

## Contact

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## Entrance Requirements

Official High School Transcripts, including a 12th Grade class schedule if applicable

SAT or ACT Scores

\$25.00 application fee

## Major Requirements

### BA

40 credits	Mathematics
8 credits	Science
48 credits	Liberal Studies
	Modern Language Proficiency
	Electives

*120 Minimum total credit hours required for graduation*

### BS

44 credits	Mathematics
11 credits	Science/Computer Science
15 credits	Special Interest Area
48 credits	Liberal Studies
	Electives

*120 Minimum total credit hours required for graduation*

## COLLEGE OF HEALTH, ENVIRONMENT, AND SCIENCE

### Programs

The study of mathematics involves more than just number crunching. The mathematician's work lies in the realm of logic, certainty, and proof. Whether modeling the trajectory of a rocket or showing the consistency of a new type of geometry, it is not enough to believe your work is correct; it must be shown so. This puts mathematics in a unique place among the sciences.

The department offers two different degrees: a bachelor of arts and a bachelor of science. The BA degree requires proficiency in a foreign language and the completion of an independent study project. For the BS degree, the student completes a set of courses in a special interest area, outside of mathematics, of the student's choosing.

A graduate from the Department of Mathematics is intellectually mature and capable of solving complex problems. There are many different career prospects ahead.

### Career Opportunities

One of the most popular options for our graduates is the master's in education degree offered by SRU. Other post-graduate educational opportunities include master and PhD programs in mathematics, medical school, and law school.

There are myriad other options for a person with a mathematics degree who wishes to go directly into the workforce. Mathematicians work as actuaries for insurance companies or the government, statisticians for the Environmental Protection Agency, cryptanalysts for the National Security Agency, computer scientists for the National Institute of Standards and Technology, and more.

### Liberal Education Requirements\*

Approximately one half of a student's courses will be credited toward completing liberal studies requirements. The liberal studies program is designed to provide students with the breadth of knowledge expected of educated people in our society. These courses compliment the depth of specialty acquired in a student's major.

The program contains seven critical goals or areas of study. For each area, students select one or two classes from a selection of "goal courses". In addition, in some areas of study, students select a course from a wide class selection identified as "enrichment courses". These courses provide the opportunity to broaden and deepen knowledge in the goal area. Lastly, co-curricular "supporting experiences" are identified. These activities and programs are available to all students and encompass working on student publications, belonging to honorary societies, or working with various on-campus special interest groups.

*Goal I: Basic Competencies*

*Goal II: The Arts*

*Goal III: Cultural Diversity and Global Perspective*

*Goal IV: Human Institutions and Interpersonal Relationships*

*Goal V: Natural Sciences and Mathematics*

*Goal VI: Our National Experience*

*Goal VII: Challenges of the Modern Age*

*\*All SRU students must complete the liberal studies requirements, which are counted in the total credit hours required for graduation and may be contained in the Major Requirements previously listed.*

## Specialized Information

The Department of Mathematics offers four minors: mathematics, statistics, elementary school mathematics, and middle school mathematics. The minor in mathematics offers both a pure mathematics track and an applied mathematics track.

In addition, the Department of Mathematics offers a certificate in statistical applications. In-service teachers may earn certificates in elementary school mathematics and/or middle school mathematics.

The bachelor of science program in mathematics requires students to take a block of 15-16 credits (called a special interest area) in an area where mathematics can be applied. The special interest areas are: actuarial science, biology, chemistry, community health, computer science, economics, finance, geology, mathematics graduate school, philosophy, physics, pre-masters of business administration, psychology, secondary education, sociology, statistics.

## Teacher Certification

Teacher certification is earned through the master of education degree at Slippery Rock University. Students seeking secondary school teaching certification in mathematics must earn a bachelor of science degree in mathematics and contact the Department of Secondary Education/Foundations of Education concerning its graduate program in education. Information about this program, including prerequisites for admission, may be obtained from the secondary education/foundations of education office in 114 McKay Education Building.

Academic Programs 2004-2005



This fact sheet is intended for informational purposes only and is subject to change.