

# MATHEMATICS (MATH)

## Department of Mathematics & Statistics, College of Engineering and Physical Sciences

Knowledge of mathematics is crucial for understanding our world. The Minor in Mathematics is designed to provide considerable flexibility for students to pursue their own mathematical interests, whether they be in the concepts of "pure" mathematics or techniques and applications. Students minoring in Mathematics will develop skills that are valued in many sectors such as business, education, government, and industry.

## Minor Requirements (Honours)

**This minor cannot be combined with a major or minor in Mathematical Science.**

A total of 5.00 credits is required to complete the Minor including:

Code	Title	Credits
MATH*1080 or MATH*1200	Elements of Calculus I <sup>1</sup> Calculus I	0.50
MATH*1090 or MATH*1210	Elements of Calculus II <sup>2</sup> Calculus II	0.50
CIS*1910 or MATH*2000	Discrete Structures in Computing I <sup>3</sup> Proofs, Sets, and Numbers	0.50
MATH*1160	Linear Algebra I	0.50
MATH*2200	Advanced Calculus I	0.50
STAT*2040	Statistics I	0.50
0.50 additional Mathematics credits at the 2000 level or above.		0.50
1.50 additional Mathematics credits at the 3000 or 4000 level		1.50

1

IPS\*1500 Integrated Mathematics and Physics I can count toward this 0.50 credit.

2

IPS\*1510 Integrated Mathematics and Physics II can count toward this 0.50 credit

3

MATH\*2000 Proofs, Sets, and Numbers is recommended. It is required for students wishing to take MATH\*3200 Real Analysis, MATH\*3130 Abstract Algebra, or MATH\*4310 Combinatorics and Graph Theory.

## Area of Concentration Requirements (General)

**This is an area of concentration within the degree:** Bachelor of Arts ([calendar.uoguelph.ca/undergraduate-calendar/degree-programs/bachelor-arts-ba/](http://calendar.uoguelph.ca/undergraduate-calendar/degree-programs/bachelor-arts-ba/)).

A minimum of 5.00 Mathematics credits is required, including:

- 4.00 credits in Mathematics, including at least 1.00 from courses at the 3000 level or above
- 1.00 additional credits from Mathematics, Statistics and/or Computing Science