GRADUATE PROGRAMS

The graduate programs are designed to produce mathematicians who are highly qualified to enter professions in academia and the industrial and governmental sectors.

PH.D. DEGREE IN MATHEMATICS

This program offers doctoral degrees in Mathematics with specialization in algebra, applied mathematics, computational mathematics, data science, geometry, mathematical biology, mathematics education, probability, and statistics. In addition, the program offers an interdisciplinary Ph.D. degree in mathematics and computer science focusing on data science. There are two different routes to obtain the Ph.D. degree: (1) obtain an M.S. degree first and then enter the Ph.D. program; or (2) enter the Ph.D. program directly with a B.S. degree.

M.S. DEGREE IN MATHEMATICS

This program develops independent research skills and prepares students for more advanced study in mathematics. The program offers specialization in several areas including applied mathematics, computational mathematics, data science, mathematics education, pure mathematics, and statistics.

M.A. DEGREE IN MATHEMATICS

This program is designed for those who are interested in strengthening their understanding of mathematics and enriching their mathematics teaching. The program embraces a philosophy of teaching and learning mathematics that is consistent with the landmark standards documents produced by the National Council of Teachers of Mathematics and focuses on enhancing mathematics teaching through preparation in topics grounded in secondary school mathematics from an advanced standpoint.

CERTIFICATE OF APPLIED STATISTICS

This program offers individuals with an undergraduate degree an opportunity to receive graduate instruction in applied statistics as a means of maintaining and enhancing their professional development.



The Department of Mathematics at the University of Texas at Arlington is a major center for mathematics research and education in the Dallas/Fort Worth metropolitan area and North Texas. It serves more than ten thousand students every year and features nationally recognized faculty with outstanding accomplishments in teaching, research, and service. The American Mathematical Society named the University of Texas at Arlington the winner of its 2013 AMS Award for an Exemplary Program or Achievement in a Mathematics Department. The department faculty members are well known for their accomplishments in teaching and research. Among them are a fellow of the UT System Academy of Distinguished Teachers, five members of the UTA Academy of Distinguished Teachers, five UT System Regent's Outstanding Teaching Award winners, and several recipients of university and state level teaching awards. In addition, most mathematics faculty members' research is supported by the National Science Foundation, National Security Agency, Air Force Office of Scientific Research, Department of Education, Department of Defense, National Institutes of Health, and Texas Higher Education Coordinating Board.

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MATHEMATICS GRADUATE STUDIES



2019-2020



FINANCIAL SUPPORT

Graduate enrollment in the Department of Mathematics has more than doubled over the last five years. There are currently over 100 graduate students in the master's and doctoral programs. Our department attracts talented students from across the nation and the world by its friendly environment, generous financial support, strong mentoring programs, distinguished faculty, and ideal location for job placement and professional opportunities.

Most doctoral students receive support as graduate fellows or graduate teaching or research assistants. Financial support can come in the form of:

- **GAANN FELLOWSHIPS**
- **GTA STIPENDS**
- **GRA STIPENDS**
- NSF BRIDGE-TO-MATH-DOCTORATE ASSISTANTSHIPS
- BRIDGE TO THE DOCTORATE (LSAMP-BD) FEL-LOWSHIP
- MATHEMATICS GRADUATE SCHOLARSHIPS
 - S. R. Bernfeld Memorial Scholarship
 - M. B. and W. G. Ray Fellowship
 B. M. McCarley Scholarship Endowment

with available additional summer support.

CONTACT INFORMATION

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Dr. James A. M. Alvarez Graduate Advisor, M.A. Program E-mail: james.alvarez@uta.edu

FACULTY RESEARCH

Our active research faculty members have strengths that lie in pure and applied mathematics, data science, statistics, and mathematics education; and many of their research projects are supported by external grants.

- Aktosun, Tuncay, Professor Ph.D., Indiana University, 1986 Inverse Problems and Wave Propagation
- Alvarez, James, Professor Ph.D., University of Texas - Austin, 1996 Undergraduate Mathematics Education
- Ambartsoumian, Gaik, Associate Professor Ph.D., Texas A&M University, 2006 Computerized Tomography and Integral Geometry
- Chen-Charpentier, Benito, Professor
 Ph.D., California Institute of Technology, 1979
 Applied and Computational Mathematics
- Cordero, Minerva, Professor Associate Dean of Science for Academic Affairs Ph.D., University of Iowa, 1989 Finite Geometries
- Gornet, Ruth, Associate Professor Ph.D., Washington University - St. Louis, 1993 Inverse Spectral Geometry
- Grantcharov, Dimitar, Professor Ph.D., University of California - Riverside, 2003 Representations of Lie Algebras and Superalgebras
- Jorgensen, David, Professor Associate Chair of the Department Ph.D., University of Nebraska - Lincoln, 1996 Commutative Algebra
- Jorgensen, Theresa, Associate Professor Ph.D., University of Nebraska Lincoln, 2000 Mathematics Education of Teachers
- Kojouharov, Hristo, Professor Ph.D., University of Wyoming, 1998 Numerical Analysis and Mathematical Biology
- Korzeniowski, Andrzej, Professor Ph.D., Wroclaw University (Poland), 1978 Probability Theory and Stochastic Processes
- Kribs, Christopher, Professor
 Ph.D., University of Wisconsin Madison, 1997
 Mathematics Education and Mathematical Biology

- Li, Ren-Cang, Professor Ph.D., University of California - Berkeley, 1995 Numerical Analysis and Scientific Computing
- Liao, Guojun, Professor Ph.D., University of California - Berkeley, 1985 Grid Generation and Differential Geometry
- Liu, Chaoqun, Professor Ph.D., University of Colorado at Denver, 1989 Computational Fluid Dynamics
- Liu, Yue (David), Professor Ph.D., Brown University, 1994 Partial Differential Equations
- Nestell, Merlynd, Professor Ph.D., Oregon State University, 1966 Integral Equations
- Pal, Suvra, Assistant Professor Ph.D., McMaster University (Canada), 2014 Survival Analysis and Statistical Computing
- Roy, Souvik, Assistant Professor Ph.D., Tata Institute of Fundamental Research, 2015 Inverse Problems and PDE Optimal Control
- Shipman, Barbara, Associate Professor
 Ph.D., University of Arizona, 1996
 Geometry and Hamiltonian Dynamical Systems
- Su, Jianzhong, Professor Chair of the Department Ph.D., University of Minnesota, 1990 Partial Differential Equations
- Sun-Mitchell, Shan, Professor Ph.D., Indiana University, 1992 Mathematical Statistics
- Vancliff, Michaela, Professor Ph.D., University of Washington, 1993 Non-Commutative Algebra and Algebraic Geometry
- Wang, Li, Assistant Professor Ph.D., University of California - San Diego, 2014 Optimization and Data Science