

## TEACHING AND RESEARCH ASSISTANTSHIPS

The Temple University Graduate Program in Mathematics admits students for the fall and the spring semesters, although the former is the recommended time for starting studies and the latter occurs only under special circumstances.

Incoming classes usually consist of about six to ten students. Most PhD students are supported by teaching assistantships; MS students are awarded teaching assistantships on the basis of availability of funds, performance and special teaching abilities. The teaching assistantships entail a stipend and full-tuition remission, and are awarded on a yearly basis for up to five years. A small number of research assistantships are also awarded each year, funded by faculty grants.

The department's best applicants are often recommended for a Temple University fellowship; these are awarded on a competitive basis, and consist of two years (the first and the fourth year) of stipend and full-tuition remission.



College of Science and Technology  
Department of Mathematics

### For more information:

David Futer, PhD, Director of Graduate Studies  
215-204-7854  
grad.math@temple.edu  
Learn more at [math.temple.edu/grad](http://math.temple.edu/grad)

### CST Graduate Services

400 Carnell Hall, 1803 N. Broad Street, Philadelphia, PA 19122

All correspondence should be sent to the above address. Grade transcripts should be sent directly by your registrar's office. Letters of recommendation should be mailed directly by your recommenders, to the above address or to [grad.math@temple.edu](mailto:grad.math@temple.edu)

## CITY LIFE

The fifth-largest city in the United States, Philadelphia is a fantastic place to study, work and play. From its wealth of history to its renowned museums, to its bustling urban life and famous cuisine, there's a lot to do and see. Temple University is located at the center of a dynamic region of more than 80 institutions of higher learning. From Temple's Main Campus, there is easy transit access to Philadelphia's bustling Center City, University City and Philadelphia International Airport and to cities up and down the Northeastern United States.

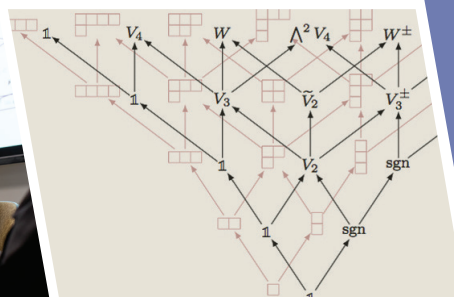
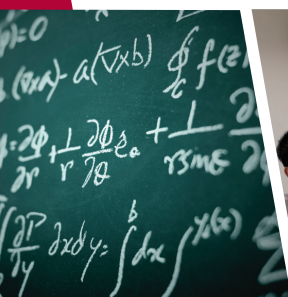
## DEPARTMENT OF MATHEMATICS

# MS AND PHD PROGRAMS

*At the crossroads of discovery, innovation and education, the Department of Mathematics offers world-class researchers, a broad spectrum of expertise in theoretical and applied mathematics, and connections to the resources and opportunities throughout the College of Science and Technology, Temple University and the Philadelphia region.*



College of Science and Technology





## GRADUATE PROGRAM

With more than twenty research-active faculty members, small classes and a high faculty/student ratio, the Temple University Department of Mathematics offers outstanding opportunities for flexible program design and ample interaction between experienced mathematicians and master's and doctoral students.

Weekly colloquia feature prominent academics covering the full spectrum of mathematical disciplines. In addition, faculty and advanced graduate students organize weekly seminars that explore topics of current research interest. The department also sponsors the Grosswald Lectures, an annual series of lectures presented by leading mathematicians.

New students have access to a repertoire of courses that ease the transition from undergraduate to graduate studies, providing a sound mathematical background to beginning students and academic challenge to the more advanced.

Both the MS and PhD programs encourage interdisciplinary coursework and interaction with other scientific disciplines.

**Temple math faculty members are very accessible. That's what sets us apart from others: We create an environment where students and faculty work together closely to achieve excellence.**

— **David Futer, PhD**  
Associate Professor and  
Director of Graduate Studies

### FACULTY AREAS OF RESEARCH SPECIALIZATION

Algebra  
Algebraic and analytic  
number theory  
Combinatorics  
Computational mathematics  
Differential geometry  
Geometric topology  
Global geometry  
Group theory  
Harmonic analysis  
Mathematical physics  
Mathematics of materials  
Numerical analysis  
Numerical resolution of  
evolution equations  
Partial differential equations  
Probability and statistics  
Several complex variables



## PROGRAMS AND REQUIREMENTS

### The MS Degree

There are two options for the Master of Science degree: MS in Mathematics and MS in Mathematics with a concentration in Applied and Computational Mathematics.

Students enrolled in either option must satisfactorily complete thirty credits of mathematics courses at the 5000 level or above. The program of study must be designed in coordination with a faculty advisor and approved by the Graduate Committee. With approval, students may include a limited number of relevant courses from the sciences or engineering.

After fulfilling course requirements, students have three options to complete the program:

- **Thesis:** under the supervision of a faculty advisor and advisory committee
- **MS exam:** composed by at least two graduate faculty on topics corresponding to student program study
- **Comprehensive exam:** three separate 25-point written exams

### The PhD Degree

Students enrolled in the PhD program must complete sixteen semester graduate courses beyond the baccalaureate. For promising students, work done toward a MS degree, at Temple or elsewhere, can be used toward partial fulfillment of PhD requirements.

PhD students must pass a written comprehensive qualifying exam in three different areas, chosen from a menu of six. Then, they must pass an oral exam on advanced topics chosen in consultation with the student's advisor.

After these steps, students are admitted to PhD candidacy and begin intensive research, guided by the advisor.

**With two master's options, a doctoral program and research expertise across the spectrum of pure and applied mathematics, Temple University offers students excellent preparation for a variety of successful careers, from teaching to business to research that supports scientific discovery.**

— **Irina Mitrea, PhD**  
Professor and Chair,  
Department of Mathematics