



THE UNIVERSITY OF  
**WAIKATO**  
*Te Whare Wānanga o Waikato*

## Applied Computing



**COMPUTING & MATHEMATICAL SCIENCES**  
ROROHIKO ME NGĀ PŪTAIAO PĀNGARAU

# Applied Computing

Applied Computing gives you the practical technological skills to provide effective computing solutions.

Applied Computing at Waikato emphasises hands-on opportunities to gain competence with a range of technologies including databases, website development tools, and visual software development environments. You will learn to use these tools to solve real problems, focusing on business applications.

Since computing is a fast-changing field, you will also develop skills to keep up-to-date with new technologies, including skills in new software – by building on what you know about how software-based systems work.

Applied Computing is where computing, science, design, and society meet. You will learn how technologies are integrated to build systems, how to find out what your customers' software needs are, and how to design useful and usable software.



## Applied Computing at Waikato

Students who complete the Bachelor of Science with a major in Applied Computing will have technical knowledge of information systems, database systems and internet technologies, and the ability to use existing tools and software libraries to plan, deliver, and apply computing solutions in a range of contexts.

## Entry requirements

While there are no specific subjects you need to study at secondary school to gain entry to Applied Computing at Waikato, NCEA Computing/Digital Technologies and Mathematics are very useful.

## Facilities

The computer facilities available to students are among the best in New Zealand, ranging from phones and tablets for mobile app development, to cluster computers for massively parallel processing. Because our degrees are highly practical, you'll begin working with these facilities right from your first semester.



## Qualification options

Applied Computing can be taken as a major for the Bachelor of Science (BSc) (3 years).

## Job opportunities

The skills students will gain from this programme can lead to work in a variety of roles including:

- Database Administration
- Software Testing
- Web Application Development
- Systems Analysis
- Technical Support

## Scholarship information

Each year we offer up to ten \$5,000 Computer Science Undergraduate Scholarships to students beginning study at the Faculty of Computing and Mathematical Sciences.

This scholarship is awarded based on the results of a competitive exam and is open to Year 12 and Year 13 students only. Visit [cms.waikato.ac.nz/scholarships](https://cms.waikato.ac.nz/scholarships) for more information.

We also 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.



## REBEKKA MARSH

BSc Computer Science, Applied Computing  
Technical Analyst, SMS Project  
University of Waikato



*After completing my degree I began working on a Student Management System project at the University of Waikato. I build student and staff facing components of an online portal, as well as behind the scenes processes for staff.*

*My job involves interacting with not only project staff, but staff throughout the University as well as external contractors. This means I am constantly learning new things and adapting my approach to problem solving. Being a recent graduate of Waikato really prepared me for my role.*

*The knowledge I gained from my classes has been invaluable in my job - I took several web design papers throughout my degree and just having that understanding is hugely beneficial.*

*The University has such a wide variety of specialisations to choose from and also a great selection of papers, which was ideal as it allowed me to focus on learning the things I'm interested in.*



## Bachelor of Science (BSc)

Y1	COMPX101 Introduction to Computer Science	COMPX161 Computing Media	CSMAX170 Foundations in Computing and Mathematical Sciences	MATHS135 STATS111 or STATS121	100 Level Science Elective	100 Level Science Elective	Elective	Elective
Y2	COMPX221 Programming for Creative Industries	COMPX222 Internet Applications	COMPX223 Database Practice and Experience	DSIGN241 Aspects of Web Design	CSMAX270 Cultural Perspectives	Elective	Elective	Elective
Y3	COMPX322 Web Development	COMPX324 User Experience Design	Any 300 Level Paper Listed for Applied Computing	COMPX375 Information Systems Industry Project	300 Level Science Elective	Elective	Elective	Elective

### Papers (15 points unless stated otherwise)

<b>MATHS135</b>	Discrete Structures
<b>STATS111</b>	Statistics for Science
<b>STATS121</b>	Introduction to Statistical Methods

## Contact us

### Faculty of Computing and Mathematical Sciences

Location: FG Link, Gate 8 Hillcrest Rd, Hamilton  
 Phone: 07 838 4322  
 Email: [cms@waikato.ac.nz](mailto:cms@waikato.ac.nz)  
 Website: [cms.waikato.ac.nz](http://cms.waikato.ac.nz)

### Department of Computer Science

Phone: 07 838 4021  
 Website: [cs.waikato.ac.nz](http://cs.waikato.ac.nz)  
 Facebook: [facebook.com/WaikatoFCMS](https://facebook.com/WaikatoFCMS)

©The University of Waikato, August 2017.