

# STATISTICS MINOR (B.SC.) (27 CREDITS)

**Offered by:** Mathematics and Statistics (Faculty of Science)

**Degree:** Bachelor of Science

**Program credit weight:** 27

## Program Description

(24-27 credits)

Students may complete this program with a minimum of 24 credits or a maximum of 27 credits.

The Minor may be taken in conjunction with any primary program in the Faculty of Science (other than those with a main component in Statistics). Students should declare their intention to follow the Minor Statistics at the beginning of the penultimate year and must obtain approval for the selection of courses to fulfil the requirements for the Minor from the Departmental Chief Adviser (or delegate).

All courses counted towards the Minor must be passed with a grade of C or better. Generally, no more than 6 credits of overlap are permitted between the Minor and the primary program. However, with an approved choice of substantial courses, the overlap restriction may be relaxed to 9 credits for students whose primary program requires 60 credits or more, and to 12 credits when the primary program requires 72 credits or more.

**Note:** For information about Fall 2025 and Winter 2026 course offerings, please check back on May 8, 2025. Until then, the "Terms offered" field will appear blank for most courses while the class schedule is being finalized.

## Required Courses (15 credits)

Expand allContract all

Course	Title	Credits
MATH 222	Calculus 3.	3
MATH 223	Linear Algebra.	3
MATH 323	Probability.	3
MATH 324	Statistics.	3
MATH 423	Applied Regression.	3

## Complementary Courses (9-12 credits)

9-12 credits selected from:

Expand allContract all

Course	Title	Credits
CHEM 593	Statistical Mechanics and Machine Learning for Chemistry.	3
COMP 451	Fundamentals of Machine Learning.	3
COMP 551	Applied Machine Learning.	4
GEOG 351	Quantitative Methods.	3
MATH 208	Introduction to Statistical Computing.	3

MATH 209	Fundamentals of Statistical Modeling and Inference.	3
MATH 308	Fundamentals of Statistical Learning.	3
MATH 427	Statistical Quality Control.	3
MATH 447	Introduction to Stochastic Processes.	3
MATH 523	Generalized Linear Models.	4
MATH 524	Nonparametric Statistics.	4
MATH 525	Sampling Theory and Applications.	4
MATH 545	Introduction to Time Series Analysis.	4
MATH 556	Mathematical Statistics 1.	4
MATH 557	Mathematical Statistics 2.	4
MATH 558	Design of Experiments.	4
MATH 559	Bayesian Theory and Methods.	4
MATH 562	Theory of Machine Learning.	4
PHYS 362	Statistical Mechanics.	3
PHYS 559	Advanced Statistical Mechanics.	3
SOCI 504	Quantitative Methods 1.	3

No more than 6 credits from the above list of complementary courses may be taken outside the Department of Mathematics and Statistics.