Mathematics Major: Traditional, Applied & Computational Sciences

Department of Mathematical Sciences

Salisbury UNIVERSITY

MAJORS

- Data Science
- Mathematics

MINORS

- Actuarial Science
- Data Science
- Mathematics
- Statistics

About the Programs

The Department of Mathematical Sciences offers programs leading to the Bachelor of Science where majors begin their studies with a core of courses that introduce the beauty and utility of four primary aspects of the mathematical sciences: pure mathematics, applied mathematics, computer science and statistics. Core courses provide students the opportunity to explore these topics before committing to a concentration in their upper-level work.

In the **Traditional Mathematics** Concentration, upper-division students complete coursework emphasizing abstract thinking and foundational mathematics. This prepares graduates for work in agencies such as NASA, the National Security Agency (NSA) and other careers that require advanced problem solving and critical thinking skills.

Students in the **Applied** option concentrate their upper-division studies in areas most often utilized in industry or business settings. These students are prepared for a variety of careers that involve applying mathematical techniques in high technology sectors of the workforce.

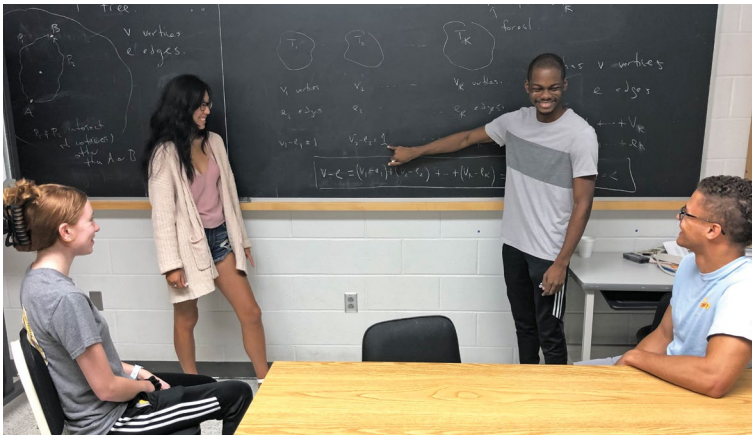
The **Computational Mathematical Sciences** Concentration combines computer science and applied mathematics to provide students the necessary tools to employ advanced software and solve problems in engineering and the natural and social sciences. Graduates are prepared for employment as members of interdisciplinary teams in industry, government, etc. All three of these tracks prepare students for future graduate studies in the mathematical sciences.

Beyond the Classroom

The department supports a variety of learning opportunities outside of standard classroom experiences. **Undergraduate research** is a particular emphasis. Research projects have led to student publications in journals and presentations at professional meetings and conferences. Notable student accomplishments include awards for student research at MD/DC/VA meetings of the Mathematical Association of America, outstanding presentation at Math Fest and four students being chosen from a national pool to present at the highly selective Council on Undergraduate Research's Poster Session on Capitol Hill. Our majors regularly receive funding for summer research, and several have been accepted for Research Experience for Undergraduate summer programs at multiple institutions.

The department supports a robust, credit-bearing **Internship Program**. These can be completed during the semester or over the summer near a student's residence. Many internships have led to permanent employment. Students have interned at locations including K&L Microwave, TidalHealth Peninsula Regional, NASA Wallops Island and the NSA.

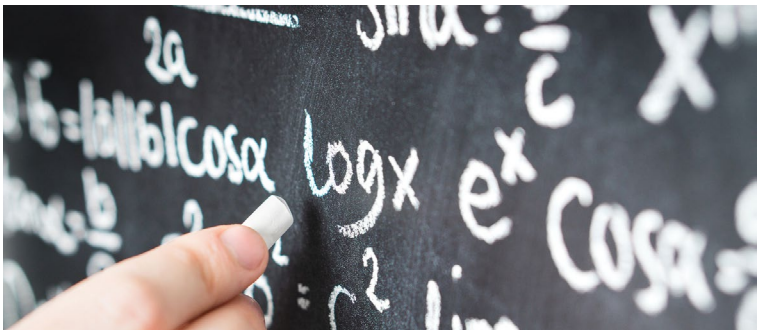
The Center for Applied Mathematical Sciences contracts with area businesses and selects a team of students who work with the client and apply their mathematical and technical skills to solve real-world problems. Recent clients include Orbital Sciences, SU's Business Economic and Community Outreach Network, NASA Wallops Island, Choptank Transport, the University System of Maryland Center for Environmental Science and TidalHealth.



Departmental Culture & Support

Students work in partnership with faculty and classmates to develop as professionals and acquire skills necessary to succeed in future endeavors. To foster student success, the department provides **free tutoring** in the Math Emporium for all 100-level and 200-level math and computer science courses.

A student-run **Math and Computer Science Club** meets regularly for both social and academic events. The department also hosts an annual ceremony for qualified students to be inducted into Pi Mu Epsilon, the national honorary mathematics society. Our students actively utilize the mathematics study room and the three computer labs used for both classes and research, including the High-Performance Computing Lab.



CAREER OPPORTUNITIES

We have graduates employed by a variety of private and public entities including:

- NASA
- Lockheed Martin Corporation
- NSA
- GEICO
- Northrop Grumman Corporation
- J.P. Morgan
- National Institute of Standards and Technology
- Johns Hopkins Applied Physics Lab
- United States Army Corps of Engineers
- Universities and Colleges

CONTACT INFORMATION

For more information about the Department of Mathematical Sciences, please contact:

410-543-6471

Follow this QR code to meet our faculty:

Scan to view a Curriculum Guide

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