

Collaborative Graduate Program with a Specialization in

Biostatistics MSc

Why Graduate Studies in Biostatistics?

A graduate degree in Biostatistics will equip students with a sound knowledge in observational and experimental study designs, statistical theory, statistical models for health data analysis, and statistical computing. A four-month practicum will provide students opportunities to apply basic knowledge and develop consulting expertise within a health research group in an academic or industry setting. Graduates of this program will be capable of working as biostatistical data analysts in public and private sectors, such as government agencies, pharmaceutical companies in industry, and multidisciplinary health research teams in research centres, institutions, and hospitals.

Why Queen's?

Queen's University is one of Canada's most research-intensive universities with a medical school. Queen's also houses a world-class group of biostatistics faculty members who are heavily involved in health-related research.

The Biostatistics program at Queen's has been greatly benefited from Queen's excellence in health research. The program is jointly offered by the Department of Public Health Sciences and Department of Mathematics and Statistics. The two departments offer strong graduate programs that include a broad range of courses in statistics, biostatistics, epidemiology, and health-services research. By combining these resources, students in the collaborative program will have unique opportunities to develop the analytical skills and



"I was drawn to the program because I knew the coursework would provide me with a strong foundation in statistics and epidemiology, while the practicum would give me the opportunity to develop practical research skills." - Michael Resume, MSc

practical experience needed to interact with practitioners and to work in health projects closely with health researchers, or to work in methodological research with biostatistics faculty members.

With the world's best scholars, prize-winning professional development opportunities, excellent funding opportunities, and life in the affordable, historic waterfront city of Kingston, Queen's offers a wonderful environment for graduate studies.

Program Structure

The Department of Public Health Sciences and Department of Mathematics and Statistics jointly offer the collaborative MSc program in Biostatistics specialization.

MSc Biostatistics: (12-months, full-time, in-person): Coursework (6 core courses and 2 electives) and a supervised 4-month practicum.

Students who complete the program requirements will receive an MSc degree in Public Health Sciences with a Specialization in Biostatistics or an MSc degree in Mathematics and Statistics with a Specialization in Biostatistics, depending on their home department.

Research Areas

- Bioinformatics
- Cancer Clinical Trials
- Genetics and Genomics Data Analysis
- High-dimensional Big Data Analysis
- Observational Studies
- Population Health and Health Services Research
- Statistical Computing

Website

phs.queensu.ca/graduate-programs/msc-biostatistics



Application FAQs

ACADEMIC REQUIREMENTS

- Four-year undergraduate degree typically in statistics, mathematics, biology, life sciences, health science, or economics, with an overall minimum average of 77%.
- At least two undergraduate courses in calculus or linear algebra and two courses in applied statistics or probability.
- Demonstrated use of quantitative skills by successfully completing courses in mathematics, statistics or data analysis.

ADDITIONAL REQUIREMENTS

- Transcripts
- CV/Resume
- Two academic letters of recommendation
- If English is not a first language, nor was the language of instruction in undergraduate studies, prospective students must meet English language proficiency requirements in writing, speaking, reading, and listening as part of the application process, and before final acceptance is granted, as per School of Graduate Studies and Postdoctoral Affairs' regulations.
- Statement of Interest

APPLICATION DEADLINE

- For international applicants, the final deadline to apply is January 31. Domestic applicants are strongly encouraged to complete their application by January 31; However, complete applications from domestic applicants may be reviewed if positions remain in the program.

What about Funding?

The Department provides individual funding packages for full-time students in the program based on the student's academic standing and on the sources of money available each year. These packages are funded through a combination of external awards, internal university awards, and internal departmental awards.

Graduate students are expected to apply to awards and scholarships for which they are eligible. For more information on awards and scholarships, consult the School of Graduate Studies and Postdoctoral Affairs' website in addition to the home department's [graduate awards page](#).

Faculty Research and Supervision

For a full list of faculty and staff, please visit <https://phs.queensu.ca/faculty-staff>

Contact

For more information, contact the representative of the Department that is best aligned with your research interests.

MATHEMATICS AND STATISTICS

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PUBLIC HEALTH SCIENCES

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