MATHEMATICS

Mathematics Program

The curriculum provides fundamental courses as well as a variety of electives for those with special interests. Students may choose a major that prepares them for a career and/or graduate study in Mathematics or Mathematics Education. Students also can pursue a career in Actuarial Science or Cybersecurity with appropriate choices of elective courses. More details on programs offered by the Mathematics and Computer Science Department can be found below or by clicking here (https://www.uwsuper.edu/academics/undergraduate-programs/?_academic_department=mathematics-and-computer-science).

Mathematics major programs include Liberal Arts and Mathematics Teaching (4-12). Mathematics minor programs include Liberal Arts, Secondary Education Mathematics (4-12) Teaching and Elementary Education. All major programs permit choices of courses appropriate to individual interests, which should be made in consultation with a Mathematics and Computer Science department advisor.

Preparation for Graduate Study

Students who intend to do graduate work in mathematics should include both MATH 440 Real Analysis and MATH 455 Abstract Algebra in their course selections when completing one of the major programs above. Students are strongly recommended to additionally take MATH 450 Topology and MATH 471 Introduction to Complex Variables. Many graduate schools require the Graduate Record Examination (GRE) Advanced Mathematics Test.

Actuarial Science

Students of Mathematics can find a rewarding career as an actuary in finance, insurance or any of a wide variety of industries requiring risk analysis and assessment. These courses are recommended:

Code	Title	Hours
MATH 240	Calculus and Analytic Geometry I	4.00
MATH 241	Calculus and Analytic Geometry II	4.00
MATH 242	Calculus and Analytic Geometry III	4.00
MATH 310	Introduction to Abstract Mathematics	3.00
MATH 370	Probability	3.00
MATH 371	Statistics	4.00
ECON 250	Principles of Microeconomics	3.00
ECON 251	Principles of Macroeconomics	3.00
FIN 320	Principles of Finance	3.00
FIN 420	Risk Management	3.00
FIN 426	Investments	3.00
ACCT 200	Financial Accounting	3.00

In general, students should take a broad spectrum of courses in Accounting, Economics, Finance and Business, as well as Mathematics and Computer Science.

Internship and Professional Practice

Students who major in Mathematics have opportunities to receive academic credit for paid work related to their field of study by taking MATH 390 Mathematical Sciences Internship.

Programs

- Mathematics Major
- Mathematics Minor
- Mathematics Teaching Major - Grades 4-12
- Mathematics Teaching Minor - Grades 4-12

Student Learning Outcomes

Mathematics Major

- Applies an appropriate formal process (or formal language) to write a solution to a given problem and to evaluate the validity and effectiveness of a given written solution.
- Solves multi-part problems by performing appropriate analysis and complex calculations.
- Demonstrates fluency in the definitions, results, analysis, and reasoning of a given axiomatically defined system.
- Produces a well-written article synthesizing existing results or providing original results spanning multiple areas of mathematics.

Faculty and Academic Staff

Bezroukov, Sergei - Professor
Devries, Jerad - Lecturer
Kahler, Heather - Assistant Teaching Professor
Khorossi, Hossain - Lecturer
Riesgraf, Kristin - Assistant Teaching Professor
Rosenberg, Steven J. - Professor
Scott, Chad - Professor
Stangle, Joshua - Associate Professor
Surina, Fnu - Assistant Professor
Totushek, Jon - Associate Professor, Department Chair
Tucker, Shin-Ping - Professor