THE UNIVERSITY OF
WAIKATO
Te Whare Wānanga o Waikato

Data Analytics

COMPUTING & MATHEMATICAL SCIENCES
ROROHIKO ME NGĀ PŪTAIAO PĀNGARAU

Data Analytics

Data Analytics is the science of collecting and processing data for knowledge discovery.

Data Analytics sits at the intersection of Statistics and Computer Science. With the massive amount of data that is available today, we need graduates who can effectively collect, manipulate, and perform statistical analyses of data. These statistical analyses allow us to make informed decisions and answer questions in a world where variability is everywhere.

Data Analytics will provide the skills and techniques for administering and manipulating large databases to extract useful information for statistical analysis, and the ability to use statistical techniques solving real world problems.

Data Analytics at Waikato

Data Analytics is available as a major for both the Bachelor of Science (BSc) (3 years) and for the Bachelor of Computing and Mathematical Sciences with Honours (BCMS(Hons)) (4 years) qualifications.

Your first year of study will include introductory papers in Statistics and Computer Science to prepare you for the higher level papers.

Data Analytics papers are supported by computer laboratories that include high-end PCs, equipped with the latest versions of specialist statistical software packages. Throughout your degree you will also benefit from small class sizes, which guarantee individualised support for your learning.

Entry requirements

While there are no specific subjects you need to study at secondary school to gain entry to Data Analytics at Waikato, Calculus and Statistics are very useful.
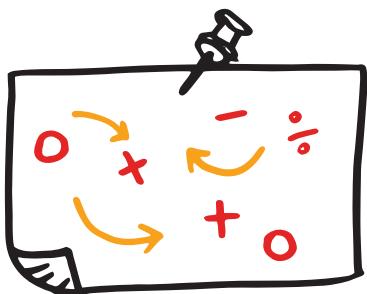
Careers in Data Analytics

The amount of data available to businesses and organisations is growing daily. Good Data Analytics graduates who can analyse data and turn it into meaningful information are in high demand.

Career opportunities

- Biometrics
- Business Analytics
- Government Research
- Industrial Statistics
- Insurance and Finance
- Market Research
- Medical Statistics
- Data Analysis

Scholarship information

We recognise our top enrolled students. Each year we present the **Dean's Awards** to the best ten students at each level, enrolled in an undergraduate degree in the Faculty of Computing and Mathematical Sciences.

CLAIRE FORSYTHE

Market Analyst, LIC

I was looking for a new challenge after I completed my Masters. As my parents are dairy farmers the Market Analyst position at LIC was both interesting to me personally and professionally. My passion for numbers and hard working ethic got me the job and it helped having background knowledge in the dairy industry!

Waikato gave me the opportunity to expand my skills and knowledge, which I have been able to apply to my everyday work. My role involves weekly and monthly reporting for the LIC New Zealand Markets team in areas such as financial activity and customer information.

A degree in Statistics from Waikato University is a prestigious degree that makes employers look at you twice. It showed that I am able to apply myself and think outside of the box.

Bachelor of Computing and Mathematical Sciences with Honours (BCMS(Hons))

Y1	STATS111 or STATS121	COMPX101 Introduction to Computer Science	CSMAX170 Foundations in Computing and Mathematical Sciences	MATHS135 Discrete Structures	Field of the Degree 100 Level	Field of the Degree 100 Level	Elective	Elective
Y2	STATS221 Statistical Data Analysis	STATS226 Computational Bayesian Analysis	COMPX223 Database Practice and Experience	Field of the Degree 100 Level	CSMAX270 Cultural Perspectives	Elective	Elective	Elective
Y3	COMPX305 or STATS321	Any 300 Level Paper listed for Data Analytics	Any 300 Level Paper listed for Data Analytics	Any 300 Level Paper listed for Data Analytics	COMPX375 OR STATS390 OR STATS391	Elective	Elective	Elective
Y4	COMPX520 Report of an Investigation *(at least 45 points)*			Any STATS 500 Level Paper	Elective	Elective	Elective	Elective

Bachelor of Science (BSc)

Y1	STATS111 or STATS121	COMPX101 Introduction to Computer Science	CSMAX170 Foundations in Computer and Mathematical Sciences	MATHS135 Discrete Structures	100 Level Science Elective	100 Level Science Elective	Elective	Elective
Y2	STATS221 Statistical Data Analysis	STATS226 Computational Bayesian Analysis	COMPX223 Database Practice and Experience	CSMAX270 Cultural Perspectives	200 Level Science Elective	Elective	Elective	Elective
Y3	COMPX305 or STATS321	Any 300 Level Paper listed for Data Analytics	Any 300 Level Paper listed for Data Analytics	Any 300 Level Paper listed for Data Analytics	COMPX375 OR STATS390 OR STATS391	Elective	Elective	Elective

Contact us

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WHERE THE WORLD IS GOING
TE AHUNGA O TE AO