

# MATHEMATICS MAJOR (BS TRADITIONAL)

Depending on their career goals, math majors can choose to earn a Bachelor of Science degree or a Bachelor of Arts degree in mathematics at Concordia University, St. Paul. In earning either degree, students will develop the quantitative reasoning, critical thinking, and problem solving skills necessary for today's technological world. The BS degree is more credits and offers students more opportunities to explore math applications within the math major, while the BA degree is fewer credits and is designed to be paired with a minor or a second major such as secondary education, computer science, business, science, or a variety of other possibilities. All of the courses in the math major are offered face-to-face in small classes (usually less than 20 students) and the emphasis is on actively solving problems in class. Throughout the curriculum, students will learn to use technology, including computer algebra systems, geometry modeling software, spreadsheets, and computer programming to model and solve problems. In some courses, students investigate topics and learn to present their ideas professionally. Some of these topics lead to independent research projects that students can present at undergraduate research conferences which can lead to earning honors in the major. Our math majors have followed a wide variety of career paths and are currently working as data analysts, risk analysts, inventory analysts, high school teachers, college professors, statisticians, doctors, lawyers, researchers, etc. Instead of asking "What can I do with a math major?", you should ask yourself "What can't I do with a math major?"

## General Education Requirements

All degree seeking undergraduate students must complete the general education (<http://catalog.csp.edu/undergraduate/academic-information/general-education-requirements/>) requirements.

## Degree Requirements

Bachelor of Science (<http://catalog.csp.edu/undergraduate/academic-information/graduation-requirements/#bs>) degree consists of a major of typically 30 to 60 credits, general education courses, upper-level requirements, and elective courses totaling a minimum of 120 credits.

Code	Title	Credits
<b>Required</b>		
MAT 135	Calculus I	4
MAT 146	Calculus II	4
MAT 110	Introduction to Probability and Statistics	3
MAT 220	Discrete Mathematics	3
MAT 255	Calculus III	4
MAT 305	Foundations of Geometry	3
MAT 330	Advanced Probability and Statistics	4
MAT 333	Financial Mathematics	3
MAT 375	Differential Equations and Linear Algebra	4
MAT 450	Abstract Algebra	4
MAT 478	Mathematics Seminar	3
MAT 498	Mathematics Internship	4
MAT 499	Senior Outcomes	0
<b>Electives (8 credits)</b>		<b>8</b>

PHS 221	General Physics I (4)
PHS 222	General Physics II (4)
CSC 115	Introduction to Python (4)
CSC 210	Microsoft Excel Core (4)
MAT 488	Independent Study in Mathematics (1-4)
<b>Total Credits</b>	<b>51</b>