

# GEOGRAPHY - MINOR

The minor program in geography is meant for students who would like to acquire basic knowledge of geography in addition to their major area of study. The department also offers undergraduate certificates in GIS (<https://www.colorado.edu/geography/undergrad-program/undergraduate-certificates/#GIS-Certificate>) and Arctic Studies (<https://www.colorado.edu/geography/undergrad-program/undergraduate-certificates/>).

For more information, visit the Undergraduate Geography Major & Minor Degrees (<https://www.colorado.edu/geography/undergrad-program/undergraduate-geography-major-minor-degrees/>) webpage.

## Requirements

### Program Requirements

Declaration of a minor is open to any student enrolled at CU Boulder, regardless of college or school affiliation.

- A minimum of 18 credit hours must be taken in the Department of Geography, including a minimum of 9 upper-division credit hours.
- All coursework applied to the minor must be completed with a grade of C- or better. No pass/fail work may be applied. The GPA of all minor coursework must equal 2.00 (C) or greater.
- Student pursuing an individually structured major, or who are pursuing a major in distributed studies, will not be eligible to earn a minor.
- Students will be allowed to apply no more than 9 credit hours (including 6 upper-division) of transfer work toward a minor.
- Coursework applied toward a minor may also be applied toward Gen Ed as well as the requirements for other majors.

### Optional Concentrations

No specific concentration is required and is not noted on student transcripts. However, students who do wish to focus on one area of geography should see the suggested course lists below. The list of courses may change at the department's discretion.

#### Physical Geography Focus

The following two courses are prerequisites to all upper-division courses listed further below.

Code	Title	Credit Hours
GEOG 1001	Environmental Systems: Climate and Vegetation	4
GEOG 1011	Environmental Systems: Landscapes and Water	4

An additional lower-division course is available.

Code	Title	Credit Hours
GEOG 2271	Introduction to the Arctic Environment	3

Among upper-division courses, the following sequences are suggested:

Code	Title	Credit Hours
<b>Climatology</b>		
GEOG 3301	Analysis of Climate and Weather Observations	3
GEOG 3601	Principles of Climate	3
GEOG 4331	Mountain Climatology	3-4
<b>Biogeography</b>		
GEOG 3351	Biogeography	3
GEOG 4371	Forest Geography: Principles and Dynamics	3
GEOG 4401	Soils Geography	3
<b>Hydrology and Geomorphology</b>		
GEOG 3511	Introduction to Hydrology	4
GEOG 4241	Principles of Geomorphology	4
GEOG 4321	Snow Hydrology	3-4
GEOG 4401	Soils Geography	3

In addition, you will find it important to complete one course in statistics at the time you commence upper-division work in physical geography. Students considering graduate school in physical geography are strongly encouraged to complete a year of coursework in general chemistry, physics, calculus and statistics.

#### Upper-Division Courses

Code	Title	Credit Hours
GEOG 3251	Mountain Geography	3
GEOG 3301	Analysis of Climate and Weather Observations	3
GEOG 3601	Principles of Climate	3
GEOG 3351	Biogeography	3
GEOG 3511	Introduction to Hydrology	4
GEOG 4201	Biometeorology	3
GEOG 4241	Principles of Geomorphology	4
GEOG 4251	Fluvial Geomorphology	4
GEOG 4261	Glaciers and Permafrost	3
GEOG 4271	The Arctic Climate System	3
GEOG 4311	Watershed Biogeochemistry	3
GEOG 4321	Snow Hydrology	3-4
GEOG 4331	Mountain Climatology	3-4
GEOG 4371	Forest Geography: Principles and Dynamics	3
GEOG 4401	Soils Geography	3

#### Human Geography Focus

One of the following four courses are prerequisites to all upper-division courses listed further below.

Code	Title	Credit Hours
GEOG 1962	Geographies of Global Change	3
GEOG 1982	Global Geographies: Societies, Places, Connections	3
GEOG 1992	Human Geographies	3

GEOG 2092	Advanced Introduction to Human Geography	3
-----------	--	---

**Upper-Division Courses**

Additional prerequisites are listed.

Code	Title	Credit Hours
GEOG 3422	Political Ecology	3
GEOG 3612	Geography of American Cities	3
GEOG 3622	Cities of the Global South	3
GEOG 3662	Economic Geography	3
GEOG 3672	Who Runs the World? Sex, Power, and Gender in Geography	3
GEOG 3682	Geography of International Development	3
GEOG 3692	Introduction to Global Public Health	4
GEOG 3742	Place, Power, and Contemporary Culture	3
GEOG 3812	Mexico, Central America, and the Caribbean	3
GEOG 3822	Geography of China	3
GEOG 3832	Geographies of South Asia	3
GEOG 3842	Human Geography of Czechia: Political, Economic and Social Transitions	3
GEOG 3862	Geography of Africa	3
GEOG 3882	Geography of the Former Soviet Union	3
GEOG 4023	Advanced Quantitative Methods for Spatial Data	4
GEOG 4292	Migration, Immigrant Adaptation, and Development	3
GEOG 4622	City Life	3
GEOG 4632	Development Geography	3
GEOG 4712	Political Geography	3
GEOG 4732	Population Geography	3
GEOG 4742	Topics in Environment and Society	3
GEOG 4762	Geographies of Political Islam	3
GEOG 4832	Geography of Tibet	3
GEOG 4852	Health and Medical Geography	3

**Environment-Society Geography Focus**

The following two courses are prerequisites to all upper-division physical geography courses listed further below.

Code	Title	Credit Hours
GEOG 1001	Environmental Systems: Climate and Vegetation	4
GEOG 1011	Environmental Systems: Landscapes and Water	4

An additional lower-division course is available.

Code	Title	Credit Hours
GEOG 2852	Contemporary Southeast Asia: Environmental Politics	3

**Upper-Division Courses**

Additional prerequisites may be listed.

Code	Title	Credit Hours
GEOG 3251	Mountain Geography	3
GEOG 3301	Analysis of Climate and Weather Observations	3
GEOG 3351	Biogeography	3
GEOG 3402	Natural Hazards	3
GEOG 3412	Conservation Practice and Resource Management	3
GEOG 3422	Political Ecology	3
GEOG 3511	Introduction to Hydrology	4
GEOG 3601	Principles of Climate	3
GEOG 3612	Geography of American Cities	3
GEOG 3672	Who Runs the World? Sex, Power, and Gender in Geography	3
GEOG 3682	Geography of International Development	3
GEOG 3692	Introduction to Global Public Health	4
GEOG 3812	Mexico, Central America, and the Caribbean	3
GEOG 3822	Geography of China	3
GEOG 3862	Geography of Africa	3
GEOG 4401	Soils Geography	3
GEOG 4430	Seminar: Conservation Trends	3
GEOG 4501	Water Resources and Water Management of Western United States	3
GEOG 4742	Topics in Environment and Society	3
GEOG 4632	Development Geography	3
GEOG 4812	Political Ecology & Latin America	3
GEOG 4822	Environment and Development in China	3
GEOG 4852	Health and Medical Geography	3

**Geographic Information Science Focus**

Students undertaking the GIS Certificate as well as a GEOG minor must take at least 9 additional credit hours of non-GIS GEOG classes to satisfy the minor requirements.

The following is a lower-division course in this concentration.

Code	Title	Credit Hours
GEOG 2053	Mapping a Changing World	3

The following are prereqs for all upper-division courses, unless otherwise noted.

Code	Title	Credit Hours
GEOG 3023	Statistics and Geographic Data	4
GEOG 3053	Geographic Information Science: Mapping	4

**Upper-Division Courses**

<b>Code</b>	<b>Title</b>	<b>Credit Hours</b>
GEOG 4023	Advanced Quantitative Methods for Spatial Data	4
GEOG 4043	Advanced Geovisualization and Web Mapping	4
GEOG 4093	Remote Sensing of the Environment	4
GEOG 4103	Geographic Information Science: Spatial Analytics	4
GEOG 4173	Research Seminar	3
GEOG 4203	Geographic Information Science: Spatial Modeling	4
GEOG 4303	Geographic Information Science: Spatial Programming	4
GEOG 4403	Geographic Information Science: Space Time Analytics	3
GEOG 4503	Geographic Information Science: Project Management	3
GEOG 4603	GIS in the Social and Natural Sciences	3