MATHEMATICS MIDDLE/ SECONDARY EDUCATION, B.A.

The math major at CSS can prepare students for graduate study in math & related STEM disciplines or for a career in math education or quantitative fields across a range of industries. The major strongly emphasizes applying mathematical skills & techniques to real-world situations through the use of course-based projects and a senior thesis. In their math coursework, students will also learn programming skills and use appropriate technology tools to enhance their understanding of mathematics and to solve problems. Math majors will also develop their written and oral communication skills so they can effectively communicate sound mathematical reasoning and understanding throughout their coursework and projects.

Contact information

math@css.edu

Learning Outcomes

Upon completion of a Mathematics Middle/Secondary Education degree, students will:

1. Practice critical reflection in the analysis and improvement of their teaching.
2. Demonstrate a sound foundation of content knowledge in the subject areas they teach.
3. Understand and implement best practices in their teaching.
4. Demonstrate the dispositions critical to effective teaching.
5. Practice responsive teaching that meets the diverse needs of all students in their classrooms.
6. Collaborate effectively with stakeholders (e.g. parents, K-12 administrators, community members) to enhance student learning.
7. Fluently use the basic computational math techniques of Calculus, Discrete Math, Linear Algebra, and Statistics.
8. Apply mathematical knowledge to a variety of real-world problems.
9. Effectively communicate sound mathematical reasoning.
10. Use appropriate technology to enhance their understanding of math, their communication of mathematical ideas, and their ability to apply mathematics to solve problems.

Requirements

Students must achieve the following program requirements for all courses listed under Program Requirements and Program Required Courses for the Mathematics Middle/Secondary Education major.

Program Requirements

Major Credits: 90-91
Major Residency Credits: 16
Minimum GPA: 2.8
Minimum Grade: C

Program Required Courses

Code	Title	Credits
MTH 2221	Calculus I	4
MTH 2222	Calculus II	4
MTH 2401	Discrete Mathematics I	4
MTH 2442	Introduction to Data Analysis and Applied Statistics	4
MTH 3302	Contemporary Geometry	4
MTH 3321	Multivariable Calculus	4
MTH 3322	Linear Algebra	4
MTH 4332	Abstract Algebra I	4
MTH 4411	Probability and Statistics I	4
MTH 4421	Principles of Analysis I	4
MTH 4501	Senior Seminar I	1
MTH 4502	Senior Seminar II	1
Methods Course(s)		
EDU 3363	Secondary Math Methods	4
Middle/Secondary Education Courses (http://catalog.css.edu/programs-az/stender-business-leadership-professional-studies/education/middle-secondary-education/#requirementstext) [1]		**44-45**
Total Credits		**90-91**

[1] Math education students should also review the Middle/Secondary and K-12 Education Licensure Program (http://catalog.css.edu/programs-az/stender-business-leadership-professional-studies/education/middle-secondary-education/#requirementstext) requirements published by the Education Department for required coursework in education.

Degree Requirements

To graduate from The College of St. Scholastica, baccalaureate students must meet the following minimum degree requirements.

Total Credits: 128
Upper Division Credits: 42
Residency Requirement: 32
Minimum GPA: 2.0