MATHEMATICS MINOR (B.ENG.) (18 CREDITS)

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

Program Description

The B.Eng.; Minor in Mathematics provides students with an even stronger foundation in mathematics to further develop their knowledge of this subject. Students enrolled in the B.Eng.; Minor in Mathematics complete a series of mathematics courses offered by the Department of Mathematics and Statistics, or other units offering mathematics courses.

Minor Adviser: Faculty Student Adviser in the McGIll Engineering Student Centre (Student Affairs Office) (Frank Dawson Adams Building, Room 22) AND an adviser designated by the Department of Mathematics and Statistics. (Please consult the Department of Mathematics and Statistics for the name of this adviser.) Selection of courses must be undertaken in conjunction with the Minor Advisers, normally beginning in the U2 year.

Note: The B.Eng.; Minor in Mathematics is open to all students in the Faculty of Engineering (including students registered in the B.Sc. (Arch.)). A maximum of 9 credits of overlap (double-counting) with the degree program is allowed.

Engineering students must obtain a grade of C or better in courses approved for this Minor.

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 Course (3 credits)

Expand allContract all

Course	Title	Credits
MATH 242	Analysis 1.	3

Complementary Courses (15 credits)

3 credits selected from:

Expand allContract all

Course	Title	Credits
MATH 223	Linear Algebra.	3
MATH 247	Honours Applied Linear Algebra.	3

6-12 credits selected from:

Expand allContract all

Course	Title	Credits
ECSE 205	Probability and Statistics for Engineers[1]	3
MATH 204	Principles of Statistics 2.	3
MATH 240	Discrete Structures.	3
MATH 243	Analysis 2.	3
MATH 264	Advanced Calculus for Engineers.	3
MATH 271	Linear Algebra and Partial Differential Equations.[2]	3
MATH 316	Complex Variables.	3
MATH 319	Partial Differential Equations .[2]	3
MATH 323	Probability.[1]	3
MATH 324	Statistics.[1]	3
MATH 326	Nonlinear Dynamics and Chaos.	3
MATH 340	Discrete Mathematics.	3
MATH 378	Nonlinear Optimization .	3
MATH 417	Linear Optimization.	3
MATH 427	Statistical Quality Control.	3
MATH 447	Introduction to Stochastic Processes.	3
MATH 463	Convex Optimization.	3
MATH 475	Honours Partial Differential Equations.	3
MATH 478	Computational Methods in Applied Mathematics .	3
MATH 563	Honours Convex Optimization .	4

1 Students who take ECSE 205 Probability and Statistics for Engineers may not take MATH 323 Probability. or MATH 324 Statistics..

2 Students may take MATH 271 Linear Algebra and Partial Differential Equations. or MATH 319 Partial Differential Equations . but not both.

0-6 credits chosen from (200- to 500-level) Mathematics and Statistics courses approved for the B.Sc. Major Mathematics or B.Sc. Honours Mathematics programs, or from mathematics courses offered in other units. The courses in this category must be chosen in consultation with, and approved by, the Minor Adviser from the Department of Mathematics and Statistics.

Note: MATH 262 Intermediate Calculus., MATH 263 Ordinary Differential Equations for Engineers. (or any course with substantial overlap in content with these two courses) and/or MATH 338 History and Philosophy of Mathematics. cannot be credited towards this minor.