

# Applied and Industrial Mathematics

- Can** the social response to pandemics be optimized to save lives?
- How** is the weather predicted?
- How** can we learn about another planet from images of its surface?
- How** can we optimize traffic flow with self-driving cars on the road?
- What** is the best strategy for managing investments during times of uncertainty?

Mathematics is integral to every scientific endeavour and fundamental to problem solving—whether modelling atmospheric phenomena or managing the complexities of risk in financial markets.

Working with state-of-the-art algorithms and software, you'll learn and apply advanced numerical skills.

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

Learn concepts, principles, qualitative and quantitative methods, and innovative problem-solving skills while gaining valuable experience with relevant, work-related research projects.



## What will I study?

- Algebraic Structures
- Dynamical Systems and Chaos
- Biostatistics
- Industrial Mathematics
- Complex Analysis
- Introduction to Probability Theory
- Computational Science
- Partial Differential Equations

## What can I do with my degree?

Pursue career and advanced education opportunities in a variety of areas including:

- Academic and research science
- Investment analytics
- Aerospace engineering
- Meteorology
- Data science
- Secondary school teaching (through Concurrent Education)
- Government agencies (e.g. Statistics Canada, Department of National Defence)
- Statistical analysis

Completion of this degree allows you to pursue graduate studies in Applied Mathematics. This includes our Master of Science program in Modelling and Computational Science.

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## Want more information?

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