Actuarial Science (BA)

Admission Requirements

Prerequisite Requirements for BA:

- ENG4U, MHF4U
- Recommended: MCV4U
- Expected minimum admission average: high 70s – mid 80s

Program Overview

Actuaries are quantitative risk professionals that apply methods from mathematics, statistics, economics, finance, accounting and behavioural sciences to measure and manage risk in such areas as insurance (e.g., loss of life, natural catastrophe, business continuity), banking (investments and product management), hedge funds (mergers and acquisitions), government, consulting and more. Actuaries are in high demand globally. Actuary is recognized as a top job and top paying job year after year by U.S. News & World Report’s 2018 Best Jobs Ranking, CNN Money, Job Related Almanac and more.

We offer a Specialized Honours BA in Actuarial Science, an Honours BA in Actuarial Science, and a Professional Certificate in Actuarial Science. The two Honours degrees (four years of full-time studies plus optional internship terms) are a great option for students who want comprehensive undergraduate training in Actuarial Science and Risk Management. The Certificate in Actuarial Science (two years of part-time studies plus optional internship terms) is a great option for career changers.

Our curriculum prepares you for attaining the designation of Associate from the Society of Actuaries or the Casualty Actuarial Society, and provides solid and rigorous training in both quantitative and qualitative aspects of the Actuarial profession to jump-start your career in industry, government or graduate studies.

Two distinctive features of our Actuarial Science program are a dynamic Student Club (ASAYU) and the sponsoring Risk and Insurance Studies Centre (RISC). ASAYU and RISC will make your undergraduate experience - from your first class till your first job – into an exceptional educational, professional, and personal journey.

yorku.ca/science/mathstats/programs/actuarial-science
Experiential Education

The Faculty of Science and RISC provide a rich diversity of opportunities for Actuarial Science undergraduate students to engage in Experiential Education. The Internship Program provides students with the opportunity to integrate their classroom learning with hands-on, paid, work experiences related to their field of study. Internship students will begin their work term(s) after their second year of classroom study and can take part in 4, 8, 12, or 16 months of work before returning to school to complete their studies. You will be able to intern with RISC or one of its partners, such as Canada Life, Sun Life Financial, Aviva Canada, Wawanesa Insurance, Mercer, Aon, PwC, Milliman, and Ernst & Young.

Here are a few quotations from our students: “York Actuarial Science program has had a huge impact on my progress in the Actuarial career, from technical math to growing my professional network”, “It’s an enriching experience, with exceptional professors, excellent education, and a great community”, “I highly recommend the Actuarial Science Certificate to anyone with a quantitative background willing to enter the field of actuarial science and risk management and get a job offer prior to graduation!”. 

Visit yorku.ca/science/students/experiential-education/ and linkedin.com/company/risk-and-insurance-studies-centre for more information.

Career Pathways for Actuarial Science

This program is specifically designed for students striving to attain the Associate designation of the Society of Actuaries or the Casualty Actuarial Society. The graduates from this program work in the following positions, among other ones:

• Actuary
• Quantitative Risk Analyst
• Financial Business Analyst
• Risk Modelling Analyst
• Data Analyst
• Data Scientist
• Post Graduate Studies/Academic Career