

STATISTICS MINOR CONCENTRATION (B.A.) (18 CREDITS)

Offered by: Mathematics and Statistics (Faculty of Science)
Degree: Bachelor of Arts
Program credit weight: 18

Program Description

The Minor Concentration Statistics is offered only in a non-expandable version, that is, one that cannot be expanded into the Major Concentration Mathematics.

The Minor Concentration Statistics may be taken in conjunction with a major concentration in some other discipline under option A of the Multi-track System, or together with the Major Concentration Mathematics and a minor concentration (which must be in some other discipline than Mathematics) under option C.

Under option C, it is not possible to combine the Minor Concentration Statistics and the Minor Concentration Mathematics. Students wishing to do this should instead take the Major Concentration Mathematics under option B (two major concentrations) and select a large number of statistics complementaries.

For more information about the Multi-track System options please refer to the Faculty of Arts regulations under "Faculty Degree Requirements", "About Program Requirements", and "Departmental Programs".

No overlap is permitted with other programs.

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.

Program Prerequisites

Students who have not completed the program prerequisite courses listed below or their equivalents will be required to make up any deficiencies in these courses over and above the 18 credits required for the program.

| Expand all | Contract all | | |
|------------|------------------------------|--|---------|
| Course | Title | | Credits |
| MATH 133 | Linear Algebra and Geometry. | | 3 |
| MATH 140 | Calculus 1. | | 3 |
| MATH 141 | Calculus 2. | | 4 |

Required Courses (15 credits)

| Expand all | Contract all | | |
|------------|------------------------------|--|---------|
| Course | Title | | Credits |
| MATH 222 | Calculus 3. ¹ | | 3 |
| MATH 223 | Linear Algebra. ¹ | | 3 |
| MATH 323 | Probability. ¹ | | 3 |

| | | |
|----------|---------------------|---|
| MATH 324 | Statistics. | 3 |
| MATH 423 | Applied Regression. | 3 |

¹ Note: If the Minor Concentration Statistics is combined with the Major Concentration Mathematics, the required courses MATH 222 Calculus 3., MATH 223 Linear Algebra. and MATH 323 Probability. must be replaced by courses selected from the Complementary Courses. Credit cannot be received for both MATH 223 Linear Algebra. and MATH 236 Algebra 2. (listed as a required course in the Major Concentration Mathematics).

Complementary Courses (3 credits)

3 credits from:

| Expand all | Contract all | | |
|------------|--|--|---------|
| Course | Title | | Credits |
| MATH 204 | Principles of Statistics 2. | | 3 |
| MATH 208 | Introduction to Statistical Computing. | | 3 |
| MATH 308 | Fundamentals of Statistical Learning. | | 3 |
| MATH 317 | Numerical Analysis. | | 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 558 | Design of Experiments. | | 4 |
| MATH 559 | Bayesian Theory and Methods. | | 4 |