



Business Analytics

Grow analytics skills to produce valued business insights

“The Business Analytics minor will provide students with the fundamental knowledge, skills and experience required to thrive in the modern workforce – especially with the ability to tailor the minor towards their primary domain.”

James M Martin
Director, Mission Intelligence,
New Zealand

The minor in Business Analytics is an excellent pairing for Commerce majors, although it can be taken alongside most other majors.

All modern organisations, including businesses, generate and store huge amounts of data that needs to be systematically analysed to extract useful insights. These insights are instrumental for good decision making. By taking this minor you will learn how to conduct data analysis – clean, manipulate, visualise, model and communicate data.

The skills and knowledge you learn in this minor can be applied across a variety of domains, including accounting, finance, economics, marketing, tourism, sports science, linguistics, psychology, zoology, ecology and health.

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Why study Business Analytics?

According to Forbes, 94 per cent of enterprises surveyed noted that data analysis was key to their business growth and digital transformation. The Business Analytics minor will teach students to apply analytics skills and techniques to organisational data to obtain actionable insights. The papers in this minor will develop sought-after skills that are required in every area of business including accounting, finance, marketing, management, economics and tourism.

Background required

There are no prerequisites except a desire to learn techniques and skills to extract insights from business data. This minor will suit anyone who has an interest in data and computing.

Teaching style

Since this is a practically oriented discipline, there is an emphasis on a "hands-on" approach to analysing data and extracting insights. The papers cover a set of core analytical skills, techniques and tools, which are applied in a business context. Core analytics skills including data cleaning, wrangling, visualisation and reporting are paramount, as are their domain-specific applications – analysing specific business problems based on available data and proposing solutions using learned techniques. Data analytics concepts and techniques are delivered through lectures, labs, tutorials and practical workshops.

Students taking the minor will learn these skills through three core papers: INFO 130 Fundamentals and Practice of Spreadsheets, COMP 120 Practical Data Science and INFO 204 Introduction to Data Science. Through these papers the students will be exposed to commonly used data analysis platforms, including Excel, R and Python, and relevant techniques. The knowledge and skills acquired in these courses will be put to practice and extended by taking two further papers (one 200- and one 300-level paper) that are in one or more business domains (e.g., accounting, finance or economics). In this way the minor spans disciplines at the Otago Business School.

Required papers

INFO 130 Fundamentals and Practice of Spreadsheets

COMP 120 Practical Data Science

INFO 204 Introduction to Data Science

Plus any one of:

ACCT 260 Introduction to Accounting Analytics

ECON 210 Introduction to Econometrics

FINC 203 Financial Data Analysis

MART 212 Understanding Markets

And any one of:

INFO 304 Advanced Data Science

ACCT 306 Accounting Information Systems

ACCT 310 Financial Statement Analysis

ACCT 360 Advanced Accounting Analytics

FINC 302 Applied Investments

ECON 375 Econometrics

Career opportunities

There is a range of opportunities available for students who pursue the Business Analytics minor. The main pathway is that of a data analyst or business intelligence analyst – for example, in specific domains such as marketing or finance, which would also be the major pursued. Other specific roles may include marketing analyst, CRM analyst, financial analyst and HR analyst. Course advisers can help you plan a personalised minor through the selection of the two non-core papers to specialise in specific domains, such as accounting analytics and financial analytics.

For questions about
Business Analytics
otago.ac.nz/informationsscience



ENDORSEMENTS

Alix Lucas-Fyfe

Co-owner, Outreach CRM, New Zealand

"This minor will be a valuable addition to any commerce degree. The skills students develop will be applicable to many different roles, industries and companies. In the current business climate, the ability to analyse data effectively to provide insights and offer strategic and practical solutions is essential."

Tony Savarimuthu

Associate Professor and programme co-ordinator

"The minor will equip students to traverse the entire business analytics workflow, including data collection, processing (cleaning, manipulation, aggregation, joining and reshaping), visualisation, modelling and communication. This minor will prepare students well for tackling data analytics tasks and challenges in the real world."

