MINOR IN MATHEMATICS

Mathematics and statistics are not only powerful problem-solving tools, but also highly creative fields of studies that combine imagination with logic, and precision with intuition.

Mathematics is much more than numbers! Its basic goal is to reveal and model general patterns to help explain our world, whether they be found in electrical impulses in the human nervous system, the evolution of animal populations in their habitats, fluctuations in stock-market prices, or electronic communications. Mathematics reaches far beyond science and engineering into medicine, business and the social sciences.

Advances in mathematics and statistics lie behind many discoveries that are now part of our daily lives, such as MRI scanners, digital compression of music and video, secure electronic communications, data mining, genomic algorithms, futures pricing, and many other innovations.

The Department of Mathematics and Statistics offers Honours, majors and minors both in mathematics and in statistics. Our Honours program in statistics is accredited by the Statistical Society of Canada, allowing graduates to earn the A.Stat. professional designation. Moreover, the Department offers a joint honours program in mathematics and economics, a joint honours program in mathematics and computer science, as well as a multidisciplinary program in financial mathematics and economics. All our honours programs also include the co-operative education option.

This program is offered in English and in French.

Program Requirements

The table below includes only discipline-specific courses. Please refer to the Academic Regulations (https://www.uottawa.ca/about-us/policies-regulations/academic-regulations/b-2-program-studies/) for information on including a minor to your degree.

Requirements for this program have been modified. Please consult the 2016-2017 calendars (http://catalogue.uottawa.ca/en/archives/) for the previous requirements.

Compulsory Courses at the 1000 level

MAT 1341	Introduction to Linear Algebra	3 Units
One option from the following:		6 Units
Option 1:		
MAT 1320	Calculus I	
MAT 1322	Calculus II	
Option 2:		
MAT 1330	Calculus for the Life Sciences I	
MAT 1332	Calculus for the Life Sciences II	
3 course units from:		3 Units
MAT 1348	Discrete Mathematics for Computing [1]	
MAT 1362	Mathematical Reasoning and Proofs [1]	

Compulsory courses at the 2000 level

MAT 2322	Calculus III for Engineers [2]	3 Units
3 course units from:		3 Units
MAT 2141	Honours Linear Algebra	
MAT 2342	Introduction to Applied Linear Algebra	
6 course units from:		6 Units
MAT 2324	Ordinary Differential Equations and the Laplace Transform [3]	
MAT 2348	Discrete Mathematics	
MAT 2355	Introduction to Geometry	
MAT 2362	Foundations of Mathematics	
MAT 2371	Introduction to Probability [5]	
MAT 2375	Introduction to Statistics [6]	
MAT 2379	Introduction to Biostatistics [4, 6]	
MAT 2384	Ordinary Differential Equations and Numerical Methods [3, 4]	

Optional courses

6 optional course units in mathematics (MAT) at the 3000 or 4000 level	6 Units
Total:	**30 Units**

Note(s)

1

Students interested in the major or honours in mathematics or statistics, the joint honours in mathematics and economics or the honours in financial mathematics and economics must take MAT 1362. Students interested in the joint honours in computer science and mathematics must take MAT 1348.

2

MAT 2322 cannot count for units in the major or honours in mathematics or statistics. Students interested in the major or honours in mathematics or statistics must take MAT 2122 and MAT 2125 instead of MAT 2322.

3

A maximum of 3 course units may be selected amongst these courses.

4

This course cannot count for units in the major or Honours in mathematics or statistics.

5

MAT 2371 is highly recommended.

6

A maximum of 3 course units may be selected amongst these courses.