

COLLEGE OF ARTS AND SCIENCES

The formal study of mathematics develops and enhances logical thinking skills, problem solving and reasoning - all qualities highly valued by employers in any professional setting, as well as graduate programs in many disciplines. At Winthrop University, students have access to faculty with a variety of disciplinary interests and professional expertise. Winthrop mathematics majors have opportunities to work closely with faculty throughout their program, engage in undergraduate research programs, and to become part of a unique and exciting mathematical community.

For more information, contact:

Department of Mathematics 142 Bancroft Hall Winthrop University Rock Hill, SC 29733 803/323-2175



Mathematics

Why should I choose mathematics at Winthrop?

The Major

The mathematics programs at Winthrop feature challenging but rewarding curricula taught by an experienced and enthusiastic faculty. The program offers Bachelor of Arts and Bachelor of Science degrees each with a teacher certification option, providing students with the opportunity to tailor a program to their specific professional goals. All programs offer explorations of a variety of mathematical disciplines and prepare students for many different post-graduation experiences. Small class sizes and the ability to interact personally with faculty members contribute to a rewarding experience for mathematics majors.

The Program

The Bachelor of Arts degree in mathematics is designed for students who wish to pursue careers in numerous areas, including industry or teaching. With the B.A. option students choose a minor in order to allow for exploration of another discipline. The Bachelor of Science in mathematics is designed for students whose career goals require a strong, comprehensive background in mathematics, including those planning to attend graduate school or enter a field of research. All mathematics majors are required to complete courses that develop mathematical skills and understanding in calculus, reasoning and proof, geometry, probability and statistics, and applied mathematics.

Internships and Undergraduate Research

Internships are available and can serve as stepping stones to employment and entry into professional careers. Although not required for graduation, students can apply up to three hours of internship credit toward their mathematics degree requirements. Majors are also encouraged to participate in research with faculty members through special topics courses, summer research programs, and small group explorations. Students and faculty work together to investigate problems that result in published articles and conference presentations.

Teacher Certification

The Department of Mathematics and the Richard W. Riley College of Education work together to offer certification for high school mathematics teaching (grades 9-12). Options for certification include the B.A. and B.S. programs in mathematics. Students must meet all requirements for admission to the Teacher Education Program and complete its core curriculum. Information on teacher certification is available through the student academic services office in the Richard W. Riley College of Education.

Student Opportunities

The Winthrop chapter of Kappa Mu Epsilon, a national mathematics honor society, offers esteemed membership to outstanding mathematics students. Nu Epsilon Rho Delta is a club for mathematics majors whose members sponsor social events, travel to conferences, field teams for national and international competitions, and participate in a variety of other activities. Financial awards such as the Ellen Rasor Wylie Mathematical Scholarship are available for high-achieving mathematics students. Such scholarships are available on a competitive basis during the freshman year and are renewable for four vears. To ensure consideration, students should indicate their interest in mathematics as a major on the admission application. Students also are given opportunities to work in the campus Mathematics Tutorial Center as paid tutors.

Post-Undergraduate Opportunities

Mathematics graduates are qualified to enter various professions including engineering, banking, insurance, government, computer technology, physics and numerous other scientific fields. Many graduates earn teaching certification and subsequently benefit from an exceptionally high employment rate. Additionally, approximately 25 percent of graduates choose to continue their education, earning master's and doctoral degrees in mathematics or mathematics-related subjects.

Faculty

Winthrop mathematics faculty members have a variety of disciplinary focuses and offer students access to a broad range of mathematical ideas. The faculty are dedicated to getting to know mathematics majors and working closely with them to develop their personal potential. The faculty at Winthrop recognize that mathematics is a challenging discipline, requiring much work and exploration; as such, they are prepared to support students as they explore all the discipline has to offer. By incorporating some of the most powerful mathematics and statistics software packages available to universities, by developing thinking and reasoning skills throughout the program, and by offering research opportunities, the mathematics faculty prepare graduates to be lifelong scholars and learners.



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