## MATHEMATICS MAJOR (BA TRADITIONAL)

| MAT 488 | Independent Study in Mathematics (1-4) |
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| MAT 498 | Mathematics Internship (1-4) | 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 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 and help the students earn 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/archive/2020-2021/undergraduate/ academic-information/general-education-requirements/) requirements.

## Degree Requirements

Bachelor of Arts (http://catalog.csp.edu/archive/2020-2021/ undergraduate/academic-information/graduation-requirements/\#ba) degree consists of a major of typically 32 to 44 credits or two minors, general education courses, and elective courses totaling a minimum of 120 credits.

| Code | Title | Credits |
| :--- | :--- | ---: |
| Required |  |  |
| MAT 135 | Calculus I | 4 |
| MAT 145 | Calculus II | 5 |
| MAT 110 | Introduction to Probability and Statistics | 3 |
| MAT 220 | Discrete Mathematics | 3 |
| MAT 305 | Foundations of Geometry | 3 |
| MAT 375 | Differential Equations and Linear Algebra | 4 |
| MAT 499 | Senior Outcomes | 0 |
| Electives (minimum of 15 credits) | 15 |  |
| CSC 210 | Microsoft Excel Core (4) |  |
| or CSC 115 | Introduction to Computer Science (4) |  |
| MAT 255 | Calculus III (4) |  |
| MAT 330 | Advanced Probability and Statistics (4) |  |
| MAT 333 | Financial Mathematics (3) |  |
| MAT 450 | Abstract Algebra (4) |  |
| MAT 478 | Mathematics Seminar (3) |  |

