Are you passionate about making a difference in the world of climate or environmental issues? Or advancing the fight against cancer or infectious diseases? The applied mathematics PhD at ASU will help you apply your mathematics expertise to devise solutions to these types of real-world problems.

Program Description

Degree Awarded: PHD Applied Mathematics

This PhD program in applied mathematics is intended for students with superior computational and mathematical modeling ability. It emphasizes a solid mathematical foundation and promotes creative scholarship in an application discipline. The School of Mathematical and Statistical Sciences at Arizona State University has faculty in applied mathematics with outstanding transdisciplinary research programs with strong external funding.

Current research interests include mathematical epidemiology and mathematical ecology, mathematical neuroscience, environmental fluid dynamics and high performance computing, imaging and inverse problems, supply chain dynamics, control and optimization, computational methods for ordinary and partial differential equations, analysis of differential equations, and geophysical and environmental fluid dynamics.

At a Glance

- **College/School:** College of Liberal Arts and Sciences
- **Location:** Tempe campus

Degree Requirements

84 credit hours, a written comprehensive exam, a prospectus and a dissertation
Five core courses (15)
MAT 591 Seminar (3)
MAT 799 Dissertation (12)

Students must pass a written comprehensive examination and an oral dissertation prospectus. Each student must write a dissertation and defend it orally in front of five dissertation committee members. Students should see the department website for examination information.

Admission Requirements

Applicants must fulfill the requirements of both the Graduate College and the College of Liberal Arts and Sciences.

Applicants are eligible to apply to the program if they have earned a bachelor's or master's degree in mathematics, applied mathematics, economics, engineering or a natural science from a regionally accredited institution.

Applicants must have a minimum of a 3.00 cumulative GPA (scale is 4.00 = "A") in the last 60 hours of a student's first bachelor's degree program, or applicants must have a minimum of a 3.00 cumulative GPA (scale is 4.00 = "A") in an applicable master's degree program.

All applicants must submit:

1. graduate admission application and application fee
2. official transcripts
3. statement of education and career goals
4. resume
5. GRE (general) scores
6. three letters of recommendation
7. proof of English proficiency

Additional Application Information

An applicant whose native language is not English (regardless of current residency) must provide proof of English proficiency.

Additional eligibility requirements include:

1. be competitive in an applicant pool as evidenced by coursework in linear algebra (equivalent to ASU course MAT 342 or MAT 343) and advanced calculus (equivalent to ASU course MAT 371)
2. have scientific programming skills (desirable)

Contact Information

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