

# Mathematics

Mathematics is a diverse discipline that reveals hidden patterns and allows us to deepen our understanding of the world around us. The discipline of mathematics is constantly evolving, creating exciting new theories, addressing challenging problems, and finding solutions to problems in engineering, business, the sciences, and the social sciences. Mathematics deals with data, measurement, observation, inference, deduction, and proof.

Mathematicians create abstract models for real problems in order to find solutions to those problems. Mathematicians analyse data to make predictions about natural phenomena, human behaviour and social systems.

## IN THIS SECTION

- Home: Mathematics
- Bachelor of Science Major and Honours
- Bachelor of Arts Minor
- Bachelor of Science Minor
- Associate of Science Degree

## STUDENT PROFILE

Students who are successful in studying mathematics will understand that mathematics is about adventure and learning and growing as they overcome challenges. Students who know mathematics can often see miniscule differences, allowing their attention to detail to cultivate an understanding of how each step of a problem progresses toward a solution rather than just memorizing these steps. Math students also often take a wider view that allows them to see the overall structure and find ways to make use of that structure to achieve their goals. Math students are curious and readily investigate ideas that may or may not work out. They seek logical understanding that only comes from fitting new ideas neatly into place with existing ones.

## CAREER OPPORTUNITIES

Graduates will be well-prepared for any number of career paths where a strong applied mathematics education is required including:

- Biotechnology
- Engineering technology
- Clean energy
- Hydrogen and fuel cell technology
- Biomedical engineering
- Financial Analysis
- Econometrics
- Operations research
- Management science
- Decision Theory
- Mathematics Education