THE OHIO STATE UNIVERSITY
COLLEGE OF ARTS AND SCIENCES

GEOGRAPHY DEPARTMENT

Geographic Information Science (Bachelor of Science)

Geographic Information Science Major
Requires 121 Total Credit Hours; 33 Major Credit Hours

GENERAL EDUCATION
College of Arts & Sciences Bachelor of Science general education requirements apply.
Please visit https://artsandsciences.osu.edu/academics/current-students/advising/ge

MAJOR REQUIREMENTS
NOTE: Several major courses are offered only one term per year. Careful schedule planning is required to complete course sequences in timely manner.

Required Prerequisites to Courses in the Major (should be completed as soon as possible)

Course	Title	Hours
CSE 1114	Intro to Databases Using MS Access	1.5
STAT 1450 **OR** STAT 2450	Intro to the Practice of Statistics **OR** Introduction to Statistical Analysis I	3

Prerequisites are course specific. There are no prerequisites that must be completed before declaring to the major.

Required Courses (8 courses/24 hours)

Course	Title	Hours	Required Prerequisite
GEOG 5100 *	Spatial Data Analysis	3	STAT 1450 or above
GEOG 5200(S)	Cartography and Map Design	3	None
GEOG 5201 **	GeoVisualization	3	GEOG 5200
GEOG 5210	Fundamentals of Geographic Information Systems	3	None
GEOG 5212 * **	Geospatial Databases for GIS	3	GEOG 5210 & CSE 1114
GEOG 5222 **	GIS Algorithms and Programming	3	GEOG 5212
GEOG 5223 **	Design and Implementation of GIS	3	GEOG 5222
GEOG 5225	Geographic Applications of Remote Sensing	3	None

* Prerequisite course required to enroll.

** Part of major course sequence. Major course(s) must be completed with a "C-" or better as prerequisite to enroll.

NOTE: Major course sequences require a minimum of 4-5 semesters to complete depending upon term of first course and ability to enroll concurrently in CSE 1114 and GEOG 5210 in first term.

Elective Courses
Choose three of the following courses (9 hours).

Course	Title	Hours
GEOG 5226	Spatial Simulation and Modeling in GIS	3
GEOG 5229 * **	Emerging Topics in GIS	3
GEOG 5XXX	One 5000-level topical course in Geography in addition to the courses above	3
CSE 2122 *	Data Structures Using C++	3
CSE 2123 *	Data Structures Using Java	3
CSE 3241 *	Introduction to Database Systems	3
CSE 5242 *	Advanced Database Management Systems	3

* Prerequisite course required to enroll.
Note: CSE courses have prerequisites beyond those required for the major.

Major Requirements

The following requirements for the major apply to all Arts and Sciences degrees.

Major requirements comprise at least 30 semester hours and can be substantially higher. Major courses must be at the 2000 level or above. At least 20 hours of the major must be in courses offered by the department of the major. Note: Some interdisciplinary majors are excluded from the 20-hour rule.

Students must earn at least a C- in a course for the course to be applied to the major. However, students must receive a 2.0 cumulative grade point average (GPA) for all major course work. If a D+, D, or an E is earned in a course needed for the major, the course cannot be counted on the major. The major advisor will decide if the course should be repeated or if another course should be substituted. Courses taken on a pass/non-pass basis cannot be used on the major.

The department must approve all courses in the major. Some departments require a "major program form," a document that must be signed by the academic advisor and submitted with the graduation application. Some departments do not require such a form because the academic advisors use an automated version on the degree audit report. Some departments require both. In any case, students should meet with the academic advisor early to plan the major; during your meeting, it can be determined whether the department requires a paper major program form. Any changes or adjustments to the major should be made in consultation with the academic advisor.

If a student transferred from another institution, no more than half of the credit hours on the major program may consist of transfer credit. The academic advisor, the chairperson of the department, and the appropriate assistant dean must approve any request for a variation in this policy.

For Honors students, the GE curriculum and major must be approved by the assigned Honors advisor. Information about the honors curriculum and requirements and how to schedule an appointment with an honors advisor is available on the College of Arts and Sciences Honors Program website: http://aschonors.osu.edu/advising. Students will also be assigned a faculty advisor in the department of study to help the student choose courses and co-curricular opportunities that align with academic and professional goals.

For more information about internship and career opportunities, visit the College of Arts and Sciences Career Services Office. Their website is http://asccareerservices.osu.edu/ .