

SOUTHERN ILLINOIS UNIVERSITY CARBONDALE

THE DEPARTMENT OF

# MATHEMATICS



# **MATHEMATICS** **THE FOUNDATION** **FOR ALL OF SCIENCE**

From the precise calculations necessary to verify scientific theories to the elegant mathematical structures that model everything from DNA to subatomic particles, mathematics is essential to science.



## ACADEMIC AVENUES

Math majors can earn a bachelor's degree in the College of Science, the College of Education and Human Services or the College of Liberal Arts. Besides specific college and university requirements, these programs include calculus, linear algebra and computer programming.

A Bachelor of Science degree in the College of Science can provide the foundation for a career in education, industry, government or business, or for graduate study followed by an academic career in mathematics research and college teaching.

The mathematics component of the Bachelor of Arts degree in the College of Liberal Arts (COLA) is identical to the College of Science program. Majors also take a secondary concentration consisting of two or three approved courses in some field in which mathematics is applicable. Our new actuarial mathematics specialization is a program in COLA.

SIU Math also offers opportunities for double majors. Students can double major in Math and any of the following majors: Engineering, Physics, Chemistry, Computer Science, and Business.

## CAREER PATHWAYS

For our graduates, finding work – such as analyzing risk for insurance companies (actuarial science) to teaching the next generation of mathematicians – has never been better. We offer bachelor's degrees in Science, Liberal Arts, and Education and Human Services. And for those students interested in graduate degrees, we offer both master's and Ph.D. degrees.

### CAREERS OPEN TO MATH MAJORS INCLUDE:

- Actuary
- Statistician
- Mathematician
- Data Analyst
- Teacher
- College professor

## OUR NEW SPECIALTY

Starting in fall 2015, the Department of Mathematics at Southern Illinois University Carbondale will offer a new specialization in actuarial mathematics within its existing Bachelor of Arts degree.

So what can an actuarial math specialization do for you? Plenty, according to the Society of Actuaries, which describes an actuary's work as combining "the skills of a business executive, mathematician, (and) financial and investment manager." Most actuaries, male and female, find rewarding careers as risk-analysis calculators in the finance and insurance industries, with a smaller number employed as analysts in business, management or technical consulting services.

## DO THE MATH

So why should you choose the math program at SIU? As a student majoring in mathematics at Southern Illinois University Carbondale, you will be in close contact with outstanding mathematics professors who are both international leaders in their research areas and outstanding teachers committed to your learning.

Consider these advantages, too:

- Classes are kept small. You're not just a face in the crowd.
- We offer a rich program that will provide you with breadth and depth.
- Our program is flexible and can be tailored to your interests and career goals.
- We have funded research opportunities immediately available for math majors.



**SIU** Southern Illinois  
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