Geographic Information Science, PhD

Ready to apply state-of-the-art geospatial analysis methods to social, economic and environmental problems? Join a school filled with innovative faculty within the discipline and leading research centers who are forging this path of discovery.

Program Description

Degree Awarded: PHD Geographic Information Science
The PhD program in geographic information science fosters training of next generation scientists and engineers who will excel at theoretical, computational, analytical and technical knowledge in transdisciplinary geospatial sciences.

Students in this doctoral program have the opportunity to conduct research at the Spatial Analysis Research Center alongside world-renowned faculty specializing in remote sensing and earth observation, GIS, geoinformatics, spatial statistics and spatial-temporal analysis. Researchers are investigating a variety of issues, including voting habits, health crises, altering landscapes and more --- all in an attempt to better understand this complex and changing world.

The program has sufficient flexibility to allow for individual needs and interests, allowing students to create a plan of study that fits their personal, academic and professional goals.

At a Glance

- **College/School:** [The College of Liberal Arts and Sciences](#)
- **Location:** [Tempe campus](#)

Degree Requirements
84 credit hours, a written comprehensive exam, an oral comprehensive exam, a prospectus and a dissertation

**Required Core (12 credit hours)**
GIS 520 GIScience Issues and Debates (3)
GIS 521 Geographic Information Science Programming (3)
GIS 571 Spatial Statistics for Geography and Planning (3)
GCU 585 Geographic Research Design and Proposal Writing (3)

**Electives or Research (55 credit hours)**

**Remote Sensing (3 credit hours)**

**Other Requirements (2 credit hours)**
GCU 591 or GPH 591 Seminar: Geography Colloquium (2)

**Culminating Experience (12 credit hours)**
GIS 799 Dissertation (12)

**Additional Curriculum Information**
Students select electives, remote sensing and other requirements seminar coursework in consultation with their academic advisor.

**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 geography, geology, earth science, computer programming, GIS, environmental science, geomatics or a related field from a regionally accredited institution.

Applicants must have a minimum cumulative GPA of 3.00 (scale is 4.00 = "A") in the last 60 hours of their first bachelor's degree program, or applicants must have a minimum cumulative GPA of 3.00 (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. three letters of recommendation
4. written statement
5. professional resume
6. proof of English proficiency
Additional Application Information
An applicant whose native language is not English must provide proof of English proficiency regardless of current residency.

Letters of recommendation should be from academic professionals or professional colleagues capable of evaluating the applicant's abilities, accomplishments and professional potential.

The written statement must address the following questions:

- What area of specialization within GIS do you wish to pursue, and why?
- Describe the aspects of your education that will enable you to pursue this area of specialization.
- What additional training do you feel you can obtain at Arizona State University to realize your education and career goals?

Also in the written statement, applicants should provide any other information (for example: research experience or information which might be drawn from a resume) that they feel the committee should consider in the application for admission.

The written statement should be no longer than two pages. A generic statement, often sent to multiple universities, does not substitute for a statement that addresses the applicant's reasons for applying to this doctoral program in geographic information science.

Application Deadlines

Fall

expand

Career Opportunities

Professionals with expertise in geospatial information science research, theory and practice are in high demand across sectors and industries, including in institutions of higher education, consulting firms and government agencies. Skills in geographical data science, mapping and data analysis are valuable to businesses and institutions that rely on data-driven approaches to solve complex real-world problems.

Career examples include:

- computer scientist
- conservation scientist
- geoscientist
- geospatial information scientist or technologist
- geospatial intelligence analyst
- remote sensing scientist or technologist

Contact Information