

# Graduate Certificate: Geographic Information Systems

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## COLLEGE OF LIBERAL ARTS

Learn more about the graduate certificate in Geographic Information Systems.

### About the Certificate

Geographic Information Systems (GIS) is a powerful analytical software tool that combines data and maps to solve complex problems at different scales. GIS is a rapidly growing field with applications in a variety of disciplines, including engineering, journalism, planning, public health and sustainability. The Graduate Certificate in GIS teaches advanced location science and technology that meets the increased demand for well-trained professional practitioners. Our courses introduce students to a variety of cutting-edge spatial analysis technology and mapping software to identify, analyze and visualize spatial data patterns. The Graduate Certificate in GIS has a range of electives to allow students to tailor their coursework to their professional or academic interests. The Department of Geography, Environment, and Urban Studies faculty have expertise in a range of GIS applications, including business, environment, geovisualization, health, location analysis, remote sensing and urban analytics.

The certificate complements our Professional Science Master's in GIS and may serve as a gateway into the program. Students in the certificate program pursue a curriculum that provides training in GIS that also complements graduate programs offered in the College of Education and Human Development, College of Liberal Arts, College of Public Health, College of Science and Technology, Fox School of Business and Management, and Lew Klein College of Media and Communication.

**Time Limit for Certificate Completion:** 4 years

**Campus Location:** Main

**Full-Time/Part-Time Status:** The graduate certificate can be completed on a part-time basis. NOTE: International students may not be eligible to apply for a student visa based on admission to the certificate program. Please contact the certificate program's administrator for more information.

**Job Prospects:** Training in GIS prepares individuals to take on advanced research positions in technology-based companies, governmental agencies and nonprofit organizations. The array of electives for the certificate allows students to specialize in the areas of their professional or academic interests.

**Non-Matriculated Student Policy:** Courses are available to non-matriculated graduate students with approval from the Graduate Chair or Assistant Director. Non-matriculated students may take up to 12 credits prior to matriculation in the Professional Science Master's in GIS. Please contact [psmgis@temple.edu](mailto:psmgis@temple.edu) for more information about registering as a non-matriculated student.

### Admission Requirements and Deadlines

#### Application Deadline:

*Fall and Spring:* Admission is on a rolling basis. Interested students should contact [psmgis@temple.edu](mailto:psmgis@temple.edu) for permission to enroll in coursework. Students are processed by the Office of Continuing Studies.

**Bachelor's Degree in Discipline/Related Discipline:** All applicants must present credentials that are the equivalent of the appropriate baccalaureate degree at Temple University.

### Certificate Requirements

*Number of Credits Required to Complete the Certificate:* 12<sup>1</sup>

*Required Courses:*

Code	Title	Credit Hours
<b>Core Course</b> <sup>2</sup>		
GUS 5062 or GUS 8067	Fundamentals of Geographical Information Systems Spatial Database Design	3
<b>Electives</b>		
Select three from the following: <sup>3</sup>		9
GUS 5000	Special Topic Seminars <sup>4</sup>	
GUS 5061	Cartographic Production	
GUS 5063	Remote Sensing	

GUS 5065	Urban Geographical Information Systems
GUS 5066	Environmental Applications of GIS
GUS 5067	GIS and Location Analysis
GUS 5068	Census Analysis with Geographical Information Systems
GUS 5069	GIS for Health Data Analysis
GUS 5072	Advanced Remote Sensing
GUS 5073	Geovisualization
GUS 5162	Advanced Statistics for Urban Applications
GUS 8065	Cartographic Design
GUS 8066	Application Development for Geographic Information Systems
GUS 8067	Spatial Database Design
GUS 8068	Web Mapping and Map Servers

**Total Credit Hours****12**

- <sup>1</sup> Matriculated graduate students may take certificate courses as electives for their program of study with the approval of their program advisor.
- <sup>2</sup> GUS 8067 Spatial Database Design is required if GUS 5062 Fundamentals of Geographical Information Systems has already been taken at any level or if the student has equivalent industry experience. Permission is required from the Graduate Chair or Assistant Director.
- <sup>3</sup> Alternately, students may select any course within the range of GUS 5030-5040 and GUS 8060-8070 as an elective toward the certificate.
- <sup>4</sup> One GUS 5000 Special Topic Seminars course with a focus on Spatial Analysis may be used toward the certificate. Special Topic courses must be approved by the Graduate Chair or Assistant Director.

**GPA Required to be Awarded the Certificate:** 3.0 minimum

## Contacts

### Certificate Program Web Address:

<https://www.temple.edu/academics/degree-programs/geographic-information-systems-certificate-graduate-la-gis-grad>

### Admissions Information:

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### Department Contacts:

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