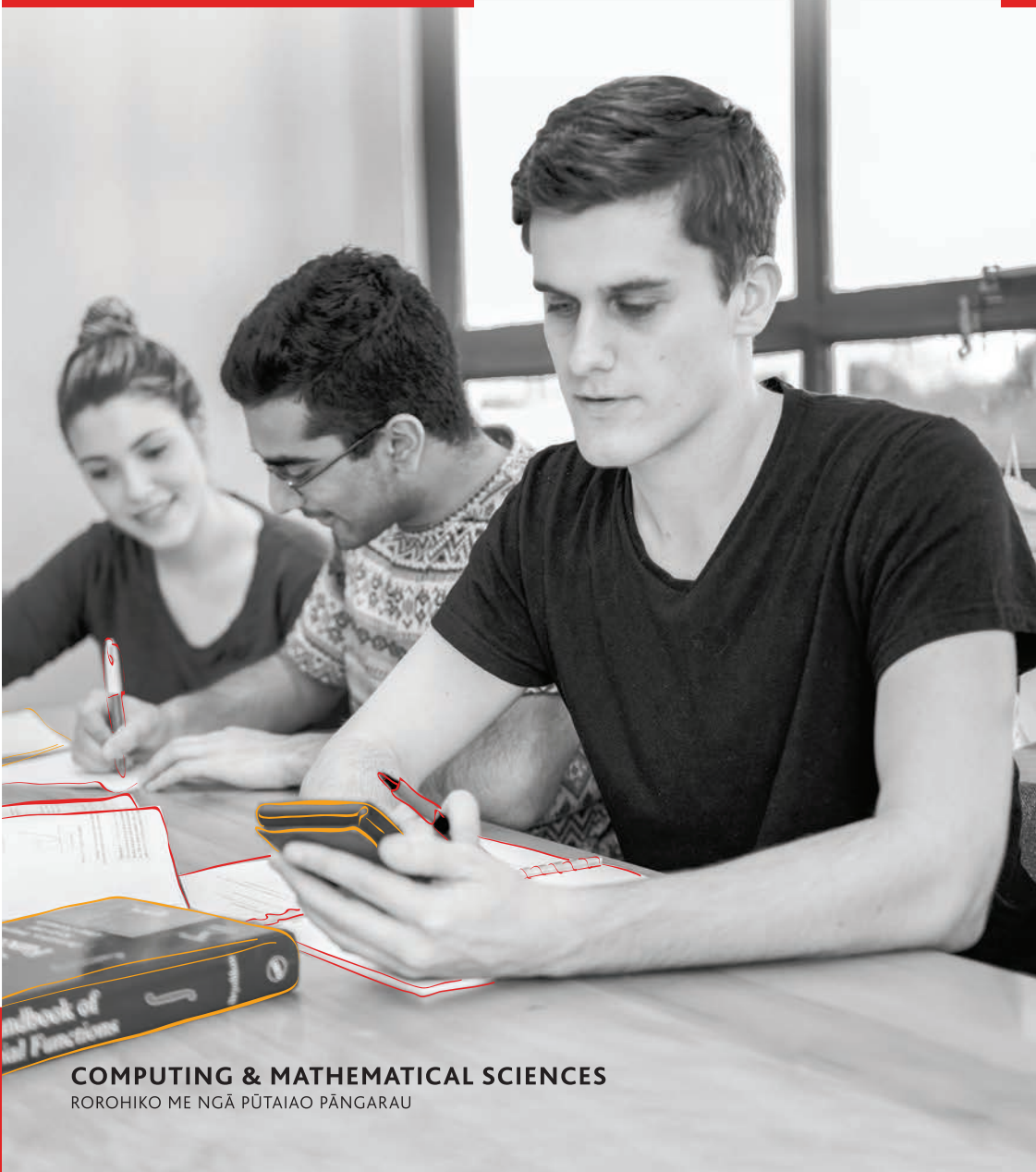




THE UNIVERSITY OF
WAIKATO
Te Whare Wānanga o Waikato

Mathematics



COMPUTING & MATHEMATICAL SCIENCES

ROROHIKO ME NGĀ PŪTAIAO PĀNGARAU

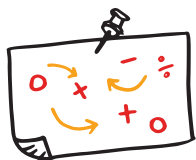
Mathematics

Mathematics underpins many activities of modern society.

A graduate with a mathematics degree, or with a strong mathematical component to their degree, is a valuable person in today's world. Besides the knowledge and understanding of mathematics itself, you will have valuable analytical and problem-solving skills.

Mathematics is used in almost every type of business, large and small. Studying mathematics in combination with another subject means you can work in other fields, such as chemistry, biology, earth sciences, economics, finance, engineering, physics, electronics, banking and meteorology, to name just a few.

Capable students should consider the flexible double major options in Mathematics and Computer Science, or Mathematics and Data Analytics.



Entry requirements

MATHS101 *Introduction to Calculus* and MATHS102 *Introduction to Algebra* are both compulsory for a major in Mathematics.

MATHS101 *Introduction to Calculus* is open to students who have 16 credits in NCEA Level 3 Calculus including at least 11 credits from AS91577, AS91578 and AS91579; or equivalent.

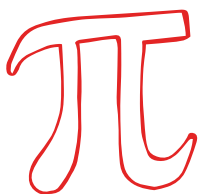
Admission to the paper MATHS102 *Introduction to Algebra* is open to students who have 16 credits of NCEA Level 3 Calculus; or equivalent.

These are guaranteed entry requirements. Those without these requirements will be considered on a case by case basis.

Qualification options

Mathematics can be taken as a first major for the following qualifications, or as a second major for most other bachelor's degrees.

- Bachelor of Computing and Mathematical Sciences with Honours (BCMS(Hons)) (4 years)
- Bachelor of Science (BSc) (3 years)



Career opportunities

The skills students will gain from study in Mathematics can lead to work in a variety of areas including:

- Data Analyst
- Financial Analyst
- IT or Computing Analyst
- Mathematical Modeller
- Meteorologist
- Research Scientist
- Secondary School Teacher

Potential employers

Students who have studied Mathematics have gained employment in a variety of organisations including:

- District/City Councils
- Government Organisations (eg Reserve Bank, Treasury, Ministry of Economic Development, Crown Research Institutes)
- Private Sector (eg power companies, banks, insurance companies)
- Secondary Schools

Scholarship information

The Mathematics Fees Scholarship is open to applicants who are enrolling in the first year of study towards an undergraduate degree with a major in Mathematics at the University of Waikato.

The scholarship will have a value up to \$5000 and is awarded based on the results of a competitive examination. Visit math.waikato.ac.nz for more information.

TESS BENSEMAN

BCMS(Hons) majoring in Mathematics & Anthropology



Mathematics has always been one of my favourite subjects. Initially it wasn't my first choice when I went to university, but when I realised that what I was doing wasn't working for me I decided to study a degree in Mathematics instead, and it was the best choice I ever made. I am loving my studies and learning a range of new maths topics.

I chose to study Mathematics as part of a BCMS(Hons) with a second major in Anthropology because it provided the opportunity to study a range of Mathematics topics while continuing to study another subject alongside it right through to the end of my degree.

At the end I can come out with a degree having studied two subjects to honours level, which will broaden my opportunities in the future.

I don't yet have a specific career path in mind, but I am looking forward to completing my degree in Mathematics and discovering many opportunities along the way.

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

Y1	MATHS101 Intro to Calculus	MATHS102 Intro to Algebra	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	MATHS201 Continuing Calculus	MATHS202 Linear Algebra	Any MATHS2 Paper	CSMAX270 Cultural Perspectives	200 Level Science Elective	Elective	Elective	Elective
Y3	MATHS301 or MATHS302	Any MATHS3 Paper	Any MATHS3 Paper	Any MATHS3 Paper	*Choose one from List A	Elective	Elective	Elective
Y4	MATHS520 Report of an Investigation <i>(at least 45 points)</i>			Any MATHS5 Paper	Elective	Elective	Elective	Elective

Bachelor of Science BSc

Y1	MATHS101 Intro to Calculus	MATHS102 Intro to Algebra	CSMAX170 Foundations in Computing and Mathematical Sciences	MATHS135 Discrete Structures	100 Level Science Elective	100 Level Science Elective	Elective	Elective
Y2	MATHS201 Continuing Calculus	MATHS202 Linear Algebra	Any MATHS2 Paper	CSMAX270 Cultural Perspectives	200 Level Science Elective	Elective	Elective	Elective
Y3	MATHS301 or MATHS302	Any MATHS3 Paper	Any MATHS3 Paper	Any MATHS3 Paper	*Choose one from List A	Elective	Elective	Elective

*List A papers can be found in the FCMS Handbook

Contact us

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WHERE THE WORLD IS GOING

TE AHUNGA O TE AO