

# GEOGRAPHY, PHD

for the degree of Doctor of Philosophy in Geography

Students must complete the course requirements as determined by their individually planned program, initiate and complete research projects, and qualify for doctoral candidacy by passing both the departmental qualifying exam and the Graduate College preliminary exam. Although we do not have a foreign language requirement, students may choose to study a foreign language to aid in their research.

## Admission

Students applying for admission to the PhD program are expected to have a strong undergraduate background in geography and/or related disciplines. In addition to other Graduate College admission requirements, a grade point average of at least 3.0 (A = 4.0) in the undergraduate major is required. PhD candidates are generally expected to have at least a 3.5 average in previous graduate work.

*GRE scores are not required or evaluated for admission to our graduate programs.*

## Assistantships and Fellowships

Geography graduate students generally receive tuition/fee waivers and monthly stipends from teaching assistantships, research assistantships, or fellowships.

## Graduate Teaching Experience

Although teaching is not a Graduate College requirement, it is an important part of the graduate experience in this program. We have implemented a professionalization program where graduate students work with faculty members to receive advice and gain first-hand experience in teaching undergraduate courses. Several of our graduate students have also had the opportunity to serve as lead instructor for introductory-level geography courses.

## Facilities and Resources

The department hosts several state-of-the-art research laboratories maintained by individual faculty members. The CyberInfrastructure and Geospatial Information (CIGI) Lab (<https://cigi.illinois.edu/>), housed in the department, researches and develops cutting-edge cyberinfrastructure to advance geospatial science and technologies. The department also houses the CyberGIS Center for Advanced Digital & Spatial Studies (<https://cybergis.illinois.edu/>) whose mission is to empower advanced digital and spatial studies through innovation of CyberGIS technologies and applications. The lab utilizes several high-performance computers and servers to perform computationally intensive geographic analysis and problem solving in various research, education, and outreach contexts.

## Map and Geography Library

The University Library has a substantial collection of geography books and journals. Most of the new and more recent books are located in the Social Sciences, Health, and Education Library (SHEL) (<https://www.library.illinois.edu/sshel/>); nearly all geography journals are available full-text through the University Library's website. The Map Library (<https://www.library.illinois.edu/max/>) holds a collection of over 626,000 maps and aerial photographs, and houses an extensive collection of books on cartography and geographic information science. Map Library and University Library Scholarly Commons (<https://www.library.illinois.edu/sc/>) staff can also help students locate geospatial data.

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## Entering with approved MA/MS degree

Code	Title	Hours
GGIS 471	Modern Geographic Thought	4
GGIS 491	Research in Geography	2
Doctoral students are required to demonstrate competence in a specific research technique		
Students must fulfill program requirements specific to their specialty area		
GGIS 599	Thesis Research (4 min applied toward degree)	4
<b>Total Hours</b>		<b>64</b>

## Other Requirements

Requirement	Description
Other requirements may overlap	
Minimum Hours Overall Required	24
Within the Unit:	
Qualifying Exam Required	Yes
Preliminary Exam Required	Yes
Final Exam/Dissertation Defense Required	Yes
Dissertation Deposit Required	Yes
Minimum GPA:	3.0

## Entering with approved BA/BS degree

Code	Title	Hours
At least two graduate-level courses on analytical research methods (at least one of which must be in geographic information systems (GIS) or related geospatial techniques)		
GGIS 471	Modern Geographic Thought	4
GGIS 491	Research in Geography	2
Doctoral students are required to demonstrate competence in a specific research technique		
Students must fulfill program requirements specific to their specialty area		
GGIS 599	Thesis Research (4 min applied toward degree)	4
<b>Total Hours</b>		<b>96</b>

## Other Requirements

Requirement	Description
Other requirements may overlap	
Minimum 500-level Hours Required	12 (8 in GGIS)
Overall:	
Must complete a major research paper of publishable quality approved by the student's advisory committee.	
Qualifying Exam Required	Yes
Preliminary Exam Required	Yes

Final Exam/Dissertation Defense Required	Yes
Dissertation Deposit Required	Yes
Minimum GPA:	3.0

Please refer to the Graduate College Handbook (<https://grad.illinois.edu/handbooks-policies/>) for additional details and requirements.

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1. All graduate students will have a fundamental understanding of the history and philosophies of geography in all its diversity and breadth.
2. All graduate students will have knowledge of the latest trends and developments in geography as social science, a discipline increasingly rooted in geographic information science, and physical science.
3. All graduate students will have a deep and nuanced comprehension of the latest conceptual developments in their selected research areas.
4. All graduate students will have the ability to formulate a research problem, know the proper conceptual tools and methods to appropriately address it, and properly place it in evolving, relevant literature.
5. All graduate students will have a strong knowledge of proper ethical conduct in the performance and completion of advanced research.

#### **Graduate Degree Programs in Geography:**

- CyberGIS and Geospatial Data Science, MS (<http://catalog.illinois.edu/graduate/las/cyberGIS-geospatial-data-science-ms/>) (online)
- Geography, MA (<http://catalog.illinois.edu/graduate/las/geography-ma/>)
- Geography, MS (<http://catalog.illinois.edu/graduate/las/geography-ms/>)
  - **concentrations:**
    - Geographic Information Science - Professional Science Master's (<http://catalog.illinois.edu/graduate/las/geography-ms/geographic-information-science-professional-science-masters/>)
    - Computational Science & Engineering (<http://catalog.illinois.edu/graduate/engineering/concentration/computational-science-engineering/>)
- Geography, PhD (p. 1)
  - **concentration:**
    - Computational Science & Engineering (<http://catalog.illinois.edu/graduate/engineering/concentration/computational-science-engineering/>)

We offer a program leading to the **Master of Science** degree in geography with the following specializations:

- **Geographic Information Science**  
Geographical information systems; Dynamic modeling of ecological and social systems; Geocomputation and CyberGIS; Aerial photo analysis; Remote sensing; Inter-regional input-output modeling; Regional science; Spatial analysis
- **River, Watershed, and Landscape Dynamics**  
Fluvial geomorphology; Watershed science and management; Aerial photo analysis; Ecosystem dynamics

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#### **Department of Geography**

Department Head: Dr. Shaowen Wang  
 Director of Graduate Studies: Dr. Brian Jefferson  
 Geography Department website (<http://catalog.illinois.edu/graduate/las/geography-ms/ggis.illinois.edu>)  
 2044 Natural History Building, 1301 W. Green Street, Urbana, IL 61801  
 (217) 333-1880  
 Geography email ([geography@illinois.edu](mailto:geography@illinois.edu))

#### **College of Liberal Arts & Sciences**

College of Liberal Arts & Sciences website (<https://las.illinois.edu/>)

#### **Admissions**

Graduate College Admissions & Requirements (<https://grad.illinois.edu/admissions/apply/>)