

# MATHEMATICS, B.S. (BEHREND)

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**Begin Campus:** Any Penn State Campus

**End Campus:** Erie

## Program Description

This major builds a foundation in mathematics with emphasis on the applications of mathematics and to the development of problem-solving skills. The major has four options that share a common core of mathematics courses for the first two years. The options are Applied Mathematics, Business, Computer Science, and Pure Mathematics. They allow students to concentrate on developing mathematical skills suitable either for entry level positions in areas including applied mathematics, actuarial sciences, statistics and computer programming, or for graduate studies in mathematics and related fields. Students, with the assistance of a faculty adviser, should select an option in their sophomore year. In addition, students are strongly encouraged to participate in faculty supervised research.

## What is Mathematics?

The study of mathematics emphasizes careful problem analysis, precision of thought and expression, and the development of mathematical skills needed for work in many other areas. Theoretical mathematicians increase basic knowledge in "pure" fields like abstract algebra, analysis, or topology. Applied mathematicians use tools growing out of calculus, analysis, computing, statistics, and operations research to solve problems in science, industry, government, and other areas.

## You Might Like This Program If...

- You enjoy solving challenging problems.
- You like to know why and how things work.
- You are interested in multiple academic disciplines.
- You are looking for a foundational major that supports diverse career paths in the sciences, engineering, research, education, and computer science.
- You find irrational numbers to be very rational, and calculate pi for fun.