Statistics and Actuarial Science B.S.

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

The science of statistics is concerned with generating and analyzing data.

Actuarial science applies statistical methods to assess risk in the insurance and financial industries.

The statistics and actuarial science major prepares students for careers in a wide variety of fields, from banking and government to health care. Advisors have information on the national actuarial examinations.

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.
• Be able to write a coherent description of a mathematical or statistical presentation.

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**

Recent UMD Graduates Job Placement Data & Employers

Here's a sampling of positions and graduate programs Statistics & Actuarial Science B.S. grads have attained six months to one year after graduation.

- Hedging Analyst - Allianz Life, Golden Valley, MN
- Underwriter Associate - HealthEZ, Bloomington, MN
- Quality Assurance Engineer - LexisNexis Risk Solutions, St. Cloud, MN
- Actuarial Associate - Securian Financial, St. Paul, MN
- Associate Actuarial Analyst - UnitedHealth Group, Minnetonka, MN
- Graduate School, Biostatistics, University of Minnesota Twin Cities
- Graduate School, Economics, The University of Texas at Austin
- Graduate School, Statistics, University of California Irvine, Irvine, CA

For more data see the Statistics & Actuarial Science B.S. Graduate Follow-Up Report [3].

For ideas about Statistics & Actuarial Science B.S. and other majors visit Career & Internship Services [4].

**Links**

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