

## DID YOU KNOW THAT...

- ◆ There are approximately fifty-nine tenured or tenure-track faculty in the department whose research interests encompass the creation, application and teaching of mathematics.
- ◆ Faculty in the Mathematics Department have been recipients of many prestigious awards including, the Dirac Medal, the von Neumann Prize, NSF Director's Award for Distinguished Teaching, Gweneth Humphreys Award for Mentorship of Undergraduate Women in Mathematics, Alfred P. Sloan Fellowship, and Clay Senior Scholar to list just a few.
- ◆ Recent PhD graduates from the UA program are employed at the University of British Columbia, Raytheon, the University of Copenhagen, SUNY Binghamton, Emage, Case Western Reserve University, Mills College, and the College of William and Mary.
- ◆ The Mathematics Department works closely with the Graduate Interdisciplinary Programs in Applied Mathematics and Statistics. Students from each "Program" and "Department" interact extensively.
- ◆ The Mathematics Department has a strong record of outreach, including hosting a regular public lecture (the Daniel Bartlett Memorial Lecture) and running math circles and teacher workshops for local students and teachers. Graduate students have many opportunities to be involved.
- ◆ The Southwest Center for Arithmetical Algebraic Geometry hosts a winter school which brings together the leaders in the field and students for an intensive week of lectures and projects. The Center also hosts a Distinguished Lecture Series.
- ◆ The Center for Recruitment and Retention of Math Teachers is a leader in K-12 education and fosters collaborations between research mathematicians and educators across the spectrum of mathematics teaching.
- ◆ The Department of Mathematics has a deep-seated commitment to diversity, and encourages applications from traditionally under-represented groups. We are a member of the Math Alliance Center and Alliance students may apply for an application fee waiver. The University of Arizona is a Hispanic Serving Institution and an American Indian and Alaska Native Serving Institution. Graduate students have an active chapter of the Association for Women in Mathematics (AWM).

## MATHEMATICS

[math.arizona.edu/graduate](http://math.arizona.edu/graduate)

Phone: 520-621-2068

Fax: 520-621-8322



Graduate Director: Dr. David Glickenstein  
[glickenstein@math.arizona.edu](mailto:glickenstein@math.arizona.edu)



THE UNIVERSITY OF ARIZONA  
COLLEGE OF SCIENCE

Mathematics

## GRADUATE PROGRAM IN MATHEMATICS

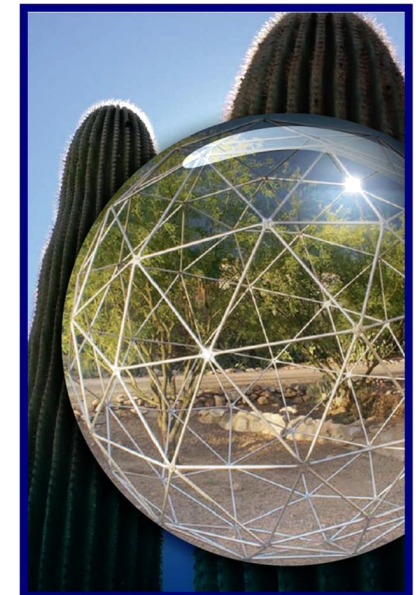


Photo by Guada Lozano; Sculpture by Ron Stansfield; Design by Roma Krebs

If you like to create mathematics, collaborate with an internationally recognized faculty in research tutorial groups, and be part of a nationally recognized tradition of innovation in teaching and curriculum development, then the Graduate Program in Mathematics at the University of Arizona is the place for you.

## TRAJECTORIES

The Mathematics Department offers MA, MS, and PhD degrees in a variety of areas encompassing the creation, application and teaching of mathematics. As a graduate student you will master a rigorous core of foundational mathematics, including algebra, real analysis, and geometry/topology and pass qualifying examinations in these topics.



Student Erik Davis leading a Qualifying Exam study session.

Second year students participate in “research tutorial groups” and work closely with a selected faculty member on a chosen project.

After more specialized courses, students work with a faculty advisor working on research.

## RESEARCH SPECIALTIES

Arizona has strong research groups in a number of areas. Here is a rough classification. For more details, including a list of faculty in each area, see [math.arizona.edu/research](http://math.arizona.edu/research).

- ◆ Algebra and Geometry
  - group theory and computational group theory, number theory and arithmetical algebraic geometry, topology and geometry
- ◆ Analysis
  - analysis and its applications, dynamical systems, geometric analysis, mathematical physics
- ◆ Applied Mathematics
  - computational science and numerical, analysis, fluids and mechanics, mathematical biology, nonlinear waves optical science
- ◆ Mathematics Education
  - K-12 education, undergraduate education Equity, outreach and informal mathematics, teacher education
- ◆ Probability and Statistics
  - stochastic processes, machine learning, random graphs, probability models and applications, data analysis

## FINANCIAL SUPPORT

Students are supported by the department through a combination of fellowships and assistantships. PhD students can expect five to six years of support including tuition and individual health insurance. The cost of living in Tucson is low, especially for housing.

### Teaching /Research Assistantships

Our students typically have full teaching responsibility for their classes. The department provides many resources for students to improve their skills. Some faculty members support students using their research grants from the National Science Foundation or other federal agencies.

### Fellowships and Training Grants

The college and department offer full or partial fellowships or other support, including Outreach Scholars, NSF Transdisciplinary Research in Principles of Data Science, NIH/NIGMS Training Grant in Computational Biology, and NASA Space Grant.

### Special Opportunities

Some first year students are eligible for special funding, including the University Fellows Program (\$32,000 for the first year), Graduate Access Fellowships and NSF Bridge to Doctorate for underrepresented or disadvantaged groups.

