Mathematics B.S.

Major
Bachelor of Science
Mathematics & Statistics
Swenson College of Science and Engineering

Mathematics is the abstract science of numbers, quantity and space.

Mathematics may be studied in its own right (*pure mathematics*), or as it is applied to other disciplines such as physics and engineering (*applied mathematics*).

The program in mathematics develops competence in mathematical techniques and sharpens mathematical insight. Mathematics is fundamental to solving problems in physics, chemistry, biology, medicine, business, engineering, and technology.

Why UMD

- Active learning environment
- Access to state-of-the-art instrumentation
- Focus on undergraduate teaching and research

Acquired Skills

- Know the basic definitions, notations, and theorems of mathematics/statistics
- Be able to apply statistical and mathematical techniques and models to solve problems
- Know how to write programming code and use mathematical/statistical software to analyze data and interpret results.

Career Possibilities

Career opportunities for mathematics and statistics are extensive.

Obvious careers involve working as an actuary for an insurance or consulting company, or as a teacher.

Most mathematics and statistics majors, however, use their problem solving skills in the business world — analyzing processes, data, and algorithms, or in government research. Employers hire mathematics and statistics majors because employers know those students are able to work on hard problems, and to make logical decisions.

Scholarships

In addition to SCSE scholarships, our department has several scholarships including:

- James L. Nelson Memorial Scholarship
- UMD Lounsberry Scholarship
- Robert L. Senkler Scholarship
- Faculty Excellence Scholarships
- Grace Peterson Memorial Scholarship
- Dr. Sylvan D. Burgstahler Memorial Scholarship
- William and Rhonda Krossner Scholarship in memory of Professor Mark Kac
- Mathematics and Statistics Faculty Scholarship in honor of William Lokke
- Barry R. and Kang Ling James Scholarship for Mathematics and Statistics

Student Clubs
Math Club [1]

Committed to fostering a love for mathematics and problem solving.

Meetings are focused on building community, service and discipline-related activities. At meetings, students are given problems from math Magazines such as Math Horizons to solve and discuss. This teaches students new problem solving techniques and helps student gain mathematical insight.

Students compete nationally in the Putnam Exam and in the Mathematical Contest in Modeling.

Actuary Club [2]

Strives to help students pass actuarial exams and prepare for employment.

There are a variety of events the club hosts to strengthen students' leadership, networking, professional, and actuarial skills.

The club also provides students with the option to complete the Validation by Educational Experience Credit. Requirements for this credit contain topics not incorporated in the preliminary actuarial exams, but that are still considered necessary skills for an actuary.

Graduate Report

Here's a sampling of positions Mathematics B.S. grads have attained six months to one year after graduation.

- Crew Planning Analyst - Compass Airlines, Minneapolis, MN
- Mathematics Teacher - Grand Rapids ISD 318, High School, Grand Rapids, MN
- Software Developer - MEDITECH, Minnetonka, MN
- Graduate School, Statistics, Rice University, Houston, TX
- Loan Documentation Specialist - Wells Fargo, Minneapolis, MN

For more data see the Mathematics B.S. Graduate Follow-Up Report [3].
For ideas about Mathematics B.S. and other majors visit Career & Internship Services [4].

Links
[1] https://bulldoglink.d.umn.edu/organization/mathclub