

# Applied Mathematics and Statistics, & Scientific Computation Program



DEPARTMENT OF  
MATHEMATICS

**Our top-ranked AMSC graduate program opens a world of possibilities with a flexible, interdisciplinary graduate experience like no other.**



**148**

Faculty  
Members



**44**

Units  
Represented



**78**

PhD  
Students



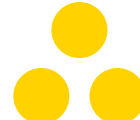
**4**

MS  
Students



**15**

US World and  
News Ranking



**3**

Specialized  
Tracks

**Choose from 3 flexible tracks + create a study plan tailored to your research interests.**



## Applied Mathematics

*Expand* the mathematical foundation of applied sciences and engineering.

*Train* in advanced applied disciplines including mathematical modeling and differential equations.



## Applied Statistics

*Specialize* in a statistical application with a variety of statistical topics.

*Develop* mathematical and computing skills necessary for modern applied statistical research.



## Scientific Computation

*Study* computation in a variety of applied fields: *Physical + Life Sciences, Engineering, Business, and Social Science.*

*Train* in computational techniques and high performance computing.

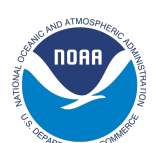
**Take your research further with local research labs + applied disciplines.**



## Local Labs + Agencies



Centers for Disease  
Control and Prevention  
National Center for  
Health Statistics



## Popular Application Areas

- ✓ Applied PDEs
- ✓ Atmospheric Sciences
- ✓ Biology and Medicine
- ✓ Computational Fluid Dynamics
- ✓ Control theory
- ✓ Cryptology
- ✓ Econometrics
- ✓ Epidemiology and Biostatistics
- ✓ Image Processing
- ✓ Machine Learning and Data Science
- ✓ Mathematical Finance
- ✓ Numerical Analysis and Scientific Computing
- ✓ Operations Research
- ✓ Quantum Computing
- ✓ Statistics
- ✓ Survey Methodology and Statistics of Social Measurement

### Why choose AMSC?

#### **AMSC Graduates are going places.**

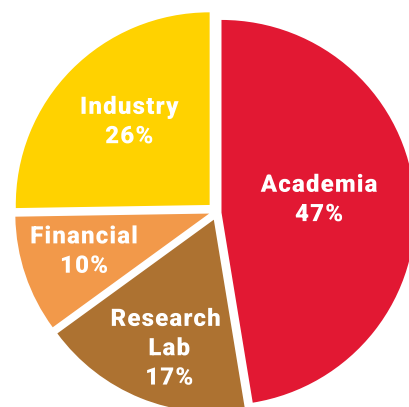
Graduates find competitive placements with Duke University, Harvard Medical School, Apple, Google, National Institutes of Health, Department of Energy, Wells Fargo, and Morgan Stanley - *to name just a few.*

#### **World-Class Experts + Faculty**

AMSC students receive individualized attention throughout their program and enjoy access to faculty with world-class expertise across several departments.

#### **Key Location near Washington, D.C.**

The AMSC program is located in a vibrant hub of mathematics, science, technology, medicine, and environmental research and policy, giving AMSC students the opportunity to work with renowned institutions.



Alumni Placement

### We are here to help our students succeed.

#### **Academic + Career Support**

- ✓ Weeklong Math Orientation with TA Training
- ✓ AMSC New Student Mentor Program
- ✓ Graduate Student Committee of AMSC, MATH, & STAT:  
<https://tinyurl.com/gscams>
- ✓ Women in Math: [wim.math.umd.edu](http://wim.math.umd.edu)
- ✓ University Career Center & The President's Promise:  
[careers.umd.edu](http://careers.umd.edu)

#### **Life + Wellness Support**

- ✓ University Health Center: [health.umd.edu](http://health.umd.edu)
- ✓ University Recreation and Wellness: [recwell.umd.edu](http://recwell.umd.edu)
- ✓ Transportation Services: [transportation.umd.edu](http://transportation.umd.edu)
- ✓ Graduate Student Life Office: [go.umd.edu/gsl](http://go.umd.edu/gsl)
- ✓ Off-Campus Housing Services: [och.umd.edu](http://och.umd.edu)
- ✓ International Student & Scholar Services Office:  
[go.umd.edu/isslink](http://go.umd.edu/isslink)
- ✓ Office of Graduate Diversity and Inclusion:  
[diversity.umd.edu](http://diversity.umd.edu)

"The academic structure lends itself well to prepare rigorously for research in applied mathematics because it encourages students to develop a *working knowledge of not only mathematics, but also their application area...*

I wanted to work with the faculty associated with the *Norbert Wiener Center for Harmonic Analysis here at UMD*. I was interested in applied harmonic analysis, so it felt pretty sensible to choose a program with a dedicated center for this subject!"

- **Shashank Sule, PhD Student**

"When I visited UMD, I was impressed by the *opportunities that such an interdisciplinary program could offer...being able to combine math with other more hands-on fields was a big draw for me*. It seemed that the AMSC program had a lot of areas where I could apply my research interests."

- **Victoria Whitley, PhD Student**

"I was drawn to the AMSC program by the *diverse set of research interests in the faculty*. When starting my PhD, I was largely undecided on the specific area of math I was most attracted to, and the *faculty were very helpful when discussing their work as well as directing me towards more like-minded professors...the decision to be a Terp was easy!*"

- **Max Springer, PhD Student**