Monmouth University Mathematics Department

http://www.monmouth.edu/academics/mathematics

Undergraduate Majors Offered

- BS Mathematics
- BS Mathematics and Education, Elementary, Middle, and Secondary Endorsement
- MS Financial Mathematics (starting Fall 2009)

Department Facilities

- Mathematics computer laboratory with 30 computers with specialized software (Maple, Geometer's Sketchpad, Minitab, Matlab).
- Mathematics computer classrooms with one computer for each student.
- Mathematics Learning Center for tutoring.

Visit the Department

Applicants are encouraged to make an appointment (through the departmental office coordinator, Doreen Brown, 732-571-4461) to visit a class or meet with a professor at any time during the year.

Why Major in Mathematics at Monmouth?

- Classes are small: no more than 30 students in calculus, often as few as 10-15 in upper classes
- Faculty get to know students individually and care about students' success
- Our courses reflect the latest in mathematics pedagogy and technology
- Mathematics Learning Center provides a place to get help for your courses, a place for mathematics majors to gather, and a place to better your understanding by helping others
- Our experiential education course, MA 419, Mathematical Modeling, gives you experience with how mathematics can be used on the job. After learning the modeling process, groups of 4-5 students work on problems proposed by external clients.
- New Jersey Gamma Chapter of the national mathematics student honor society, Kappa Mu Epsilon, sponsors programs available for all mathematics students

What Can You Do with a Mathematics Major?

- Many of our majors go into teaching. Currently there are about two positions for every mathematics-certified applicant at the high school level and about three positions for every mathematics-certified applicant at the middle school level in New Jersey.
- Mathematics is one of the most flexible majors in terms of the kinds of jobs you can have when you graduate.

- Many mathematics majors are employed in banking and finance. You may eventually go on for an MBA, or for a specialized master's degree in the mathematics of finance. For such careers, a minor in business is a good companion to your mathematics major.
- Actuaries work for insurance companies and some other organizations, making predictions based on large quantities of data. To become a full-fledged actuary, you pass a series of examinations. You're often given on-the-job time to study for these examinations, and each one passed may lead to a promotion.
- Many mathematics majors work in software industries. Software industries are as happy to employ mathematics majors as computer science or software engineering majors to be software engineers. For such jobs, a few programming courses beyond the minimum are appropriate.
- Other mathematics majors work as part of an engineering team, solving the mathematical problems which come up when the engineers on the team work on the design.
- Still others work in a wide range of industries doing many kinds of mathematical modeling. For example, some work for large companies such as UPS modeling routes for deliveries or placement of central facilities. Almost any problem has its mathematical aspects.
- Mathematics majors can even become doctors and lawyers. The analytical skills you develop majoring in mathematics gives you a good background for choosing the right diagnosis as a doctor, or making a water-tight argument as a lawyer.
- **Online Career Resources:**

http://www.awm-math.org/career.html
http://www.siam.org/careers/
http://www.maa.org/careers/
http://www.amtnj.org/jobs.php
http://www.ams.org/employment