



Master of Applied Statistics

School of Mathematics
and Statistics

**KNOW
YOUR
MIND**



MASTER OF APPLIED STATISTICS

There is a growing national and international demand in government, 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 (MAppStat) 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 ONE-YEAR PROGRAMME

Victoria University of Wellington is located in the capital city of New Zealand and is surrounded by government, business and both public and private research organisations. The Master of Applied Statistics programme may be completed in one year full time (three trimesters: March–June, July–October and November–February) or up to three years part time. Students can start the programme either in March or July. Graduates of the programme will have strong research, analytical and communication skills.

SCHOOL OF MATHEMATICS AND STATISTICS

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 internationally recognised 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 Whakari 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 and Statistics. L-R: Professor Rod Downey, Professor Rob Goldblatt, Professor Estate Khmaladze, Professor Geoff Whittle and Professor Matt Visser.

PROGRAMME OF STUDY

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

Part One

The coursework component consists of six to eight of the following courses in advanced statistics:

- STAT 431 Biostatistics
- STAT 432 Computational Statistics
- STAT 433 Stochastic Processes
- STAT 434 Statistical Inference
- STAT 435 Time Series
- STAT 436 Forecasting
- STAT 437 Probability
- STAT 438 Generalised Linear Models
- STAT 439 Sample Surveys
- STAT 451 Official Statistics
- STAT 452 Bayesian Inference
- STAT 457 Stochastic Models in Warranty and Maintenance
- STAT 481 Special Topic 1: Mathematical Demography and Life Insurance Mathematics
- STAT 482 Special Topic: Systems Modelling

Part Two

The practical and research training comprises:

- Consultancy training—in a hands-on course on providing statistical advice to clients in other fields (for example, biological sciences, psychology, business, social sciences and linguistics).
- Research skills development—through a research methods course.
- Placement—working in a relevant government department or business during the summer trimester (November–February).
- A 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.

www.victoria.ac.nz/enrol

International Students 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 Wellington city—including Malaysian, Thai, Indonesian, Japanese and Chinese, among others—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 and provides support and advice, starting with meeting you at the airport, ferry or train station when you arrive and introducing 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 New Zealand culture.

Study to Work

A student who has completed a qualification in New Zealand may be eligible for a graduate post-study work visa for a maximum of 12 months. Once they have found a job, they can apply for a further visa for up to two or three years under Immigration New Zealand's Study to Work category.

Application procedure

International students should apply through Victoria International.

www.victoria.ac.nz/international

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—achieving an overall band of 6.5 in IELTS, with 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 12-week English Proficiency Programme at Victoria’s English Language Institute. You can join the programme at different times of the year (March, July or November).

Useful links

Wellington: www.wellingtonnz.com

New Zealand: www.newzealand.com

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

Immigration: www.immigration.govt.nz

Victoria’s English Proficiency Programme: www.victoria.ac.nz/lals

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

Dr Ivy (I-Ming) Liu

Programme Director

School of Mathematics and Statistics

Room 424, Cotton Building, Kelburn Campus

Phone 04-463 5648

Email ivy.liu@vuw.ac.nz

For general information contact:

School of Mathematics and Statistics

Room 358, Cotton Building, Kelburn Campus

Phone 04-463 5341

Email sms-office@vuw.ac.nz

Website www.victoria.ac.nz/sms

Faculty of Science

Room 144, Cotton Building, Kelburn Campus

Phone 04-463 5101

Email science-faculty@vuw.ac.nz

Website www.victoria.ac.nz/science

International students should contact:

Victoria International

Phone +64-4-463 5350

Email victoria-international@vuw.ac.nz

Website www.victoria.ac.nz/international



FACULTY OF SCIENCE

04-463 5101 | science-faculty@vuw.ac.nz | www.victoria.ac.nz/science