Dr. Edward Allen: Algebraic Combinatorics
Dr. Justin Allman: Algebraic Topology and Geometry
Dr. Kenneth Berenhaut: Applied Probability
Dr. Abbey Bourdon: Arithmetic Geometry
Dr. Lucy D'Agostino McGowan: Causal inference
Dr. Nicole Dalzell: Statistics Education
Dr. Rob Erhardt: Environmental Statistics
Dr. Jennifer Erway: Numerical Optimization
Dr. Ciaran Evans: Changepoint Detection
Dr. Claudia Falcon: Applied Mathematics
Dr. John Gemmer: Applied Mathematics
Dr. Staci Hepler: Bayesian Modeling
Dr. John Holmes: The Analysis of PDEs
Dr. Hugh Howards: Topology and Geometry
Dr. Emily Huang: Digital Phenotyping
Dr. Sneha Jadhav: Functional Data Analysis
Dr. Miaohua Jiang: Dynamical Systems and SmoothErgodic Theory
Dr. Ellen Kirkman: Noncommutative Algebra
Dr. Leandro Lichtenfelz: Differential Geometry
Dr. Sarah Mason: Algebraic Combinatorics
Dr. Frank Moore: Commutative Algebra
Dr. Jason Parsley: Differential Geometry
Dr. Sarah Raynor: Partial Differential Equations
Dr. Stephen Robinson: Partial Differential Equations
Dr. Jeremy Rouse: Number Theory
Dr. Lynne Yengulalp: Topology and Set Theory

WAKE FOREST
U N I V E R S I T Y
GRADUATE SCHOOL of ARTS \& SCIENCES

Application Forms and Graduate Bulletin may be found here:
graduate.wfu.edu

## For Fall Admission:

Applications are due January 15
For more program information, contact:
Mathematics Graduate Program Director
Department of Mathematics \& Statistics Wake Forest University
P. O. Box 7388

Winston-Salem, NC 27109
Phone: 336-758-5300
Fax: 336-758-7190
Email: rouseja@wfu.edu

## Department website: <br> http://college.wfu.edu/math/




## WAKE FOREST

U N I V E R S I T Y
Department of Mathematics \& Statistics


## Master



Science

## Financial Aid



## Overview

The Department of Mathematics and Statistics offers the degree of Master of Science. The degree requirements are flexible and permit both thesis and non-thesis programs of study, with a focus on either mathematics (pure or applied) or on statistics.

The program is designed to accommodate students seeking either a terminal degree or preparation for Ph.D. work at another institution. The program fosters personal interactions with faculty and other students which leads to significant mathematical growth. It provides a supportive and stimulating environment appropriate for students seeking to enrich their understanding of mathematics and statistics before making a career choice or choosing a Ph.D. program.

Faculty research interests include algebra, topology, number theory, combinatorics, differential equations, analysis, medical and biological applications, and scientific computing; statistical climatology, environmental and ecological statistics, Bayesian modeling and computing, stochastic processes and network analysis, applications of statistics to social sciences and biology.

## Course Offerings

The course offerings of our program are varied. Every year we offer graduate courses in algebra, analysis, statistics, and topology, as well as a number of other advanced courses, including those in applied mathematics, number theory, discrete mathematics, computational mathematics and geometry. A complete two-year schedule is on our website.

## Academic Environment

There is a great deal of personal interaction between the faculty and students. The faculty of the department have diverse interests and are willing to share them with students.

The department sponsors chapters the Association for Women in Mathematics as well as the mathematical honor society Pi Mu Epsilon. The department sponsors many activities including colloquia, intramural sports teams and picnics.

Numerous computing facilities are available to graduate students including access to a department server and the University's High Performance Computing Cluster.

The University's library subscribes to a variety of journals and has an extensive collection of back holdings. The library also has a good monograph collection. Interlibrary loan is available.

## Degree Requirements

Students typically devote two years to completing a master's degree in our department and most students gain from investing two full years. However, occasionally, a student will finish in three semesters or even in one year and a summer.
The master of science degree can be obtained in four distinct ways. Students may choose to do the mathematics or the statistics track; students may also choose a thesis or nonthesis track. The non-thesis track requires more coursework while the thesis track requires oral and written demonstration of an extended mathematical or statistical investigation under the guidance of a faculty advisor. As students typically take three courses per semester, only the thesis option allows the possibility of finishing in an academic year plus a summer.

The degree requirements for each track are summarized in the table below:


Almost all of the participants in our program receive substantial aid: a teaching assistantship, or a full or partial scholarship. Students who receive assistantships receive a full scholarship plus a living allowance (\$15780 for the 2021-2022 academic year). Students who receive a partial scholarship are responsible for the balance of their tuition, which is $\$ 9276$ for academic year 2021-2022. Students who do not have an assistantship are eligible to work in the Math Center on an hourly basis.

## Admission Requirements/Prerequisites

Candidates for admissions to the Master of Science Program in the Department of Mathematics and Statistics should have completed at least thirty three semester hours of mathematics and statistics at an accredited college or university. At least fifteen of these hours should require, as a prerequisite, two semesters of calculus or a semester of linear algebra. Most successful applicants have taken three semesters of calculus (through multi variable calculus), linear algebra, abstract algebra (or modern algebra) and advanced calculus (or other advanced courses in analysis). Prior experience with computing is helpful but not required, particularly for the statistics track. Applicants who do not have this preparation may be required to take additional preparatory courses.


## Where Do Graduates Go After Wake Forest?

Graduates from our undergraduate and graduate programs in mathematics and statistics have been very successful. Graduates of our Masters program have gone on to Ph.D. programs in Mathematics, Statistics, Biostatistics, Education, Operations Research, and Computer Science at a large variety of institutions. A list of schools to which our graduates have gone is available on our website

Graduate students have also taken jobs in actuarial science, statistics, biostatistics, analytics, computing, government security, government contracting, and teaching at the college and high school level.

