

Master of Applied Statistics 2015

School of Mathematics, Statistics
and Operations Research

KNOW YOUR MIND

One year Master of Applied Statistics*

There is a growing national and international demand in government, the social and physical sciences, business and finance for statistics and quantitative analysis, which are required for interpretation of the great variety and quantity of data generated in the information age.

The Master of Applied Statistics is designed to train students in a range of advanced statistical techniques and to provide them with an appreciation of the variety of work undertaken by professional statisticians.

Victoria's Master of Applied Statistics

Victoria University of Wellington is located in the capital city of New Zealand and is surrounded by government, business, and public plus private research organisations. The Master of Applied Statistics programme is to be completed in three trimesters (March–June, July–Oct, Nov–Feb) full time or up to three years part time. Graduates of the programme will have developed strong research, analytical and communication skills.

*Subject to Universities New Zealand approval by May 2014



School of Mathematics, Statistics and Operations Research

We are a vibrant and dynamic unit of around 30 academics and many postgraduate students, as well as a large body of undergraduates. The School's teaching and research are highly regarded by current students, alumni, and the international research community.

Our international quality staff consistently attract national and international grant funding and recognition through awards, invitations and membership of professional organisations.

Students benefit from our central location in Wellington—a compact, cosmopolitan city by the sea with diverse social and cultural activities at hand. Our proximity to government and research institutes enables staff to build collaborations with a wide variety of organisations such as Statistics New Zealand, Capital and Coast District Health Board, the Ministry of Primary Industries, the New Zealand Police and Toi Whaakari New Zealand Drama School. These collaborations allow our students the opportunity to work on relevant, real-world problems.

Royal Society of New Zealand Fellows from School of Mathematics, Statistics and Operations Research. L–r: Professor Rod Downey, Professor Rob Goldblatt, Professor Estate Khmaladze, Professor Geoff Whittle, Professor Matt Visser



Programme of study

The Master of Applied Statistics programme consists of two components: course work and practical training.

1. During the course you will complete six to eight of the following courses in advanced statistics:

- Bayesian Inference
- Biostatistics
- Computational Statistics
- Forecasting
- Generalised Linear Models
- Mathematical Demography and Life Insurance Mathematics
- Official Statistics
- Optimisation in Operations Research
- Probability
- Sample Surveys
- Statistical Inference
- Stochastic Models in Warranty and Maintenance
- Stochastic Processes
- Time Series

2. You will also take on practical and research training:

- Consultancy training—hands-on course providing statistical advice to clients in other fields (eg. biological sciences, psychology, business, social sciences, linguistics).
- Research skills development through a research preparation course.
- Placement—working in a relevant government department or business during the summer trimester (Nov–Feb).
- Project—applying your research and analytical skills to solve a problem arising from the placement, or independent of it.

Career opportunities

The consultancy training and work placement components are unique to Victoria's Master of Applied Statistics. They provide an opportunity for our students to gain work experience, develop teamwork and communication skills, form workplace connections, and build new career opportunities.

Workload

Full-time students can expect the workload (including classes) to be around 40 hours per week.

Admission criteria

Admission to the Master of Applied Statistics programme requires:

- an undergraduate degree in a relevant quantitative subject with a good academic performance (B+ or better)
- acceptance as a candidate by the Head of School (or nominee).

How to apply

Domestic students may apply for entry to the programme online: visit **www.victoria.ac.nz/enrol** to find out more.

International Students will need to apply through Victoria International (see following page).



International students

Students come to study at Victoria from all over the world—each year students from more than 100 different countries make up the student population. There are many international communities in the city—Malaysian, Thai, Indonesian, Japanese, Chinese—that help to make international students feel at home in their new learning environment.

Victoria International

Victoria International looks after the needs and welfare of international students, provides support and advice, and will meet you at the airport then introduce you to Victoria and Wellington.

Victoria International runs an orientation programme one or two weeks before the beginning of each trimester. This includes a tour of Wellington and an introduction to Kiwi culture.

Study to Work

For a student who has completed a qualification in New Zealand, you may be eligible for a Graduate Job Search Work Visa for a maximum of 12 months. Then, when you have found a job, you can apply for a further visa for up to two or three years under the Study to Work category.

Application procedure

International students should apply through Victoria International: visit **www.victoria.ac.nz/international** for more information.

If your application is successful, you will be advised of all subsequent procedures, such as obtaining a student visa. Information is also available from New Zealand diplomatic or trade offices.

Competence in English

When applying for the Master of Applied Statistics, you will need to provide evidence of a high level of English language skills.

If your first language is not English, you must show evidence of competence in English by taking a recognised test of English language proficiency—IELTS overall band of 6.5, no sub-score below 6 or TOEFL 90 on the internet-based test with at least 20 in writing. If you need to study English before beginning the Master of Applied Statistics, it is highly recommended that you attend the November–February English Proficiency Course at Victoria's English Language Institute.

Useful links

About Wellington: **www.WellingtonNZ.com**

About New Zealand: **www.newzealand.com**

Future students at Victoria: **www.victoria.ac.nz/study**

Immigration: **www.immigration.govt.nz**



To find out more about the Master of Applied Statistics contact:

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Faculty of Science

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