MINOR IN STATISTICS

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 2022-2023 calendars (http://catalogue.uottawa.ca/en/archives/) for the previous requirements.

Compulsory Courses		
MAT 2342	Introduction to Applied Linear Algebra	3 Units
MAT 2371	Introduction to Probability	3 Units
Optional Courses		
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 1341	Introduction to Linear Algebra	
MAT 1302	Mathematical Methods II	
3 course units from:		3 Units
MAT 2375	Introduction to Statistics	
MAT 2379	Introduction to Biostatistics [1]	
9 course units from: [2]		9 Units
MAT 3172	Foundations of Probability [3]	
MAT 3175	Introduction to Mathematical Statistics [3]	
MAT 3375	Regression Analysis	
MAT 3378	Analysis of Experimental Designs	
MAT 3379	Introduction to Time Series Analysis	
MAT 4371	Applied Probability	
MAT 4374	Computational Statistics	
MAT 4375	Multivariate Statistical Methods	
MAT 4376	Topics in Statistics	
MAT 4377	Topics in Applied Probability	
MAT 4378	Categorical Data Analysis	
MAT 4379	Survey Sampling	
MAT 4380	Advanced Regression	
MAT 4381	Bayesian Inference	
MAT 4382	Generalized Linear Models	
3 optional course units in mathematics (MAT) at the 2000, 3000 or 4000 level, or from the following list:		3 Units
BIO 4158	Applied Biostatistics	
ECO 4186	Applied Econometrics [3]	
GEG 4120	Spatial Data Science [3]	
GEO 4354	Quantitative Analysis in Geology [3]	
Total:		**30 Units**

Note(s)

1

This course cannot count in a major or an Honours program in mathematics or statistics.

2

The courses in this list are accredited by the Statistical Society of Canada for the A.Stat. professional designation. Consult the Department of Mathematics and Statistics for more details.

3

These courses require prerequisites which are not part of the minor.