

MATHEMATICAL STUDIES

College of Arts and Sciences • Department of Mathematics and Statistics

Degrees Available at SIUE

- B.A., B.S., Mathematical Studies

Why Mathematical Studies?

Often called the foundation of all sciences, mathematics deals with the science of structure, order, measurements, and relationships of objects or groups of objects. Those who like to problem-solve are ideally suited to study mathematics. The degree can lead to rewarding careers in education and finance as well as a growing array of job opportunities in technology and engineering.

Mathematical Studies at SIUE

Almost all degrees require a solid background in mathematics. Those choosing Mathematical Studies at SIUE will experience small class sizes and one-to-one mentoring, as well as close access to all mathematics faculty. Because math is a universal language, SIUE's mathematics faculty is highly diverse, with professors from many different backgrounds and specialties. All full-time faculty members hold doctorate degrees. A departmental Math Club offers lectures by invited guests and hosts several problem-solving competitions designed to foster enthusiasm for math. Math students at SIUE have access to more than 500 state-of-the-art PCs in over a dozen computer labs on campus. SIUE has site licenses for several popular mathematical software packages, including Mathematica, MATLAB, SAS, and Minitab. The University's Lovejoy Library includes extensive collections of periodicals and books about mathematics and statistics.

Career Outlook

Mathematics plays a vital role in the effort to understand the world and the environment for a vast array of fields. The natural sciences, economics, political science, sociology, psychology and other social sciences rely on mathematics to understand, control and predict phenomena. Consequently, mathematics majors have many career opportunities open to them. Career prospects for students with other specialties are also enhanced by courses in mathematics. With above-average salaries and high overall job satisfaction, mathematics and its various specializations have been consistently ranked among the best jobs in the United States over the past several years.

Admission Requirements

- Complete MATH 120 and 125, or mathematics courses having these as prerequisites (or equivalent courses at another accredited institution of higher education)
- Maintain a GPA of 2.0 or higher in all university mathematics courses, and have a GPA of 2.0 or higher in all SIUE courses taken
- Complete in high school seven semesters of university preparatory mathematics courses, including a course in trigonometry, and have no grade lower than a C in those courses.

**Students who do not qualify for admission into an academic program in the department but hope to seek admission later are encouraged to obtain advice from a faculty member in the department.*

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Faculty

Distinguished Research Professors

Krzysztof Jarosz, (Chair), Ph.D.

1982, University of Warsaw

Urszula Ledzewicz, Ph.D.

1984, University of Lodz

Steve E. Rigdon, Ph.D.

1985, University of Missouri-Columbia

Professors

Zenia Agustin, Ph.D.

1997, Bowling Green State University

Chunqing Lu, , Ph.D.

1986, University of New York at Buffalo

Andrew A. Neath, Ph.D.

1994, University of California at Davis

George Pelekanos, Ph.D.

1997, University of Delaware

Edward C. Sewell, Ph.D.

1990, Cornell University

Associate Professors

Marcus Agustin, Ph.D.

1997, Bowling Green State University

Marilyn Hasty, Ph.D.

1986, Southern Illinois University Carbondale

Hee Leem Koung, Ph.D.

2003, University of Iowa

James L. Parish, Ph.D.

1985, University of Chicago

G. Stacey Staples, Ph.D.

2004, Southern Illinois University Carbondale

Tammy M. Voepel, Ph.D.

1997, University of Missouri-Columbia

Assistant Professors

Song Foh Chew, Ph.D.

2005, Purdue University

Myung-Sin Song, Ph.D.

2005, University of Iowa

Cynthia Traub, Ph.D.

2006, Washington University

Adam G. Weyhaupt, Ph.D.

2006, Indiana University

SOUTHERN ILLINOIS UNIVERSITY
EDWARDSVILLE

COLLEGE OF ARTS & SCIENCES

Sample Four-Year Curriculum - BS

	FALL	SPRING
YEAR 1	MATH 150 Calculus I (5) General Education (12) Total 17	MATH 152 Calculus II (5) CS 140 Introduction to Computing I (4) General Education (9) Total 18
YEAR 2	MATH 250 Calculus III (4) PHYS 151 University Physics I (INSM) (4) PHYS 151L University Physics I Lab (1) MATH 223 Logic and Mathematical Reasoning (3) MATH 321 - Linear Algebra I (3) Total 15	PHYS 152 University Physics I (DNSM) (4) PHYS 152L University Physics I Lab (1) MATH 350 Introduction to Analysis (3) Science or Engineering elective (3) General Education (3) Total 14
YEAR 3	MATH 320 Introduction to Algebraic Structures (3) MATH 421 Linear Algebra II (3) MATH 450 Real Analysis I (3) Science or Engineering elective (3) General Education (3) Total 15	MATH 420 Abstract Algebra (3) MATH 437 Differential Geometry (3) General education (3) 400-level Math Elective (3) MATH, STAT, or OR elective (3) Total 15
YEAR 4	MATH 451 Introduction to Complex Analysis (3) MATH 498 Senior Seminar (2) MATH, STAT, or OR elective (3) General Education (3) Electives (4) Total 15	MATH 499 Senior Project (2) MATH, STAT, or OR elective (3) General Education (3) Electives (7) Total 15

TRANSFER STUDENTS Maximize your transfer experience - complete the **bolded** courses/requirements pre-transfer **AND** satisfy the Illinois Articulation Initiative (IAI) General Ed Core or receive an AA, AS, or AAT (early childhood, special ed, or math) degree from an IAI community college. If 'Minor' requirements are shown, discuss careful course selection with the academic advising contact listed. Transfer Credit Equivalency Guides are located at siue.edu/transfer/

BA degree requires two semesters of same foreign language.

Academic Advising Information

Brian Hinterscher
 College of Arts and Sciences Undergraduate Advising
 Campus Box 1609
 SIUE
 Edwardsville, IL 62026-1609
 618.650.5525

Contact Info

Department of Mathematics and Statistics
 Campus Box 1653
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