Degrees Available at SIUE
• Master of Science in Mathematics
A secondary education mathematics teaching focus is available with our Master of Science in Education (MSEd) in curriculum and instruction.

Specialized Learning Opportunities
• Computational and Applied Mathematics Specialization
• Postsecondary Mathematics Education Specialization
• Pure Mathematics Specialization
• Statistics and Operations Research Specialization
• Mathematics Professional Development Sequences
• Early Entry BS and MS in Mathematics

Program Format
The program can be completed through traditional daytime and evening courses.

Mathematics and Statistics at SIUE
How does a statistician design an experiment to test a new drug? What is an efficient algorithm to solve a differential equation, and when does it work? How do you determine a fair price for an annuity? Given a complex network of nodes and edges, what is the shortest path from one vertex to another? How can you teach problem solving in a diverse high school classroom?

These are only some of the questions to be explored in our four graduate program concentrations. At SIUE, we have a graduate student-to-faculty ratio of two-to-one, so our students receive personalized attention from faculty recognized for outstanding teaching and excellent research. The Department of Mathematics and Statistics at SIUE provides learning and research opportunities in many areas and students are exposed to various cultures from diverse faculty members in the College of Arts and Sciences.

What can I do with a degree in mathematics?
Professionals holding positions as mathematicians, statisticians and actuaries consistently rank their careers at the top of surveys on job satisfaction and security. According to the U.S Bureau of Labor Statistics, the job outlook in these fields remains strong, and growth is projected at 25% over the next 10 years. While salaries vary by field, employment type and education level, the median national salary for an actuary is approximately $93,000, the median national salary for a mathematician is approximately $101,000 and the median national salary for a statistician is $75,000.

Most professionals in the field of mathematics hold a master's or doctoral degree, and our students are no exception. Our graduates have attained PhDs from Indiana University, Texas A&M, St. Louis University, the University of Missouri, Northern Illinois, the University of Iowa, University of Nebraska and many others. Students from SIUE are employed in government and corporate organizations, and hold positions with Humana, The Warranty Group, Synchrony Financial, NRG Energy, Boeing, National Personnel Records Center, U.S. Transportation Command, the FBI and others.

Global Experience
With a diverse group of faculty members from China, Greece, Japan, Korea, Malaysia, the Philippines, and the United States, SIUE is an ideal place for an international student to receive individual attention from faculty members that will help propel them toward graduate school or their chosen career.

Hands-on Learning
Through the master's thesis or master's project, graduate students work one-on-one with a faculty member to explore an area of mathematics, statistics or operations research outside of the usual coursework. Mathematics and statistics faculty have also sponsored several students through grants. Some students have co-authored papers with faculty and have presented their research at regional, national and international conferences.

Graduate Faculty

Graduate Program Director
Jireh Loreaux, PhD
Assistant Professor
2016, University of Cincinnati
Research Interest:
Operator Theory

Marcus Agustin, PhD
Professor
1997, Bowling Green
State University
Research Interest: Statistics,
Reliability and Survival Analysis

Ma. Zenia Agustin, PhD
Professor
1997, Bowling Green
State University
Research Interest: Statistics

Song Foh Chew, PhD
Professor
2005, Purdue University
Research Interest:
Operations Research

Cheryl Eames, PhD
Associate Professor
2014, Illinois State University
Research Interest:
Mathematics Education

Yi Jiang, PhD
Assistant Professor
2018, Iowa State
Research Interest:
Numerical Analysis and
Computational Math

Koung Hee Leem, PhD
Professor
2003, University of Iowa
Research Interest: Numerical
Analysis and Scientific Computing

Jun Liu, PhD
Assistant Professor
2015, Southern Illinois University
Carbondale
Research Interest: PDE-
Constrained Optimization and
Optimal Control, Numerical
PDEs, Numerical Linear Algebra

Andrew A. Neath, PhD
Professor
1994, University of
California-Davis
Research Interest: Statistics

George Pelekanos, PhD
*Distinguished Research
Professor and Chair*
1997, University of Delaware
Research Interest:
Inverse Scattering

Beidi Qiang, PhD
Assistant Professor
2017, University of South Carolina
Research Interest: Statistics,
Reliability Analysis with Dynamic
System Modeling, Nonparametric
and Bayesian Methods

Edward C. Sewell, PhD
*Distinguished Research
Professor*
1990, Cornell University
Research Interest:
Operations Research

Myung Sin Song, PhD
Professor
2005, University of Iowa
Research Interest: Functional and
Harmonic Analysis of Wavelets

G. Stacey Staples, PhD
Professor
2004, Southern Illinois University
Carbondale
Research Interest: Clifford
Algebras, Combinatorics,
Probability on
Algebraic Structures

Tammy Voepel, PhD
Associate Professor
1997, University of Missouri
Research Interest:
Mathematics Education

SOUTHERN ILLINOIS UNIVERSITY
EDWARDSVILLE
GRADUATE SCHOOL

Admission Requirements
- Graduate School application and $40 fee
- Submission of all postsecondary academic transcripts
- Undergraduate background that includes MATH 150, 152, 223, 250 and 321 or their equivalents.
- GPA of at least 2.7 (A=4.0) in mathematics and statistics courses
- International Applicants: Proof of English Proficiency, minimum requirements are TOEFL (79), IELTS (6.5) or equivalent
- A brief statement of educational and career goals and interests, together with any supporting documents
- A description of any special qualifications or relevant professional experience

Program application materials may be uploaded during the application process, but official transcripts must be sent directly from the school attended, and test scores must be verifiable with the appropriate testing service. Please contact the Graduate Admissions office with questions regarding the application submission process at graduateadmissions@siue.edu.

In some cases, applicants who meet the requirements for admission to the Graduate School, but do not have the required background in mathematics as indicated above, may register as unclassified graduate students until deficiencies have been satisfied to permit admission to degree-seeking status.

It is recommended that students in the computational and applied mathematics or statistics and operations research specializations have a working knowledge of algorithmic programming language. It is also recommended that students in the theoretical mathematics or computational and applied mathematics specializations have a course in real analysis equivalent to MATH 350 at SIUE.

Graduation Requirements
For students who complete a thesis or research paper, the final examination consists of an oral presentation based on the content of the thesis or research paper. The examination is administered by the student's advisory committee, which includes the student's research advisor and two other members of the graduate faculty. For those students who select additional course work in lieu of a thesis or research paper, the final exam covers the content from three 500-level MATH, STAT or OR courses chosen jointly by the student and advisor.

Required Credit Hours/Tuition and Fees
- 30
- Visit siue.edu/graduate-tuition for detailed tuition information

Curriculum
The program of study requires a minimum of 30 semester hours of graduate credit, at least 15 of which must be at the 500-level. Students must maintain an overall grade point average of 3.0 for all courses taken in the program.

Students pursuing a double major must complete all required courses in one of the options below. Six to nine hours of the electives may be waived for students who complete a double major. These students must complete at least nine hours of 500-level mathematics, statistics or operations research courses, not counting the thesis or research paper.

Students may choose from four specializations:
- Pure Mathematics
- Statistics and Operations Research
- Computational and Applied Mathematics
- Postsecondary Mathematics Education

Contact Information
Department of Mathematics and Statistics
College of Arts and Sciences
Southern Illinois University Edwardsville
Phone: 618-650-2382
Email: math@siue.edu