore cutting-edge, cloud-based, open-source applications to bring to life clear visualisations of complex, big real-world data. You will also explore the influence of disciplines and ethical considerations that impact the efficacy of data visualisation.

Learning outcomes

- Identify a target audience, refine the problem they are trying to solve and determine the data visualisation design goal.
- Conceptualise multiple data visualisation designs and determine the most appropriate strategy to achieve the goal.
- Source, review and prepare the data required for data visualisation.
- Use leading, web-based, open-source, interactive data visualisation technology to build, deploy and disseminate data visualisations.
- Support the communication of the story behind data visualisation using written, verbal and interactive techniques that connect to data findings and defined business problems.
- Integrate knowledge of visual perception, information visualisation and findings from data visualisation research to improve the effectiveness of data visualisations and critique the work of others.
- Reflect on the major ethical issues that can arise during the practice of data visualisation.

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- Integrate knowledge of visual perception, information visualisation and findings from data visualisation research to improve the effectiveness of data visualisations and critique the work of others.
- Reflect on the major ethical issues that can arise during the practice of data visualisation.

Data Wrangling

Course overview

Real-world data are commonly incomplete, noisy and inconsistent. This course will cover a wide range of topics designed to equip you with the skills needed to prepare all forms of untidy data for analysis. The course will cover the core concepts of data pre-processing, namely, tidy data, data integration, data cleaning, data transformation, data standardisation, data discretisation and data reduction. You will develop and apply your data-wrangling skills to complex, noisy and inconsistent real-world data using leading open-source software.

Learning outcomes

- Accurately, logically and ethically combine data from multiple sources to make it suitable for statistical analysis and draw valid interpretations.
- Articulate how data meets best practice standards – e.g. tidy data principles.
- Select, perform and justify data validation processes for raw datasets.
- Use leading open-source software (e.g. R) for reproducible, automated data processing.

Every effort has been made to ensure the information contained in this publication is accurate and current at the date of publishing. For the most up-to-date information, please refer to the RMIT University website before submitting your application.

Prepared November 2024.

Further information

studyonline.rmit.edu.au
Call 1300 701 171

Book a 15-minute chat today

RMIT University CRICOS Provider Code: 00122A
RMIT Registered Training Organisation code: 3046