Mathematics
Course 18

At MIT, mathematics is an exceptionally broad field of study, including both theoretical and applied math. Math majors have the opportunity to explore many different areas in order to identify their particular interests and abilities. The strengths of the Department of Mathematics in the theoretical field lie in analysis, algebra, geometry, and topology; in the applied field, strengths include fluid mechanics, mathematical physics, combinatorics, and computer science.

Mathematics at MIT

The Department of Mathematics is one of MIT's most active departments. Virtually all students take courses in the department, partly because calculus is one of the basic requirements for any MIT undergraduate degree. Unlike other universities, however, MIT's senior faculty members regularly teach the elementary and introductory courses. As a result, even the first-year calculus classes are taught by some of the best mathematicians in the world. In a report published by the National Academy of Science, the MIT Mathematics Department was ranked highly for its quality of faculty-- tied for first place with three other universities.

There are usually about 100 math majors in each graduating class. Since the department has over 50 full-time faculty members, the faculty/student ratio is very favorable.

Undergraduate Program

There are four undergraduate programs in the department; three -- General Mathematics, Applied Mathematics, and Theoretical Mathematics -- lead to the degree Bachelor of Science in Mathematics, and the fourth -- Mathematics with Computer Science -- leads to the degree Bachelor of Science in Mathematics with Computer Science. Students in the department have the opportunity to take advanced subjects or seminars with research mathematicians and to participate in research projects. The Mathematics major is a very flexible one, allowing students to design a course of study to best suit their needs and interests.

Many math majors are involved with the department outside the classroom. For example, they run the Undergraduate Mathematics Association and the Undergraduate Society for Women in Mathematics, they arrange some of the department's independent activities during the January term such as the Integration Bee, and they organize an annual dinner for math majors and advisors and other events such as Career evenings. Many math majors are involved with professors in the instructional activities of the department, helping with such tasks as tutoring and homework grading. And many majors participate in research projects, through MIT's UROP or other programs.

Post Baccalaureate Opportunities

What do you do with a math degree? About half of the graduating seniors in math at MIT go on to graduate school. Of these, slightly more than half study fields other than mathematics, such as computer science, physics, economics, or law. The remaining math graduates find that their mathematics training prepares them for many different career fields, including finance, software, and much more. Keep in mind that many positions held by people trained in math do not carry the title "mathematician." Such jobs are apt to be called mathematical consultant, statistician, systems analyst, actuary, or computer specialist.

Contact Information

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Further information is also available on the web at
http://math.mit.edu/.

The MIT Course Catalog contains further information on the Institute, including all graduate and undergraduate courses and programs. Please visit the MIT Course Catalog website for more details at *http://web.mit.edu/catalog/index.html.*

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