Statistics and Actuarial Science

Mathematics Major:

About the Department

The Department of Mathematics and Computer Science has adopted the tetrahedron as a symbol representing the different facets of the mathematical sciences and the unity of the whole. Majors begin their study with a core of courses that introduce the beauty and utility of all four areas represented in the tetrahedron: pure mathematics, applied mathematics, computer science and statistics. They routinely work in partnership with faculty and other students to develop as professionals and to acquire skills necessary to succeed in a variety of future endeavors. We offer various flavors of the mathematics major: a B.S. in mathematics; a B.S. in mathematics with a concentration in statistics; a B.S. in mathematics with a concentration in computer science and a B.S. in mathematics with secondary education certification. Students have the opportunity to explore the various facets of the mathematical sciences in the core before committing to a particular direction in their upper-level work.

Statistics Concentration

Statistics is a growing field. According to the American Statistical Association, there is an increased demand for statisticians in the workforce. There is a need for statisticians in the pharmaceutical industry, marketing, biomedical fields, government agencies and many other fields.

Most of real-life problems involve collecting, organizing and analyzing huge sets of data. Statistical software packages like Minitab, SPSS (available for SU students and used throughout the campus) and others help to manipulate and display the data.

The Statistics Concentration at SU combines courses in mathematics and both theoretical and applied statistics. One of the requirements of statistics track for students is to have a one-semester internship or complete an undergraduate research project.

Recently, students have worked on various SU-related projects for small local businesses and with doctors and staff from Peninsula Regional Medical Center (the largest local hospital). Graduating students from this program have gone on to work at the Census Bureau, National Security Agency, the IRS, Labor Bureau, as well as many industries. Others have earned Ph.D.s in statistics or biostatistics.

Actuarial Science Track

Actuaries are professionals in finding ways to manage financial risk. Every individual and every business faces the risk of undesirable events like death, disease, fire, hurricanes, lawsuits, etc. Actuaries design and price insurance products that reduce the financial impact of losses resulting from these unfortunate events.

Actuaries are increasingly in the news as business leaders because their work is often impacted by current events. For example, recent natural disasters, world economic and financial crises, and healthcare are all topics where actuaries expertise is valued. Actuarial work requires a combination of strong analytical skills, oral and written communication skills, business knowledge, and an understanding of human behavior.

The actuarial profession is perfect for individuals who enjoy challenges and problems solving.

The Actuarial Science Track at SU combines courses in mathematics, actuarial science, computing finance, accounting and economics that help students develop the skills and credentials that can lead to an entry-level job with an insurance company, consulting firm or governmental organization. Our recent graduates work for such top-notch companies as Travelers, New York Life and Aetna.

For more details about actuarial science visit www.beanactuary.com; for more detail about the program at Salisbury University contact Dr. V. Hoklai at vxholdai@salisbury.edu or Dr. B. Wainwright at bawainwright@salisbury.edu.

Students who graduate with concentrations in statistics or actuarial science may go on to careers in:
- Financial Management in Insurance Organizations
- Investments
- Pension Consulting
- Mathematical statistics
- Survey statistics
- Quality Control
- Biostatistics

Statistics may be defined as ‘a body of methods for making wise decisions in the face of uncertainty.’”
— W.A. Wallis

www.salisbury.edu/mathcosc