



WESTERN ILLINOIS UNIVERSITY

Mathematics

Department of Mathematics, College of Arts & Sciences

Major Program

Mathematics is among the most fascinating of all intellectual disciplines, the purest of all art forms, and the most challenging of games. Mathematicians make contributions to society by helping to solve problems in such diverse fields as medicine, management, economics, government, computer science, social science, and engineering.

The mission of our degree program is to develop an appropriate knowledge of mathematics with the analytical skills and attitudes of mind required for the efficient use of mathematics in a variety of careers. The development of rigorous mathematical reasoning and abstraction from the particular to the general are two themes that unify the curriculum.

The degree program intends to broaden the student's view of the practice of mathematics and provides opportunity to experience learning through group effort and teamwork. The curriculum is designed around the abilities and academic needs of the average Mathematics major. Supplementary credit and noncredit experiences are provided to attract and challenge the talented student.

The Department of Mathematics offers two degree options: (1) the Bachelor of Science (BS) in Mathematics and (2) the BS in Mathematics–Teacher Certification. All majors complete core courses in calculus and linear algebra. At the upper-division level, students choose from a rich collection of pure and applied courses in mathematics and statistics. The department provides instruction in the methods of teaching mathematics for the BS in Mathematics–Teacher Certification option, leading to a State of Illinois certification in 7th through 12th grades.

The Department of Mathematics also offers minors in Mathematics and Statistics. Additionally, Mathematics courses are offered supporting the Pre-Engineering program and the Mathematics area of concentration in Elementary Education.

Students who have completed an advanced placement calculus course may be granted credit based upon their scores. Other students who have studied calculus in high school may take a proficiency examination administered by the department for college credit and advanced placement in calculus.

Faculty

The Department of Mathematics has more than 30 faculty members with teaching and research interests in many areas of pure and applied mathematics, statistics, and mathematics education. The faculty has a strong commitment to undergraduate students.

A mathematics education resource office is a point-of-contact place for mathematics teachers. The office contains current materials for teaching mathematical concepts at all grade levels.

In addition to University computer facilities, the Department of Mathematics has its own newly renovated computer lab. This lab is used to supplement instruction in many courses.

HIGHER VALUES IN HIGHER EDUCATION

Scholarships

The Department of Mathematics has several scholarships available to new students which include the Mathematics Alumni Scholarships and the four-year F. Glenadine Gibb Mathematics Education Scholarship. Applications for scholarships may be obtained from the department. Detailed information on scholarships is available from the department website at wiu.edu/math/scholar/scholar-intro.php, by visiting the University's Scholarship office, by calling (309) 298-2001, or on the Web at wiu.edu/Scholarship.



Honors in Mathematics

To be eligible for the Centennial Honors College, entering freshmen must have an ACT composite score of at least 28 OR have a 26 or 27 composite ACT and be in the top 15% of their graduating class OR have an ACT composite score of at least 24 and be in the top 10% of their high school graduating class. Transfer students with at least 12 semester hours and up to 59 semester hours of undergraduate courses are admitted with a grade point average of at least 3.3 OR 3.4 for 60 semester hours or more. To find out more, visit wiu.edu/honors. General honors seminars in the humanities, sciences, and social sciences provide students with the opportunity to explore key academic issues with distinguished faculty members. In the Mathematics major, honors students may receive honors designation in any math course through working with the instructor on an individually tailored project.

Student Activities

The Department of Mathematics sponsors a chapter of Kappa Mu Epsilon, a national mathematics honor society, and a student chapter of the Mathematics Association of America. The student officers plan a variety of group activities of interest to members. Math TEAM (Together Everyone Achieves More) is a student group for prospective teachers; its mission is to provide future mathematics teachers at all levels opportunities to learn mathematics and the teaching of mathematics. Mathematical Opportunities for Students and Teachers (MOST) Math is another student group for providing information about employment opportunities for our majors.

For Your General Outlook

In the Mathematics major, students generally take Calculus I and II in the first two terms. They continue with Calculus III, Linear Algebra, and Sets and Logic in the second year. In the third and fourth years, a variety of required and elective advanced mathematics courses are offered, and students choose their courses based on their interests and with help from their adviser.

Special Opportunities

Mathematics majors are encouraged to take a special course entitled Undergraduate Research. This course involves the dedicated, individual pursuit of a mathematical topic or application from an area of research that is represented within the department, culminating in a final paper or presentation to peers and faculty. All students are encouraged to present their work at the University's annual Undergraduate Research Day. For more information, please visit our website at wiu.edu/math/academic/Undergraduate%20Research/Home.php. Mathematics majors also may become qualified to be employed either as undergraduate teaching assistants in intermediate algebra, as tutors in the Academic Assistance Center for Mathematics, or as helpers in grading papers.

After College

Our graduates have been successful in pursuing interesting and rewarding careers. Some are working in industry for such companies as Caterpillar, Inc., Deere and Company, and McDonnell-Douglas. Some are working in business for such companies as Arthur Andersen, Hewitt Associates, and State Farm, and many are teaching throughout Illinois, the region, and elsewhere. Many of our graduates have also successfully pursued graduate degree programs and hold positions in research and college teaching.

For More Information

Additional information about the department's programs, scholarships, and other financial assistance can be obtained by visiting the Department of Mathematics in Morgan Hall 476, by calling (309) 298-1054 or 298-2467, by faxing (309) 298-1857, by e-mailing mathematics@wiu.edu, or by visiting our website at wiu.edu/math.

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