# Bachelor of Arts in Geography

**Geography (B.A.) — Minimum 39 Units**

## Required Core Courses (12 Units)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 101</td>
<td>Our Physical Environment</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 102</td>
<td>The Human Environment</td>
<td>3</td>
</tr>
<tr>
<td>or GEOG 107</td>
<td>World Regions and Interrelations</td>
<td></td>
</tr>
<tr>
<td>GEOG 205</td>
<td>Geographic Techniques</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 500GW</td>
<td>Physical and Human Dimensions of Climate Change - GWAR</td>
<td>3</td>
</tr>
</tbody>
</table>

## Capstone (3 Units)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 690</td>
<td>Senior Seminar in Geography and Environmental Science</td>
<td>3</td>
</tr>
</tbody>
</table>

## Distribution Requirement (12–15 Units)

(Cross-listed courses originating in other departments are not accepted in these categories.)

One course from each of the following four areas:

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

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 550</td>
<td>Geography of the United States and Canada</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 552</td>
<td>Geography of California</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 575</td>
<td>Emerging China</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 646</td>
<td>The Geography of Marine Resources</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 647</td>
<td>Geography of Water Resources</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 648</td>
<td>Management of National Parks and Protected Areas</td>
<td>4</td>
</tr>
<tr>
<td>GEOG/USP 651</td>
<td>San Francisco Bay Area Environmental Issues</td>
<td>4</td>
</tr>
</tbody>
</table>

- Either Geographic Techniques – 601–639 numbered courses in Geography or Applied Geography – 640–668 numbered courses in Geography

## Focus of Interest (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. In addition, alternative concentrations tailored to individual student interest may be developed in consultation with the Geography undergraduate advisor. On advisement, appropriate upper division courses from other departments and programs may be included.

- **Human Geography**
- **Environmental Studies**
- **Physical Environment**
- **Resource Management**
- **Techniques of Geographic Analysis**
- **Urban Environment, Transportation, and Land Use**

- Focused individual interest pursued in consultation with the undergraduate advisor

## 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-.

## Foci of Interest

### Focus on Human Geography

In addition to serving traditional liberal arts education, this option permits systematic study within cultural geography.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 422</td>
<td>Environmental Perception</td>
<td>3</td>
</tr>
<tr>
<td>GEOG/WGS 423</td>
<td>Geographic Perspectives on Gender, Environment, and Development</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 425</td>
<td>Economic Geography</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 427</td>
<td>Agriculture and Food Supply</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 430</td>
<td>Transforming Food and Agriculture Systems: Local to Global</td>
<td>4</td>
</tr>
<tr>
<td>GEOG/USP 432</td>
<td>Urban Geography</td>
<td>4</td>
</tr>
<tr>
<td>GEOG/H ED 434</td>
<td>Geographies of Health and Health Care</td>
<td>3</td>
</tr>
<tr>
<td>GEOG/I R 445</td>
<td>Geopolitics and Globalization</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 454</td>
<td>San Francisco on Foot</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 455</td>
<td>Geography of Ethnic Communities</td>
<td>3</td>
</tr>
<tr>
<td>Select a 500 level course</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

### Focus on Environmental Studies

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

**Required**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG/ENVS 600</td>
<td>Environmental Problems and Solutions</td>
<td>3</td>
</tr>
</tbody>
</table>

**Recommended**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 316</td>
<td>Biogeography</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 317</td>
<td>Geography of Soils</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 422</td>
<td>Environmental Perception</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 427</td>
<td>Agriculture and Food Supply</td>
<td>4</td>
</tr>
<tr>
<td>GEOG/ERTH 642</td>
<td>Watershed Assessment and Restoration</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 644</td>
<td>Water Quality</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 646</td>
<td>The Geography of Marine Resources</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 647</td>
<td>Geography of Water Resources</td>
<td>4</td>
</tr>
<tr>
<td>GEOG/USP 651</td>
<td>San Francisco Bay Area Environmental Issues</td>
<td>4</td>
</tr>
<tr>
<td>GEOG/USP 652</td>
<td>Environmental Impact Analysis</td>
<td>4</td>
</tr>
<tr>
<td>GEOG/ENVS 657</td>
<td>Natural Resource Management: Biotic Resources</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 666</td>
<td>Geography of Garbage: Recycling and Waste Reduction</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 667/USP 515</td>
<td>Environmental Justice: Race, Poverty, and the Environment</td>
<td>4</td>
</tr>
</tbody>
</table>
This option concentrates on technical skills:

**Focus on Techniques of Geographic Analysis**

This option may be pursued in consultation with a geography major advisor.

### 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 600: Cartography  4

### Internship

- GEOG 601: Field Methods in Geographic Information Systems  3
- GEOG 602: Geographic Information Systems for Environmental Analysis  4
- GEOG 603: Programming for Geographic Information Science  4
- GEOG 606/611: Remote Sensing of the Environment I/II  4

### Data Display in Cartography

- GEOG 607: Cartography  4

### Supportive Internship

- GEOG 608: Geographic Internship  2-6

### Focus on Urban Environment, Transportation, and Land Use

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

- 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 432/433: 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 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 Management  3

### Focus based on individual interests

This focus may be pursued in consultation with a geography major advisor.

- highly recommended courses
  - GEOG 603: Introduction to Geographic Information Systems  3
  - GEOG 688: Geographic Internship  2-6

### 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.

### 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
- GEOG 668: Geographic Internship  2-6

### Focus on Resource Management

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

- 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

### Focus on Resource Management

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

### Focus on the Physical Environment

This focus offers a chance to study physical patterns and processes involving landforms, climate, biogeography, soils, and water.

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/: EARTH 442: Surface Water Hydrology  4

### Supporting Courses

- GEOG 602: Field Methods in Physical Geography  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

### Data Display in Cartography

- GEOG 606: Cartography  4

### Internship

- GEOG 608: Geographic Internship  2-6

### Focus on Urban Environment, Transportation, and Land Use

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

- 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 432/433: 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 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

### Focus based on individual interests

This focus may be pursued in consultation with a geography major advisor.

- highly recommended courses
  - GEOG 603: Introduction to Geographic Information Systems  3
  - GEOG 688: Geographic Internship  2-6

### 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 advisor 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 advisor 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

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Course Level</th>
<th>Units</th>
<th>Area Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral Communication</td>
<td>LD</td>
<td>3</td>
<td>A1</td>
</tr>
<tr>
<td>Written English Communication I</td>
<td>LD</td>
<td>3</td>
<td>A2</td>
</tr>
<tr>
<td>Critical Thinking</td>
<td>LD</td>
<td>3</td>
<td>A3</td>
</tr>
<tr>
<td>Written English Communication II</td>
<td>LD</td>
<td>3</td>
<td>A4</td>
</tr>
<tr>
<td>Physical Science</td>
<td>LD</td>
<td>3</td>
<td>B1</td>
</tr>
<tr>
<td>Life Science</td>
<td>LD</td>
<td>3</td>
<td>B2</td>
</tr>
<tr>
<td>Lab Science</td>
<td>LD</td>
<td>1</td>
<td>B3</td>
</tr>
<tr>
<td>Mathematics/Quantitative Reasoning</td>
<td>LD</td>
<td>3</td>
<td>B4</td>
</tr>
<tr>
<td>Arts</td>
<td>LD</td>
<td>3</td>
<td>C1</td>
</tr>
<tr>
<td>Arts or Humanities</td>
<td>LD</td>
<td>3</td>
<td>C1 or C2</td>
</tr>
<tr>
<td>Humanities: Literature</td>
<td>LD</td>
<td>3</td>
<td>C3</td>
</tr>
<tr>
<td>Social Sciences</td>
<td>LD</td>
<td>3</td>
<td>D1</td>
</tr>
<tr>
<td>Social Sciences: US History</td>
<td>LD</td>
<td>3</td>
<td>D2</td>
</tr>
<tr>
<td>Social Sciences: US &amp; CA Government</td>
<td>LD</td>
<td>3</td>
<td>D3</td>
</tr>
<tr>
<td>Lifelong Learning and Self-Development (LLD)</td>
<td>LD or UD</td>
<td>3</td>
<td>E</td>
</tr>
<tr>
<td>Physical and/or Life Science</td>
<td>UD</td>
<td>3</td>
<td>UD-B</td>
</tr>
<tr>
<td>Arts and/or Humanities</td>
<td>UD</td>
<td>3</td>
<td>UD-C</td>
</tr>
<tr>
<td>Social Sciences</td>
<td>UD</td>
<td>3</td>
<td>UD-D</td>
</tr>
</tbody>
</table>

**SF State Studies**

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

American Ethnic and Racial Minorities (AERM) | LD or UD | 3

Environmental Sustainability (ES) | LD or UD | 3
Global Perspectives (GP) | LD or UD | 3
Social Justice (SJ) | LD or UD | 3

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

**First-Time Student Roadmap (4 Year)**

This roadmap opens in a new tab. (bulletin.sfsu.edu/colleges/science-engineering/geography-environment/ba-geography/roadmap.html)

**Transfer Student Roadmap (2 Year)**

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

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 includes completion of all lower-division General Education requirements and at least 18 units in a specific major. 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 and displays:

- How many lower-division units required for the major have been completed upon entry based on award of a specific ADT;
- Which lower-division requirements are considered complete upon entry based on award of a specific ADT;
- How to complete the remaining 60 units for the degree in four semesters.
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 (GE 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 http://bulletin.sfsu.edu/undergraduate-education/general-education/lower-division/#AAEL.

Identify and complete a 2nd-semester written English composition course before transfer. This is usually the next course after the typical “freshman comp” course, with a focus on writing, reading and critical analytical skills for academic purposes, and developing skills in composing, revising, and the use of rhetorical strategies.

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.

- Complete 60 or more transferable semester units or 90 or more quarter units
- Earn a college grade point average of 2.00 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, with intermediate algebra as a prerequisite (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.

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
   - a 2nd-semester course in written English composition

For information about satisfying the requirements described in (1) and (2) above at a California Community College (CCC), please visit http://www.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, including 2nd-semester composition;

Remedial courses are not transferable and do not apply to the minimum 60 units/90 quarters 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 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 in order to focus on preparation courses for the major. (This advice does not apply to students pursuing associate degree completion before transfer.)

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

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...