

MATHEMATICS MAJOR (M)

MATH 441	Real Analysis	3
MATH 490	Math Senior Seminar	3
Total Hours		40

The Mathematics Department at Concordia University primary goal is to build competencies in the understanding, communication, and application of mathematics. Concordia math students will gain an appreciation of mathematics as an appropriate discipline to investigate God's universe as they analyze mathematical structures and apply mathematical problem-solving strategies to a variety of real-world problems.

The CUW mathematics major will give you a deep comprehension of areas like calculus, linear algebra, differential equations, geometry, abstract algebra and real analysis. You'll be able to solve and understand differential equations, sequences and series, vector-valued functions, partial derivatives, functions and algorithms.

Program Learning Outcomes

- Demonstrate knowledge of mathematics, including algebra, geometry, probability, and analysis
- Apply mathematical problem-solving strategies in a variety of real-world applications
- Demonstrate the ability to apply mathematical statistics to interpret information
- Demonstrate the ability to prove and disprove conjectures
- Communicate mathematical concepts in oral, symbolic, and written forms
- Apply and appreciate mathematics as an appropriate paradigm in order to investigate God's creation

Curriculum

Code	Title	Hours
Core Requirements (https://catalog.cuw.edu/undergraduate/university/acad-prog/trad/core/) ¹		45
Major Requirements		40
Electives		35
Minor: Optional		
Total Hours		120

¹ For transfer students, please see the Advanced Transfer Core (<https://catalog.cuw.edu/undergraduate/university/acad-prog/trad/transfer-core/>).

Major Requirements

Code	Title	Hours
Required Courses		
CSC 150	Foundations of Computer Science	3
MATH 201	Calculus I	4
MATH 202	Calculus II	4
MATH 203	Calculus III	4
MATH 205	Statistics I (satisfies the mathematics requirement in the core)	3
MATH 220	Discrete Math	3
MATH 305	Statistics II	3
MATH 321	Abstract Algebra	3
MATH 325	Linear Algebra and Differential Equations	4
MATH 331	Geometry	3