

- Algebra and Combinatorics
- Numerical Linear Algebra
- Control Theory and Optimization
- Fluid Dynamics
- Mathematical Biology
- Numerical Analysis
- Algebraic and Geometric Topology
- Computational Science
- Dynamical Systems
- Math Education
- Mathematical Physics
- Partial Differential Equations

The Department of Mathematics has internationally recognized excellence in a wide range of research areas. In addition to our traditional course offerings, every semester features special topics classes and multiple seminars on emerging directions in mathematics and its applications.

## Virginia Tech Mathematics Programs

### OVERVIEW

There are roughly 65 graduate students actively enrolled in the Mathematics program. About 1/3 are in the Master's (M.S.) program.

There is a seamless transition from the M.S. program to the Ph.D. program if desired. The Math Department offers both traditional and interdisciplinary options for the M.S. degree. The final exam for the M.S.

degree is either a Master's Thesis, a Master's Project or taking Ph.D. Preliminary Exams. The typical length of the Ph.D. degree for an entering student with an M.S. is four years, while students entering after their B.S. typically finish in five.



### STUDENT RESEARCH

Depending on research area, students begin research with one of our 40+ research faculty as early as their first year.

Students attend regional and national math meetings to present their research. Examples of faculty research can be found on the Department webpage

[www.math.vt.edu](http://www.math.vt.edu)

If you have interest in working with a particular faculty member, feel free to contact them directly.

### STUDENT PLACEMENT

We have an excellent track record of placing our graduates. Students graduating with a Ph.D. typically choose a job in academia or in the National Labs. To illustrate the range of career goals that can be accommodated, recent Ph.Ds. have gone on to work for: MIT, RPI, Salisbury University, Portland State University, Oak Ridge National Laboratory, Rice, and the University of Zurich. Some employers of our past M.S. graduates are Google, Anthem, The Federal Reserve, Bloomberg, Kyocera, and other Ph.D. programs.



Details about M.S. and Ph.D. degree programs can be found in our graduate policies document at

[www.math.vt.edu/grPolicies.pdf](http://www.math.vt.edu/grPolicies.pdf)

### APPLICATION INFO

Applications must be completed online at

[graduateschool.vt.edu](http://graduateschool.vt.edu)

A completed application for all Graduate Programs in Mathematics includes academic transcripts, at least three letters of recommendation from Professors of advanced Mathematics courses or research advisors, and Graduate Record Examination (GRE) general test scores.

---

- Dynamic and supportive graduate student environment

---

- World class computing resources  
<http://www.arc.vt.edu>

---

- Most graduate students supported by Graduate Teaching Assistantships

---

- Information on other support such as Fellowships and Scholarships available at [graduateschool.vt.edu](http://graduateschool.vt.edu)

---

- Many students take advantage of internship opportunities at companies or national labs.

---

- Career-smart faculty advisors

---

- Students learn valuable teaching skills through an extensive mentoring program.



Department of  
Mathematics

Research programs in the Department of Mathematics are enhanced by collaborations with other researchers across Virginia Tech either in other departments or in various research centers and research institutes.

## Affiliated Research Centers and Institutes

- **Interdisciplinary Center for Applied Mathematics**  
[www.icam.vt.edu](http://www.icam.vt.edu)
- **Center for Statistical Mechanics, Mathematical Physics, and Theoretical Chemistry**  
[www.mathphys.vt.edu](http://www.mathphys.vt.edu)
- **Center for Mathematical Computation**
- **Biocomplexity Institute**  
[www.vbi.vt.edu](http://www.vbi.vt.edu)
- **Institute for Critical Technology and Applied Science**  
[www.ictas.vt.edu](http://www.ictas.vt.edu)

### Virginia Tech System X Supercomputer



#### CONTACT US FOR MORE INFORMATION:

**Dr. Jeff Borggaard**  
Graduate Program Director

**Mrs. Nicole Sutphin**  
Graduate Program Coordinator  
[nsutphin@vt.edu](mailto:nsutphin@vt.edu)

Contact the department if you're interested in visiting so we can set up a meeting while you're here on campus. We can introduce you to faculty members you'd be studying with and give you details about what it's like to be a student in our program.

#### [Virginia Tech Visitor's Center](#)

Find information about parking passes, maps, accessibility, where to stay, and sights to see while you're here.



Department of  
Mathematics

Mathematics (MC 0123)  
McBryde, RM 460, Virginia Tech  
225 Stanger Street  
Blacksburg, VA. 24061  
(540) 231-6537  
[info@math.vt.edu](mailto:info@math.vt.edu)

## Graduate Programs in the Department of Mathematics

