

GEOGRAPHY & GEOGRAPHIC INFORMATION SCIENCE: GEOGRAPHIC INFORMATION SCIENCE, BSLAS

for the degree of Bachelor of Science in Liberal Arts & Sciences: Major in Geography & Geographic Information Science, Geographic Information Science Concentration

A Bachelor of Science in Geography & Geographic Information Science with Geographic Information Science concentration prepares students to use cutting-edge geospatial technologies and data to examine environmental and social issues; support business decisions; protect the environment; and manage the massive amounts of spatial data generated from mobile devices and sensor networks. The GIS concentration provides in-depth practical and field training, preparing students for geospatial careers- one of the fastest-growing domestic job sectors.

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General education: Students must complete the Campus General Education (<https://courses.illinois.edu/>) requirements including the campus general education language requirement. Minimum required major and supporting course work: a minimum of 40 upper-division hours. Twelve (12) hours of 300- and 400-level courses in the major must be taken on this campus.

Geography & GIS Core Requirements

Code	Title	Hours
Total Core Hours		10-16
Select one of the following three(3) courses:		3-4
GGIS/ATMS 100	Introduction to Meteorology	
GGIS 103	Earth's Physical Systems	
GGIS 222	Big Rivers of the World	
Select one of the following six (6) courses:		3-4
GGIS 101	Global Development & Environment	
GGIS 104	Social and Cultural Geography	
GGIS 105		
GGIS 106	Geographies of Globalization	
GGIS 210	Social & Environmental Issues	
GGIS 221	Geographies of Global Conflict	
GIS Core (2) courses:		4-8
(Only students pursuing the Geographic Information Science Concentration are required to take both GGIS 371 and GGIS 379.)		
GGIS 371	Spatial Analysis	
GGIS 379	Introduction to Geographic Information Systems	

Code	Title	Hours
Geographic Information Science Concentration Requirements		
GGIS 371	Spatial Analysis	
GGIS 380	Geographic Information Systems II	
Select one (1) of the following courses:		3
CS 105	Intro Computing: Non-Tech	
CS 124	Introduction to Computer Science I	
or equivalent course approved by the Department's Advisor		
Select a minimum of three (3) courses from the following:		9-11
GGIS 205	Business Location Decisions	
GGIS/SOC 280	Intro to Social Statistics	
GGIS 407	Foundations of CyberGIS & Geospatial Data Science	
GGIS 412	Geospatial Technologies & Society	
GGIS/ATMS 421	Earth Systems Modeling	
GGIS/PATH 439	Health Applications of GIS	
GGIS 460	Aerial Photo Analysis	
GGIS 468	Biological Modeling	
GGIS 473	Digital Cartography & Map Design	
GGIS 476	Environmental Remote Sensing	
GGIS 477	Introduction to Remote Sensing	
GGIS 478	Techniques of Remote Sensing	
GGIS 479	Advanced Topics in GIS	
GGIS 480	Principles of Geographic Information Science	
GGIS 489	Programming for GIS	
Select two (2) human and/or physical geography courses:		6-8
GGIS 204	Cities of the World	
GGIS 210	Social & Environmental Issues	
GGIS 221	Geographies of Global Conflict	
GGIS 222	Big Rivers of the World	
GGIS 224	Environmental Data Science	
GGIS/NRES 287	Environment and Society	
GGIS 350	Sustainability and the City	
GGIS 356	Sustainable Development in South Asia	
GGIS 370/ESE 320	Water Planet, Water Crisis	
GGIS 384	Population Geography	
GGIS/NRES 401	Watershed Hydrology	
GGIS 405	Geography Field Course	
GGIS 406	Fluvial Geomorphology	
GGIS 408	Humans and River Systems	
GGIS 410	Green Development	
GGIS 436	Biogeography	
GGIS 438	Geography of Health Care	
GGIS/LA 446	Sustainable Planning Seminar	
GGIS 455	Geography of Sub-Saharan Africa	
GGIS 465	Transportation & Sustainability	
GGIS 466	Environmental Policy	
GGIS 471	Modern Geographic Thought	
GGIS/ESE 482	Challenges of Sustainability	
GGIS 483	Urban Geography	
GGIS 484	Cities, Crime, and Space	

GGIS 496	Climate & Social Vulnerability
Total Hours Geographic Information Science Concentration	Hours 26-30
Total Hours Required for Graduation	120

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Sample Sequence

This sample sequence is intended to be used only as a guide for degree completion. All students should work individually with their academic advisors to decide the actual course selection and sequence that works best for them based on their academic preparation and goals. Enrichment programming such as study abroad, minors, internships, and so on may impact the structure of this four-year plan. Course availability is not guaranteed during the semester indicated in the sample sequence.

Students must fulfill their Language Other Than English requirement by successfully completing a fourth level of a language other than English. See the corresponding section on the Degree and General Education Requirements page (<http://catalog.illinois.edu/general-information/degree-general-education-requirements/>).

First Year

First Semester	Hours	Second Semester	Hours
GGIS 103 (or GGIS 100 or GGIS 222)	4	4 Geography & GIS core course	4
Free elective course	4	1 General Education course or Composition 1	4
Language Other than English (3rd level)	4	4 Language Other than English (4th level)	4
Composition I or General Education course	4	3 Free elective course	4
Free elective course	3		
	15		16

Second Year

First Semester	Hours	Second Semester	Hours
GGIS 371	4	4 GGIS 379	4
General Education course	4	3 Geographic Information Science Concentration course	4
General Education Course	3	3 General Education Course	3
Free elective course	3	3 Free elective course	3
	13		14

Third Year

First Semester	Hours	Second Semester	Hours
GGIS 380		4 Geographic Information Science Concentration course	3
Human and/or Physical Geography course		4 CS 105 or 124	3
General Education Course	3	3 General Education Course	3
General Education Course	3	3 Free elective course	3
Free elective course	3	3 Free elective course	3
	17		15

Fourth Year

First Semester	Hours	Second Semester	Hours
Geographic Information Science Concentration course		3 Human and/or Physical Geography course	4
General Education Course	3	3 Free elective course	3
General Education Course	3	3 Free elective course	3
Free elective course	3	3 Free elective course	3
Free elective course	2	3 Free elective course	2
	15		15

Total Hours 120

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Undergraduate Degree Programs in Geography & Geographic Information Science

For the Degree of Bachelor of Science in Liberal Arts and Sciences

- Major in Computer Science & Geography & GIS, BSLAS (http://catalog.illinois.edu/undergraduate/eng_las/computer-science-geography-geographic-information-science-bslas/)
- Major in Geography & Geographic Information Science, Geographic Information Science Concentration, BSLAS (p. 1)
- Major in Geography & Geographic Information Science, Physical Geography Concentration, BSLAS (<http://catalog.illinois.edu/>)

[undergraduate/las/geography-geographic-information-science-bslas/physical-geography/](#)

For the Degree of Bachelor of Arts in Liberal Arts and Sciences

- Major in Geography & Geographic Information Science, General Geography Concentration, BALAS (<http://catalog.illinois.edu/undergraduate/las/geography-geographic-information-science-balas/general-geography/>)
- Major in Geography & Geographic Information Science, Human Geography Concentration, BALAS (<http://catalog.illinois.edu/undergraduate/las/geography-geographic-information-science-balas/human-geography/>)

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Geography & Geographic Information Science

Department homepage (<https://ggis.illinois.edu/>)

Faculty directory (<https://ggis.illinois.edu/directory/faculty/>)

Undergraduate advising (<https://ggis.illinois.edu/academics/undergraduate/advising/>)

College of Liberal Arts & Sciences

College of LAS homepage (<https://las.illinois.edu/>)

Admissions & Requirements (<http://catalog.illinois.edu/schools/las/academic-units/>)

Admissions

University of Illinois Urbana-Champaign Undergrad Admissions (<https://www.admissions.illinois.edu/>)