MA in Applied Mathematics

Students graduating with a MA in Applied Mathematics should be able to:

Core Knowledge

- Demonstrate a mastery in Analysis and Applied Mathematics to a level commensurate with current standards in mathematics, including real analysis, complex analysis, numerical analysis and high performance computing, asymptotics, and calculus of variations (*Area Requirements Option*).
- Demonstrate mastery of Mathematics at an advanced undergraduate level in linear algebra, real and complex analysis, numerical analysis and differential equations (*Thesis Option).*

Research Methods and Analysis

- Conduct primary research literature searches in their chosen subfield (Thesis Option).
- Use pure mathematical or applied methods to understand some aspect of the frontiers of mathematical knowledge.
- Students will be able to plan and execute a research project, analyze relevant findings, and organize results into a coherent argument (Thesis Option).

Pedagogy

- Communicate mathematical concepts to a variety of audiences.

Scholarly Communication

- Communicate effectively the results of their research to professionals within their subfield, and within the broader mathematics community, through both oral presentation and written work (*Thesis Option).*