Applied Mathematics, PHD

Modality

On Campus

Program URL

https://mathstat.georgetown.edu/phd-program/

The Ph.D. program in Applied Mathematics prepares students for careers in academia, industry, or government. Students receive expert guidance in research and a foundation in teaching pedagogy.

Academic Policies

Students must have a GPA of 3.000 upon completion of the 27 credit hours and pass both comprehensive examinations to qualify for candidacy. Students who do not satisfy this requirement will be dismissed from the Ph.D. program but have the option of receiving the Master of Science in Mathematics and Statistics.

Other Policies

All students are required to serve as Teaching Associates in their second year of the program. This entails serving as the instructor of record for a lower level Math course such as Calculus I.

Requirements

Program Requirements

The course requirements consist of nine courses (27 credits), not including credits associated with dissertation research. Students are required to take four course courses in the first year of study: Real Analysis, Advanced Linear Algebra, Complex Variables, and Numerical Analysis.

Required Examinations

Students are required to pass two comprehensive examinations that focus on the core courses: one on real and complex analysis and the other one linear algebra and numerical analysis. Students must attempt both comprehensive examinations at the end of their first year of study. Students who fail a comprehensive exam will have one additional attempt to pass.

Thesis Requirements

Once a student has passed their comprehensive examinations, they must form a dissertation committee of at least three members. One member must be identified as the advisor.

The Dissertation Advisor will work with the student to write a dissertation that is a culmination of original research. Students are required to meet with their Dissertation Advisor at least once a year to provide progress updates on the dissertation.

Upon approval of the dissertation committee, the student will schedule a public defense of their dissertation. Following the defense and a unanimous vote by the dissertation committee to accept the dissertation, the Ph.D. degree will be granted.