

Making a difference
to the world's health.



MASTER OF BIostatISTICS

SCHOOL OF PUBLIC HEALTH, UQ HERSTON (WEB-BASED)

Biostatistics uses data to measure, understand and ultimately solve medical problems. This exciting and versatile discipline is contributing to all fields of medical research and evidence-based health care.

UQ's Biostatistics program is part of the Biostatistics Collaboration of Australia and has been developed by Australia's foremost biostatisticians. It combines mathematical theory with knowledge of the specific challenges arising in different areas of science, making it a rewarding field of study for students who like maths and quantitative problems and want to contribute to the advance of broader scientific understanding.

Biostatistics graduates typically work in four main areas of medical research:

- Laboratory research studies to understand disease processes or pharmacological effects of new drugs
- Epidemiological studies to identify factors that increase disease risk (eg. influence of smoking on heart disease)

- Clinical trials to evaluate new drugs, procedures or treatment methods
- Health services research to evaluate the effectiveness of new modes of health care

If you like collecting and studying information, forecasting and drawing conclusions, biostatistics may offer the perfect health career for you.



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What will I study?

The courses of the Biostatistics program ensure students gain the knowledge and skills required to work as biostatisticians in a variety of roles and settings. The core courses for students whose undergraduate degree included a maths or statistics major are:

- Introduction to Epidemiology
- Data Management and Statistical Computing

Students with a undergraduate degree in health study these core courses:

- Introduction to Epidemiology
- Data Management and Statistical Computing
- Mathematical Background for Biostatistics
- Probability and Distribution Theory

Students can then choose from a range of other courses depending on their own interests or career aspirations:

- Health indicators and Health Surveys
- Design of Randomised Controlled Trials
- Linear Models
- Bayesian Statistical Methods
- Longitudinal and Correlated Data
- Burden of Disease Methods

In the last semester of a Masters degree, students complete a capstone course or undertake a dissertation. This course or dissertation gives the student an opportunity to apply the knowledge, skills and competencies learned during the program to a particular biostatistical problem.

The Biostatistics program can also be studied at Graduate Diploma and Graduate Certificate level.

This program is studied externally, using the latest web-based learning technologies. Full details of all study options and courses can be found at www.sph.uq.edu.au.

Careers

Graduates with qualifications in Biostatistics are in demand all over the world and can choose many different career paths. On any given day, our graduates might be:

- Compiling data for a longitudinal study on Australian women's health
- Interpreting results of a study of air quality near a bus tunnel in Seattle
- Monitoring and evaluating data on infections in hospitals in the UK
- Working at a global pharmaceutical company, analysing the efficacy of a potential new drug to treat HIV

Whether working 'hands-on' in the field, or in research, academia or government, all biostatisticians have the potential to make a real difference to the world's health.

World-leading expertise

The Biostatistics program at UQ is run as part of the Biostatistics Collaboration of Australia (BCA), the country's leading group of biostatisticians. Find out more at www.bca.edu.au.

The Biostatistics program is also enriched by the School's strong links with leading international agencies (including **Australian Aid**, the World Bank and the World Health Organization) and its major public health projects with partners like the Wellcome Trust, Atlantic Philanthropies and the Gates Foundation.

Why study at UQ?

When you come to The University of Queensland your learning experience will be enriched by first class services and facilities, flexible study options and exciting research and international study opportunities.

You will find many benefits from our international reputation for teaching quality and our world leading research. UQ is Queensland's oldest university and has won more teaching awards than any other Australian university.



For more information contact:

School of Public Health

Phone 07 3365 5345 (Australia) +61 7 3365 5345 (International)

Email enquiries@sph.uq.edu.au www.sph.uq.edu.au



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