Collaborative Graduate Program with a Specialisation in Biostatistics

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 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. It is a 12-month program with two terms of course work (6 core courses, 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
- Statistical Computing
- Cancer Clinical Trials
- Observational Studies
- Population Health and Health Services Research
- High-dimensional Big Data Analysis
- Genetics and Genomics Data Analysis
- Bioinformatics

“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.”

WEBSITE
phs.queensu.ca/graduate-programs/msc-biostatistics
queensu.ca/sgs/graduate-calendar/programs-study/
### Application FAQs

**What do I need to know to APPLY?**

Before you start your application, please review the departmental websites:

- [phs.queensu.ca/graduate-programs/msc-biostatistics](phs.queensu.ca/graduate-programs/msc-biostatistics)
- [queensu.ca/sgs/graduate-calendar/programs-study/biostatistics](queensu.ca/sgs/graduate-calendar/programs-study/biostatistics)

**ACADEMIC REQUIREMENTS**

- Four-year Bachelor's degree with Honours, and an overall minimum average of 75% in undergraduate studies.
- All MSc applicants must have demonstrated quantitative skills, by either having a BSc degrees in statistics, mathematics, or computer science, or successfully completing courses in mathematics, statistics or data analysis. Successful applicants normally have at least two undergraduate courses in calculus and linear algebra and two courses in applied statistics and probability.

**ADDITIONAL REQUIREMENTS**

- Two copies of an official transcript (for external students).
- Two academic letters of recommendation.
- If English is not a native language, prospective students must meet the English language proficiency requirements in writing, speaking, reading, and listening.

**DEADLINES**

- Applications are due: We will start to review submitted applications and send out offers after January 31st. Any new applications submitted after January 31st will continue to be considered until we reach our admission target.
- Application review begins in mid-February.

**What about FUNDING?**

Individual funding packages for full-time students in the program will be developed based upon 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 awards, internal departmental awards, faculty support, teaching assistantships, graduate research assistant fellowships, and research assistantships.

## CONTACT Information

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

- **PUBLIC HEALTH SCIENCES**
  - Sue Preston
  - epid@queensu.ca

- **MATHEMATICS AND STATISTICS**
  - Jennifer Read
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