The MS and PhD programs in the Department of Applied Mathematics and Statistics prepare the next generation of leading mathematical and statistical researchers, both in the private and public sectors, for a world driven by increasingly complex technology and scientific challenges.

**Graduates of the M.S. and Ph.D. programs work in a variety of different sectors, including technology, engineering, finance, and academia. Recent alumni have obtained positions at companies like Northrop Grumman, Lockheed Martin, and Oppenheimer Funds, as well as, national laboratories, and both teaching- and research-oriented universities.**

### MS and PhD Curriculum

MS and PhD students pursuing CAM will complete the following six courses:

- Linear Vector Spaces
- Applied Analysis
- Applied Mathematics I
- Applied Mathematics II
- Numerical Solutions of PDE's
- Computational Linear Algebra

Two elective courses in topics such as:

- Parallel Scientific Computing
- Integral Equations
- Mathematical and Computational Neuroscience

### CAREER OPPORTUNITIES

Graduates of the M.S. and Ph.D. programs work in a variety of different sectors, including technology, engineering, finance, and academia. Recent alumni have obtained positions at companies like Northrop Grumman, Lockheed Martin, and Oppenheimer Funds, as well as national laboratories, and both teaching- and research-oriented universities.

### COMPUTATIONAL AND APPLIED MATHEMATICS

#### Degrees Offered

- **Master of Science**
  - 30 credits

- **Doctor of Philosophy**
  - 72 credits

#### Faculty Research Areas:

- **High Performance Scientific Computing**
- **Mathematical Biology**
- **Numerical Methods for PDEs**
- **Multiscale Analysis & Simulation**
- **Biological Fluid Dynamics**
- **Uncertainty Quantification**
- **Wave Phenomena & Inverse Problems**
- **Applied Analysis & Dynamical Systems**
- **Meshfree Approximation Methods**

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**Program Information**

*Information is from the 2016-17 Mines Career Center Outcomes Survey*