

Integrated Mathematics and Computer Science

How can we use machine learning to make the world a better place?

How do we build AIs to detect frauds?

Can we predict the stock market?

How can differential equations help to make data centres better?

Is data intelligence the next gold rush?

What can we learn from social network data?

The technology industry has long benefited from trained talents in Mathematics and Computer Science. In recent years, there has been a steady increase in demand for individuals with skill sets that combine the two disciplines. Our Integrated Mathematics and Computer Science program focuses on where these two disciplines converge, and the practical application of computer knowledge and mathematical principles.

The curriculum offers the flexibility in upper year courses tailored for a wide range of career trajectories and interests. Through program-specific application and integration courses, you'll engage in experiential learning through self-directed group projects inspired by industry problems and initiatives.

Augment your learning experience through our five-year co-op option.

Building upon a comprehensive and integrated curriculum of mathematics, computer science and statistics, you'll learn to solve complex and socially relevant problems using tools in computer programming and mathematical analysis, in an immersive and experiential learning environment.



What will I study?

- Analysis and Design of Algorithms
- Computational Science
- Differential Equations
- Machine Learning
- Mathematical Modeling
- Optimization
- Probability and Statistics
- Programming Languages
- Scientific Data Analysis and Databases
- Software Systems Development and Integration

What can I do with my degree?

- Computational analytics
- Financial and investment analysis
- Machine Learning and Data Scientist
- System and Software Developer

Graduates of the Integrated Computer Science and Mathematics program will also be able to pursue post-graduate education in a variety of Computer Science, or Applied Mathematics areas. This includes our Master of Science programs in Computer Science, or Modelling and Computational Science.

Want more information?

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