

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

Offered by: Mathematics and Statistics (Faculty of Science)

Degree: Bachelor of Arts; Bachelor of Arts and Science

Program credit weight: 18

Program Description

The Minor Concentration Mathematics is offered in two versions: an expandable version, for students who wish to leave open the option of expanding the program into a Major Concentration Mathematics, and a non-expandable version for students who know on entry into the Minor that they do not wish to expand it into a major concentration.

The Minor Concentration Mathematics may be taken in conjunction with a major concentration in some other discipline under option A of the Multi-track System. Students planning on taking the Major Concentration Mathematics and the Minor Concentration Mathematics as part of Multi-track option C should select the Supplementary Minor Concentration in Mathematics in place of this Minor concentration.

Under option C, it is not possible to combine the Minor Concentration Mathematics and the Minor Concentration Statistics. 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.

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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 allContract all		
Course	Title	Credits
MATH 133	Linear Algebra and Geometry.	3
MATH 140	Calculus 1.	3
MATH 141	Calculus 2.	4

Expandable Version: Required Courses (12 credits)

Expand allContract all

Course	Title	Credits
MATH 222	Calculus 3.	3
MATH 235	Algebra 1. ¹	3
MATH 236	Algebra 2.	3
MATH 315	Ordinary Differential Equations.	3

¹ Note: Credit cannot be received for both MATH 236 Algebra 2. and MATH 223 Linear Algebra. (listed as a required course in the non-expandable version of this Minor concentration).

Expandable Version: Complementary Courses (6 credits)

Students selecting the expandable version of this program complete 6 credits of complementary courses from the Complementary Course List.

It is strongly recommended that students take MATH 323 Probability. as a complementary course.

Non-Expandable Version: Required Courses (9 credits)

Expand allContract all

Course	Title	Credits
MATH 222	Calculus 3. ¹	3
MATH 223	Linear Algebra.	3
MATH 315	Ordinary Differential Equations.	3

¹ Note: Credit cannot be received for both MATH 223 Linear Algebra. and MATH 236 Algebra 2. (listed as a required course in the expandable version of this Minor concentration).

Non-Expandable Version: Complementary Courses (9 credits)

Students selecting the non-expandable version of this program complete 9 credits of complementary courses from the Complementary Course List.

It is strongly recommended that students take MATH 323 Probability. as a complementary course.

Complementary Course List

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Course	Title	Credits
MATH 249	Honours Complex Variables. ¹	3
MATH 314	Advanced Calculus. ¹	3
MATH 316	Complex Variables.	3

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MATH 317	Numerical Analysis.	3
MATH 318	Mathematical Logic.	3
MATH 319	Partial Differential Equations .	3
MATH 323	Probability.	3
MATH 324	Statistics.	3
MATH 326	Nonlinear Dynamics and Chaos.	3
MATH 327	Matrix Numerical Analysis.	3
MATH 340	Discrete Mathematics.	3
MATH 346	Number Theory.	3
MATH 348	Euclidean Geometry.	3
MATH 417	Linear Optimization.	3
MATH 451	Introduction to General Topology.	3

¹ Note: Either MATH 249 Honours Complex Variables. or MATH 316 Complex Variables. may be taken but not both.