Admission Requirements

Statistics (BA, BSc)

<table>
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<tr>
<th>Prerequisite Requirements for BA:</th>
<th>Prerequisite Requirements for BSc:</th>
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<tbody>
<tr>
<td>• ENG4U, MHF4U</td>
<td>• ENG4U, MHF4U, SBI4U or SCH4U or SPH4U</td>
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<td>• Recommended: MCV4U</td>
<td>• Recommended: MCV4U</td>
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Expected minimum admission average: high 70s – low 80s

If you major in Statistics your courses in first year will probably be:
• Calculus
• Statistics
• Problems, Conjectures, and Proofs
• Computing for Math and Stats
• One of Biology, Chemistry, Physics, or Earth & Atmospheric Science (BSc students only)
• General Education Course(s)

In second year you will probably take:
• Linear Algebra
• Calculus of Several Variables with Applications
• Elementary Probability
• Statistics II
• One of Biology, Chemistry, Physics, or Earth & Atmospheric Science (BSc students only)
• General Education Course(s)

Career options for Statistics majors include:
• Accountant, Financial Auditor, Actuary, Financial Analyst
• Applied Science Technologist, Quality Control Analyst
• Operations Research and Optimization, Industrial and Scientific Research
• Biometrician, Biostatistician
• Cryptologist, Cryptographer Computer Programmer/Systems Analyst
• Demographer
• Economist (Mathematical)
• Mathematician, Statistician
• Education – elementary, high school, college, university
• Post Graduate Studies/Academic Career

Courses you might take in upper years include:
• Categorical Data Analysis
• Sample Survey Design
• Classical Regression Analysis
• Mathematical Statistics
• Applied Multivariate Statistical Analysis
• Experimental Design
• Mathematical Analysis
• Topics in Applied Statistics
Why study Mathematics & Statistics at York University?

Studying Statistics at York puts you right at the centre of a diverse intellectual community dedicated to developing your advanced critical thinking and analytical skills. At York you will study with award-winning professors and choose from an innovative curriculum designed to give you the skills to understand the power and elegance of abstract reasoning and to appreciate the role of mathematics in human culture and the sciences. Your professors work to help you to learn the basic material of the course, to understand how and why this material was developed, and to know how to apply it. Through problem solving, you will acquire skills in critical thinking and logical analysis that will serve you well in many careers, particularly those that demand a sound understanding of statistics.

Program Overview

The Statistics program provides students with the basic conceptual tools and the practical training to analyse data, explain it, and draw inferences for future events. At the end of this program, students should also be able to use and understand certain statistical software packages commonly used in industry. The Statistics program at York will give you skills for almost every branch of professional and research work. Your studies will begin with core courses in calculus, problems, conjectures & proofs, statistics, probability, computing and linear algebra, and move into advanced work in data analysis, survey sampling, multivariate statistical analysis, and experimental design. You will easily be able to combine your studies in Statistics with other studies in the life, physical or social sciences, economics, administrative studies or environmental studies. The Statistics programs are also excellent preparation for students who wish to pursue graduate studies or a career in teaching.

Facilities and Opportunities at York University and Beyond

Your studies in Statistics at York will take place in energetic classes and tutorials taught by fifty full-time faculty members whose teaching and research interests span the spectrum of mathematical studies today. Our strong academic support system includes the Statistics Tutorial Labs and the peer Study Group program to bolster your mathematical understanding. Club Infinity offers social and intellectual exchange with your peers. A rich array of academic prizes and awards recognizes high achievement in your statistical studies.

Experiential Education

The Faculty of Science provides a rich diversity of opportunities for undergraduate students to engage in Experiential Education. Students can explore the ideas covered in class through a variety of experiences – whether they are in the classroom, in a lab, working in a community organization or a private sector firm.

Here are just a few of the companies you could have the opportunity to work for:

- Sanofi Pasteur
- Health Gene Corporation
- Parks Canada
- City of Toronto
- Grande Prairie Regional College

Visit /science.yorku.ca/current-students/ee/ for more information

Research Opportunities

Advance your knowledge by gaining research experience outside the classroom. Students are able to learn advanced lab skills, use sophisticated lab equipment, interact with graduate students, gain in-depth knowledge in a particular field, and actually contributes to the advancement of scientific knowledge.