

BACHELOR OF ARTS IN GEOGRAPHY

Geographers study physical and biological environments, human societies and their spatial interactions, and utilize both environmental science and social science perspectives. Geographers seek to analyze the processes, spatial patterns, and consequences of human-environment interaction and address issues of sustainability, using maps, fieldwork, and geospatial technologies such as GIS to solve real-world problems. Areas of study within geography include resource management (<http://geog.sfsu.edu/focusresman/>), physical geography (<http://geog.sfsu.edu/focusphysical/>), environmental studies (<http://geog.sfsu.edu/focusenvstudy/>), methods of geographic analysis, human geography (<http://geog.sfsu.edu/focushuman/>), and urban and land-use planning (<http://geog.sfsu.edu/focusplanning/>). The undergraduate major core courses introduce foundational concepts in physical and human geography, as well as field methods and geographic information science. An upper-division distribution requirement gives students more focused work in physical geography, human geography, regional geography, and applied geography or methods. Each student also develops a 12-unit set of electives related to a coherent area of interest based on their career goals.

Geography (B.A.) - 39-43 Units

Core Requirements (12 Units)

Code	Title	Units
GEOG 101	Our Physical Environment	3
GEOG 102 or GEOG 107	The Human Environment World Regions and Interrelations	3
GEOG 205	Geographic Techniques	3
GEOG 500GW	Physical and Human Dimensions of Climate Change - GVAR	3

Capstone (3 Units)

Code	Title	Units
GEOG 690	Senior Seminar in Geography and Environmental Science	3

Distribution Requirement (12-16 Units)

One course from each of the following four areas:

- Physical Geography – 310-399 numbered courses in Geography
- Human Geography – 400-level courses in Geography
- Human-Environment Interaction in a Regional Context

Code	Title	Units
GEOG 550	Geography of the United States and Canada	3
GEOG 552	Geography of California	3
GEOG 575	Emerging China	3
GEOG 646	The Geography of Marine Resources	4
GEOG 647	Geography of Water Resources	4
GEOG 648	Management of National Parks and Protected Areas	4
GEOG/USP 651	San Francisco Bay Area Environmental Issues	4

D. Techniques or Applied Geography – courses from either Geographic Techniques – Geog 601-639 or Applied Geography – Geog 640–668. Note: while some of these courses also apply to the 'Human-Environment Interaction in a Regional Context' area, they cannot double count towards the major.

Note: Course used to satisfy distribution requirements cannot be double counted as a guided elective.

Guided Electives (12 units)

Units of upper-division geography electives consisting of a minimum of three courses chosen on advisement. These courses will be organized around coherent themes such as those listed below. Courses for the following guided electives are listed below, but other themes are also possible, such as agriculture or water resources, either of which may include courses in human geography, physical geography, and geographic information science. Students are encouraged to meet with a B.A. Geography major adviser to develop their theme to best prepare for suitable careers. On advisement, appropriate upper division courses from other departments and programs may be included.

- Human Geography
- Environmental Studies
- Physical Geography
- Resource Management
- Geographic Information Science
- Urban Environment, Transportation, and Land Use
- Focused individual interest pursued in consultation with the undergraduate adviser

Notes

1. A minimum of 40 upper-division units must be completed for the degree (including upper-division units required for the major, general education, electives, etc.). A student can complete this major yet not attain the necessary number of upper-division units required for graduation. In this case, additional upper-division courses will be needed to reach the required total.
2. Students are advised that the CR grade is acceptable in any two courses to be counted for the geography major. No more than one course counted toward major requirements may be completed with a grade less than a C-.

Guided Electives

Human Geography

In addition to serving traditional liberal arts education, this theme provides systematic study within human geography:

Code	Title	Units
GEOG 422	Environmental Perception	3
GEOG/WGS 423	Geographic Perspectives on Gender, Environment, and Development	3
GEOG 425	Economic Geography	3
GEOG 427	Agriculture and Food Supply	4
GEOG 430	Transforming Food and Agriculture Systems: Local to Global	4
GEOG/USP 432	Urban Geography	4
GEOG/H ED 434	Geographies of Health and Health Care	3
GEOG/I R 445	Geopolitics and Globalization	3
GEOG 454	San Francisco on Foot	4

GEOG 455	Geography of Ethnic Communities	3
GEOG 421	Future Environments	3
GEOG 428	International Political Economy of Food and Hunger	4
GEOG 433	Urban Transportation	4
GEOG 435	Geography of Global Transportation	4
GEOG 437	Bicycle Geographies	4

Environmental Studies

This theme provides students with an opportunity to learn about environmental processes and issues arising from human activities on our planet.

Code	Title	Units
GEOG 316	Biogeography	4
GEOG 317	Geography of Soils	4
GEOG 342	Surface Water Hydrology	4
GEOG 422	Environmental Perception	3
GEOG 427	Agriculture and Food Supply	4
GEOG/ENVS 600	Environmental Problems and Solutions	3
GEOG/ERTH 642	Watershed Assessment and Restoration	4
GEOG 644	Water Quality	3
GEOG 646	The Geography of Marine Resources	4
GEOG 647	Geography of Water Resources	4
GEOG/USP 651	San Francisco Bay Area Environmental Issues	4
GEOG/USP 652	Environmental Impact Analysis	4
GEOG/ENVS 657	Natural Resource Management: Biotic Resources	4
GEOG 666	Geography of Garbage: Recycling and Waste Reduction	3
GEOG 667/ USP 515	Environmental Justice: Race, Poverty, and the Environment	4
GEOG 668/ USP 513/PLSI 513	Politics, Law, and the Urban Environment	4

Supplementary courses in Environmental Studies are also recommended on advisement

Physical Geography

In these courses, students study physical patterns and processes involving landforms, climate, biogeography, soils, and water.

Code	Title	Units
Courses central to the specialization include:		
GEOG 312	Geography of Landforms	4
GEOG 313	Earth's Climate System	4
GEOG 314	Bioclimatology	4
GEOG 316	Biogeography	4
GEOG 317	Geography of Soils	4
GEOG 342/ ERTH 442	Surface Water Hydrology	4
Supporting courses include:		
GEOG 602	Field Methods in Physical Geography	4
GEOG/ERTH 642	Watershed Assessment and Restoration	4
GEOG 647	Geography of Water Resources	4
GEOG/ENVS 657	Natural Resource Management: Biotic Resources	4

Supplementary courses in Earth & Climate Sciences and Biology are recommended on advisement

GEOG 644	Water Quality	3
GEOG 643	Biogeomorphology of Sierra Nevada Streams and Meadows	2

Resource Management

A central theme in geography is the use and abuse of natural resources. Courses central to this specialization include:

Code	Title	Units
GEOG 317	Geography of Soils	4
GEOG 425	Economic Geography	3
GEOG 427	Agriculture and Food Supply	4
GEOG/ENVS 600	Environmental Problems and Solutions	3
GEOG 602	Field Methods in Physical Geography	4
GEOG 603	Introduction to Geographic Information Systems	3
GEOG 610	Remote Sensing of the Environment I	4
GEOG 611	Remote Sensing of the Environment II	4
GEOG/ERTH 642	Watershed Assessment and Restoration	4
GEOG 644	Water Quality	3
GEOG 646	The Geography of Marine Resources	4
GEOG 647	Geography of Water Resources	4
GEOG/ENVS 657	Natural Resource Management: Biotic Resources	4
GEOG 666	Geography of Garbage: Recycling and Waste Reduction	3

Supplementary courses in Earth & Climate Sciences and Biology are recommended on advisement

Geographic Information Science

This theme concentrates on methods of spatial analysis and mapping, including GIS, cartography, and remote sensing.

Code	Title	Units
Data Acquisition in the field		
GEOG 601	Field Methods in Human Geography	3
GEOG 602	Field Methods in Physical Geography	4
Data Analysis in the lab		
GEOG 610	Remote Sensing of the Environment I	4
GEOG 611	Remote Sensing of the Environment II	4
GEOG 603	Introduction to Geographic Information Systems	3
GEOG 620	Geographical Information Systems	4
GEOG 621	Geographic Information Systems for Environmental Analysis	4
GEOG 625	Programming for Geographic Information Science	4
GEOG 629	Coastal and Marine Applications of GIS	3
GEOG 606	Cartography	3

Urban Environment, Transportation, and Land Use

This specialization offers an opportunity to acquire foundation knowledge to prepare for entry-level careers and graduate work. Key courses include:

Code	Title	Units
GEOG 422	Environmental Perception	3
GEOG/WGS 423	Geographic Perspectives on Gender, Environment, and Development	3

GEOG 425	Economic Geography	3
GEOG 427	Agriculture and Food Supply	4
GEOG 432/432	Urban Geography	4
GEOG/USP 433	Urban Transportation	4
GEOG/H ED 434	Geographies of Health and Health Care	3
GEOG 435	Geography of Global Transportation	4
GEOG 437	Bicycle Geographies	4
GEOG 455	Geography of Ethnic Communities	3
GEOG 601	Field Methods in Human Geography	3
GEOG 603	Introduction to Geographic Information Systems	3
GEOG/USP 651	San Francisco Bay Area Environmental Issues	4
GEOG/USP 652	Environmental Impact Analysis	4
GEOG/USP 658	Land-Use Planning	4
GEOG 666	Geography of Garbage: Recycling and Waste Reduction	3
GEOG 667/ USP 515	Environmental Justice: Race, Poverty, and the Environment	4

Upper division courses in Urban Studies are particularly appropriate as well.

Complementary Studies

All Bachelor of Arts students must complete 12 units of complementary studies in courses outside the primary prefix for the major, and not cross-listed with the primary prefix for the major. Students who complete two majors or a major and a minor automatically complete the complementary studies requirement.

An additional way to satisfy the complementary studies requirement for students in the geography major is to meet with an adviser to identify courses other than GEOG, and not cross-listed with GEOG, that would serve to complement each student's area of interest. Four units from complementary studies will also double-count toward units in the major.

Students who have earned AA-T or AS-T degrees and are pursuing a similar B.A. degree at SF State are required to fulfill the Complementary Studies requirement as defined by the major department. Students should consult with a major adviser about how transfer units and/or SF State units can best be applied to this requirement in order to ensure degree completion within 60 units.

General Education Requirements

Requirement	Course Level	Units	Area Designation
Oral Communication	LD	3	A1
Written English Communication I	LD	3	A2
Critical Thinking	LD	3	A3
Physical Science	LD	3	B1
Life Science	LD	3	B2
Lab Science	LD	1	B3
Mathematics/Quantitative Reasoning	LD	3	B4
Arts	LD	3	C1
Humanities	LD	3	C2
Arts or Humanities	LD	3	C1 or C2

Social Sciences	LD	3	D1
Social Sciences: US History	LD	3	D2
Social Sciences: US & CA Government	LD	3	D3
Lifelong Learning and Self-Development (LLD)	LD	3	E
Physical and/or Life Science	UD	3	UD-B
Arts and/or Humanities	UD	3	UD-C
Social Sciences	UD	3	UD-D

SF State Studies

Courses certified as meeting the SF State Studies requirements may be upper or lower division in General Education (GE), a major or minor, or an elective.

American Ethnic and Racial Minorities	LD or UD	3	AERM
Environmental Sustainability	LD or UD	3	ES
Global Perspectives	LD or UD	3	GP
Social Justice	LD or UD	3	SJ

Note: LD = Lower-Division; UD = Upper-Division.

First-Time Student Roadmap (4 Year)

Find the correct roadmap (A, B, C, or D):

1. Select the row that matches your English Course choice for A2.*
2. Select the column that matches your QR Category (found at your student center under Math Alert).
3. Click the Roadmap that lines up with your row and column.

For example, if you are taking ENG 104 as your first English course and your student center math alert says you are QR Category III, you should choose Roadmap D.

Pathway	QR Cat I/II	QR Cat III/IV
ENG 114	Roadmap A (http://bulletin.sfsu.edu/colleges/science-engineering/geography-environment/ba-geography/roadmap-i-ii-eng/)	Roadmap C (http://bulletin.sfsu.edu/colleges/science-engineering/geography-environment/ba-geography/roadmap-iii-iv-eng/)
ENG 104/ENG 105	Roadmap B (http://bulletin.sfsu.edu/colleges/science-engineering/geography-environment/ba-geography/roadmap-i-ii-stretch/)	Roadmap D (http://bulletin.sfsu.edu/colleges/science-engineering/geography-environment/ba-geography/roadmap-iii-iv-stretch/)

*Composition for Multilingual Students: If taking ENG 209 as your first English course, choose the ENG 114 row. If taking ENG 204 for your first English course, choose the ENG 104/ENG 105 row.

Transfer Student Roadmap (2 Year)

For students with an AA-T in **Geography**. [This roadmap opens in a new tab \(http://bulletin.sfsu.edu/colleges/science-engineering/geography-environment/ba-geography/adt-roadmap/\)](http://bulletin.sfsu.edu/colleges/science-engineering/geography-environment/ba-geography/adt-roadmap/).

This degree program is an approved pathway ("similar" major) for students earning the ADT in Geography

California legislation SB 1440 (2009) mandated the creation of the Associate Degree for Transfer (ADT) to be awarded by the California Community Colleges. Two types of ADTs are awarded: Associate in Arts for Transfer (AA-T) and Associate in Science for Transfer (AS-T).

Note: no specific degree is required for admission as an upper-division student. However, the ADT includes specific guarantees related to admission and graduation and is designed to clarify the transfer process and strengthen lower-division preparation for the major.

An ADT totals 60 units and in most cases includes completion of all lower-division General Education requirements and at least 18 units in a specific major. (The Biology, Chemistry, and Environmental Science AS-T degrees defer 3 units in lower-division GE area C and 3 units in lower-division GE area D until after transfer.) Students pursuing an ADT are guaranteed admission to the CSU if minimum eligibility requirements are met, though not necessarily to the CSU campus of primary choice.

Upon verification that the ADT has been awarded prior to matriculation at SF State, students are guaranteed B.A. or B.S. completion in 60 units if pursuing a "similar" major after transfer. Determinations about "similar" majors at SF State are made by faculty in the discipline.

Degree completion in 60 units cannot be guaranteed when a student simultaneously pursues an additional major, a minor, certificate, or credential.

A sample advising roadmap for students who have earned an ADT and continue in a "similar" major at SF State is available on the Roadmaps tab on the degree requirements page for the major. The roadmap displays:

- How many lower-division units required for the major have been completed upon entry based on the award of a specific ADT;
- Which lower-division requirements are considered complete upon entry based on the award of a specific ADT;
- How to complete the remaining 60 units for the degree in four semesters.

Students who have earned an ADT should seek advising in the major department during the first semester of attendance.

General Advising Information for Transfer Students

1. Before transfer, complete as many lower-division requirements or electives for this major as possible.
2. The following courses are not required for admission but are required for graduation. Students are strongly encouraged to complete these

units before transfer; doing so will provide more flexibility in course selection after transfer.

- a course in U.S. History
- a course in U.S. & California Government

For information about satisfying the requirements described in (1) and (2) above at a California Community College (CCC), please visit <http://www.assist.org> (<http://assist.org>). Check any geographically accessible CCCs; sometimes options include more than one college. Use ASSIST to determine:

- Which courses at a CCC satisfy any lower-division major requirements for this major;
- Which courses at a CCC satisfy CSU GE, US History, and US & CA Government requirements.

Remedial courses are not transferable and do not apply to the minimum 60 semester units/90 quarter units required for admission.

Additional units for courses that are repeated do not apply to the minimum 60 units required for upper-division transfer (for example, if a course was not passed on the first attempt or was taken to earn a better grade).

Before leaving the last California Community College of attendance, obtain a summary of completion of lower-division General Education units (IGETC or CSU GE Breadth). This is often referred to as a GE certification worksheet. SF State does not require delivery of this certification to Admissions, but students should retain this document for verifying degree progress after transfer.

Credit for Advanced Placement, International Baccalaureate, or College-Level Examination Program courses: AP/IB/CLEP credit is not automatically transferred from the previous institution. Units are transferred only when an official score report is delivered to SF State. Credit is based on the academic year during which exams were taken. Refer to the University Bulletin in effect during the year of AP/IB/CLEP examination(s) for details regarding the award of credit for AP/IB/CLEP.

Students pursuing majors in science, technology, engineering, and mathematics (STEM) disciplines often defer 6-9 units of lower-division General Education in Areas C and D until after transfer to focus on preparation courses for the major. This advice does not apply to students pursuing associate degree completion before transfer.

Transferring From Institutions Other Than CCCs or CSUs

Review SF State's lower-division General Education requirements. Note that, as described below, the four basic skills courses required for admission meet A1, A2, A3, and B4 in the SF State GE pattern. Courses that fulfill the remaining areas of SF State's lower-division GE pattern are available at most two-year and four-year colleges and universities.

Of the four required basic skills courses, a course in critical thinking (A3) may not be widely offered outside the CCC and CSU systems. Students should attempt to identify and take an appropriate course no later than the term of application to the CSU. To review more information about the A3 requirement, please visit bulletin.sfsu.edu/undergraduate-education/general-education/lower-division/#AAEL.

Waiting until after transfer to take a single course at SF State that meets both US and CA/local government requirements may be an appropriate option, particularly if transferring from outside of California.

All Students Must Meet the Transfer Eligibility Requirements Outlined Below for Admission.

For more information, visit the Undergraduate Admissions section (<http://bulletin.sfsu.edu/undergraduate-admissions/>).

- Complete 60 or more transferable semester units or 90 or more quarter units.
- Earn a college grade point average of 2.0 or better in all transferable courses. Non-local area residents may be held to a higher GPA standard.
- Be in good standing at the last college or university attended.
- Complete 30-semester units (45-quarter units) of General Education, including four basic skills courses:
 - a. One course in oral communication (same as CSU GE Area A1)
 - b. One course in written composition (same as CSU GE Area A2)
 - c. One course in critical thinking (same as CSU GE Area A3)
 - d. One course in mathematics or quantitative reasoning (same as CSU GE Area B4)
- The four basic skills courses and a minimum of 60 transferable semester units (90-quarter units) must be completed by the spring semester prior to fall admission, or by the fall semester prior to spring admission. Earn a C- or better grade in each basic skills course.