MATHEMATICS

Mathematics
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Faculty & Staff List (https://www.mills.edu/faculty/mathematics/)

In view of the pervasive roles that quantitative analysis plays throughout our society, a basic familiarity with the disciplines of mathematics has become an integral part of a liberal arts education. As a college for women, Mills recognizes the importance of encouraging women to study mathematics, and of providing them with the high-quality instruction they need to succeed in these disciplines. Encouraging mathematical literacy is part of the College's continued effort to increase the analytical competence of its women graduates.

Mathematics is an excellent field both for lifetime intellectual interest and for career preparation. Women are becoming increasingly prominent in the field. Recent presidents of both the American Mathematical Society and the Mathematical Association of America have been women. Mathematics also serves as an excellent basis for business, finance, engineering, sciences, teaching, actuarial work, and fields that need highly developed analytical skills, such as law.

Small, interactively taught classes provide students with an ideal environment for learning mathematics. The cross-registration program with UC Berkeley enables outstanding students to take advantage of a wide range of mathematics courses not usually available at a small college.

Note: The basic calculus sequence (MATH 047 Calculus I–MATH 048 Calculus II) begins in the fall. Students who need additional preparation before taking calculus should enroll in MATH 003 Pre-Calculus along with MATH 003L Pre-Calculus Workshop in the spring before beginning MATH 047 Calculus I the following fall. To determine which initial course is appropriate, the student should take the self-placement quizzes offered by the department and consult with mathematics advisors. Students who plan to do further work in mathematics, science, or engineering are advised to continue the calculus sequence by taking MATH 050 Linear Algebra and MATH 049 Multivariable Calculus.

Before declaring a major in mathematics, a student must have completed MATH 047 Calculus I, MATH 048 Calculus II, and MATH 050 Linear Algebra. The grade in each of these courses should be at least a B-. Some exceptions may be allowed upon the recommendation of the department. Students required to declare a major before completing these courses may provisionally declare the mathematics major. The provisional declaration will be revoked if the student does not earn at least a B- in MATH 047 Calculus I, MATH 048 Calculus II, and MATH 050 Linear Algebra. Proficiency in basic logical and problem-solving skills, as determined by the instructor, is required for enrollment in advanced courses.

Learning Outcomes

- Analyze, construct, and critique mathematical proofs using logical reasoning.
- Communicate mathematical ideas clearly and coherently.
- Solve complex theoretical and applied mathematical problems.
- Manipulate mathematical expressions efficiently and precisely.

Majors & Minors

Majors

Mathematics Major—BA (https://catalog.mills.edu/undergraduate/majors-minors/mathematics/mathematics-ba/)
Mathematics Major—BS (https://catalog.mills.edu/undergraduate/majors-minors/mathematics/mathematics-bs/)

Minor

Mathematics Minor (https://catalog.mills.edu/undergraduate/majors-minors/mathematics/mathematics-minor/)