

# Geospatial Information Science and Technology

## Minor

The minor in Geospatial Information Science and Technology (GIST) has been approved by three departments at UC Berkeley. The Departments of Environmental Science, Policy, and Management in the College of Natural Resources, City and Regional Planning in the College of Environmental Design, and Geography in the College of Letters & Science offer minors in GIST which includes courses across campus. These programs serve students in geography and other social sciences, archaeology, environmental science, policy and management, city and regional planning, humanities, architecture, landscape architecture and environmental planning, civil and environmental engineering, public policy, and environmental public health. The minor is open to all majors at UC Berkeley.

## Declaring the Minor

The Geospatial Information Science and Technology minor is available to any current UC Berkeley student in good academic standing. The deadline to complete this minor program is before your degree at UC Berkeley has posted. For more information, please visit <https://nature.berkeley.edu/advising/minors/gist>

Students who have a strong interest in an area of study outside their major often decide to complete a minor program. These programs have set requirements and are noted officially on the transcript in the memoranda section, but they are not noted on diplomas.

## General Guidelines

### Completing the Geospatial Information Science and Technology Minor Program

1. All minors must be declared no later than one semester before a student's Expected Graduation Term (EGT). If the semester before EGT is fall or spring, the deadline is the last day of RRR week. If the semester before EGT is summer, the deadline is the final Friday of Summer Sessions. To declare a minor, contact the department advisor for information on requirements, and the declaration process.
2. Students must complete one required prerequisite and at least five upper division courses. At least three upper division courses must be selected from the restricted elective list.
3. Students must check with their home college for overlap restrictions between majors and minors.
4. All courses must be taken for a letter grade and the cumulative minor GPA must be 2.0 or higher.

## Requirements

### Prerequisite, select one course from the following list.<sup>1</sup>

ESPM 72	Introduction to Geographic Information Systems [3]
GEOG 80	Digital Worlds: An Introduction to Geospatial Technologies [4]

### Upper Division Courses - Restricted Elective Courses: Select at least 3 courses from the following list.

ESPM 164	GIS and Environmental Science [3]
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ESPM/LD ARCH C177	GIS and Environmental Spatial Data Analysis [4]
ESPM 173	Introduction to Ecological Data Analysis [3]
GEOG 183	Cartographic Representation [5]
GEOG 185	Earth System Remote Sensing [3]
GEOG 187	Geographic Information Analysis [4]
GEOG/LD ARCH C188	Geographic Information Systems [4]
LD ARCH/ESPM C177	GIS and Environmental Spatial Data Analysis [4]
LD ARCH/GEOG C188	Geographic Information Systems [4]

### Upper Division Courses - Additional Elective Courses: Select final upper division courses from the lists above or below.

#### Undergraduate Courses

COMPSI 160	User Interface Design and Development [4]
CY PLAN 110	Introduction to City Planning [4]
EPS 101	Field Geology and Digital Mapping [4]
ESPM 137	Landscape Ecology [3]
ESPM 172	Remote Sensing of the Environment [3]
GEOG 186	Web Cartography [5]
LD ARCH 110	Ecological Analysis [3]
LD ARCH 130	Sustainable Landscapes and Cities [4]

Graduate Courses (Graduate courses may be used with the consent of instructor and with the completion of necessary prerequisites.)

CY PLAN 204	Analytic and Research Methods for Planners: Introduction to GIS and City Planning [4]
CY PLAN 255	Urban Informatics and Visualization [3]
ESPM 271	Advanced Remote Sensing of Natural Resources [3]
ESPM 290	Special Topics in Environmental Science, Policy, and Management [1-4] (Depends on topic, see minor advisor for details.)
GEOG 282	Geographic Information Systems: Applications in Geographical Research [4]
GEOG 285	Topics in Earth System Remote Sensing [3]
LD ARCH 221	Quantitative Methods in Environmental Planning [3]
LD ARCH 289	Applied Remote Sensing [3]
PB HLTH 272A	Geographic Information Science for Public and Environmental Health [4]
PUB POL 290	Special Topics in Public Policy [1-4] (Depends on topic, see minor advisor for details.)

<sup>1</sup> For additional preparation, students might consider taking optional coursework involving programming such as COMP SCI 61A. Students should also consider attending Geolunch Seminars. Go to <http://gif.berkeley.edu/about/geolunch.html> for more information.