## Bachelor of Arts in Geography – GEOG Associate Degree for Transfer Roadmap

This is a sample pathway for students who transfer to San Francisco State University in the current Bulletin year with an AA-T in Geography. Six units in the major (GEOG 101, GEOG 102 or GEOG 107) and all lower-division GE requirements have been satisfied. Additional units in the major may have been satisfied. Check with a major advisor about the most appropriate course sequence. **Degree completion guaranteed in 60 units; see the Associate Degree for Transfer (ADT) section for more information** (http://bulletin.sfsu.edu/undergraduate-admissions/transfer-students).

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td></td>
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<tr>
<td>GEOG 205</td>
<td>Geographic Techniques (Major Core)</td>
<td>3</td>
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<tr>
<td>Distribution Requirement (12-15 units) - Take One 1</td>
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<td>3</td>
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<tr>
<td>Focus of Interest (12 units) - Take One 2</td>
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<td>3</td>
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<tr>
<td>U.S. and California Government (bulletin.sfsu.edu/undergraduate-education/graduation-requirements/#usg)</td>
<td>or University Elective if US/CA Government met before transfer</td>
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<tr>
<td>University Elective</td>
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<tr>
<td><strong>Units</strong></td>
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<td>15</td>
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<tr>
<td><strong>Second Semester</strong></td>
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<tr>
<td>GEOG 500GW</td>
<td>Physical and Human Dimensions of Climate Change - GWAR (Major Core)</td>
<td>3</td>
</tr>
<tr>
<td>Distribution Requirement (12-15 units) - Take One 1</td>
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<td>3</td>
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<tr>
<td>Focus of Interest (12 units) - Take One 2</td>
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<td>3</td>
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<tr>
<td>US History (bulletin.sfsu.edu/undergraduate-education/graduation-requirements/#USHaGR)</td>
<td>or University Elective if US History met before transfer</td>
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<tr>
<td>GE Area UD-B: Upper-Division Physical and/or Life Sciences</td>
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<tr>
<td><strong>Units</strong></td>
<td></td>
<td>15</td>
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<tr>
<td><strong>Third Semester</strong></td>
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<tr>
<td>Distribution Requirement (12-15 units) - Take Two 1</td>
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<td>6</td>
</tr>
<tr>
<td>Focus of Interest (12 units) - Take One 2</td>
<td></td>
<td>3</td>
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<tr>
<td>GE Area UD-C: Upper-Division Arts and/or Humanities</td>
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<td>University Elective</td>
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<td>3</td>
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<tr>
<td><strong>Units</strong></td>
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<td>15</td>
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<tr>
<td><strong>Fourth Semester</strong></td>
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<tr>
<td>GEOG 690</td>
<td>Senior Seminar in Geography and Environmental Science (Major Capstone)</td>
<td>3</td>
</tr>
</tbody>
</table>

1. **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**:
       - GEOG 550 Geography of the United States and Canada (3 units)
       - GEOG 552 Geography of California (3 units) (UD-D, AERM, ES, SJ)
       - GEOG 575 Emerging China (3 units)
       - GEOG 646 The Geography of Marine Resources (4 units)
       - GEOG 647 Geography of Water Resources (4 units)
       - GEOG 648 Management of National Parks and Protected Areas (4 units)
       - GEOG 651/USP 651 San Francisco Bay Area Environmental Issues (4 units) (UD-B, ES)
     - Either Geographic Techniques: 601–639 numbered courses in Geography
       or Applied Geography: 640–668 numbered courses in Geography

   2. University Elective if requirement already satisfied
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

Note: 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.

Foci of Interest

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

GEOG 422 Environmental Perception (3 units)
GEOG 423/WGS 423 Geographic Perspectives on Gender, Environment, and Development (3 units)
GEOG 425 Economic Geography (3 units)
GEOG 427 Agriculture and Food Supply (4 units) (ES, GP)
GEOG 430 Transforming Food and Agriculture Systems: Local to Global (4 units) (ES, GP, SJ)
GEOG 432/USP 432 Urban Geography (4 units) (ES, GP)
GEOG 434/H ED 434 Geographies of Health and Health Care (3 units)
GEOG 445/I R 445 Geopolitics and Globalization (3 units) (UD-D)
GEOG 454 San Francisco on Foot (4 units)
GEOG 455 Geography of Ethnic Communities (3 units) (AERM, SJ)
Select a 500 level course

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
GEOG 600/ENVS 600 Environmental Problems and Solutions (3 units) (UD-D, ES, GP)

Recommended
GEOG 316 Biogeography (4 units)
GEOG 317 Geography of Soils (4 units)
GEOG 422 Environmental Perception (3 units)
GEOG 427 Agriculture and Food Supply (4 units) (ES, GP)
GEOG 642/ERTH 642 Watershed Assessment and Restoration (4 units)
GEOG 644 Water Quality (3 units)
GEOG 646 The Geography of Marine Resources (4 units)
GEOG 647 Geography of Water Resources (4 units)
GEOG 651/USP 651 San Francisco Bay Area Environmental Issues (4 units) (UD-B, ES)
GEOG 652/USP 652 Environmental Impact Analysis (4 units)
GEOG 657/ENVS 657 Natural Resource Management: Biotic Resources (4 units)
GEOG 666 Geography of Garbage: Recycling and Waste Reduction (3 units) (ES)
GEOG 667/USP 515 Environmental Justice: Race, Poverty, and the Environment (4 units) (ES, GP, SJ)
GEOG 668/USP 513/PLSI 513 Politics, Law, and the Urban Environment (4 units)
Supplementary courses in Environmental Studies are also recommended on advisement.

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 units)
GEOG 313 Earth's Climate System (4 units)
GEOG 314 Bioclimatology (4 units)
GEOG 316 Biogeography (4 units)
GEOG 317 Geography of Soils (4 units)
GEOG 342/ERTH 442 Surface Water Hydrology (4 units)
Supporting courses include:
GEOG 602 Field Methods in Physical Geography (4 units)
GEOG 642/ERTH 642 Watershed Assessment and Restoration (4 units)
GEOG 647 Geography of Water Resources (4 units)
GEOG 657/ENVS 657 Natural Resource Management: Biotic Resources (4 units)
Supplementary courses in Earth & Climate Sciences and Biology are recommended on advisement.

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 units)
GEOG 425 Economic Geography (3 units)
GEOG 427 Agriculture and Food Supply (4 units) (ES, GP)
GEOG 600/ENVS 600 Environmental Problems and Solutions (3 units) (UD-D, ES, GP)
GEOG 602 Field Methods in Physical Geography (4 units)
GEOG 603 Introduction to Geographic Information Systems (3 units)
GEOG 610 Remote Sensing of the Environment I (4 units)
GEOG 611 Remote Sensing of the Environment II (4 units)
GEOG 642/ERTH 642 Watershed Assessment and Restoration (4 units)
GEOG 644 Water Quality (3 units)
GEOG 646 The Geography of Marine Resources (4 units)
GEOG 647 Geography of Water Resources (4 units)
GEOG 657/ENVS 657 Natural Resource Management: Biotic Resources (4 units)
GEOG 666 Geography of Garbage: Recycling and Waste Reduction (3 units) (ES)
Supplementary courses in Earth & Climate Sciences and Biology are recommended on advisement.

Focus on Techniques of Geographic Analysis
This option concentrates on technical skills:
Data Acquisition in the field
GEOG 601 Field Methods in Human Geography (3 units)
GEOG 602 Field Methods in Physical Geography (4 units)
Data Analysis in the lab
GEOG 610 Remote Sensing of the Environment I (4 units)
GEOG 611 Remote Sensing of the Environment II (4 units)
Geographic Information Systems
GEOG 603 Introduction to Geographic Information Systems (3 units)
GEOG 620 Geographical Information Systems (4 units)
GEOG 621 Geographic Information Systems for Environmental Analysis (4 units)
GEOG 625 Programming for Geographic Information Science (4 units)
GEOG 629 Coastal and Marine Applications of GIS (3 units)
Data Display in Cartography
GEOG 606 Cartography (3 units)
Internship (strongly recommended)
GEOG 688 Geographic Internship (2-6 units)

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 units)
GEOG 423/WGS 423 Geographic Perspectives on Gender, Environment, and Development (3 units)
GEOG 425 Economic Geography (3 units)
GEOG 427 Agriculture and Food Supply (4 units) (ES, GP)
GEOG 432/USP 432 Urban Geography (4 units) (ES, GP)
GEOG 433/USP 433 Urban Transportation (4 units)
GEOG 434/H ED 434 Geographies of Health and Health Care (3 units)
GEOG 435 Geography of Global Transportation (4 units)
GEOG 455 Geography of Ethnic Communities (3 units) (AERM, SJ)
GEOG 601 Field Methods in Human Geography (3 units)
GEOG 603 Introduction to Geographic Information Systems (3 units)
GEOG 651/USP 651 San Francisco Bay Area Environmental Issues (4 units) (UD-B, ES)
GEOG 652/USP 652 Environmental Impact Analysis (4 units)
GEOG 658/USP 658 Land-Use Planning (4 units)
GEOG 666 Geography of Garbage: Recycling and Waste Reduction (3 units) (ES)
GEOG 667/USP 515 Environmental Justice: Race, Poverty, and the Environment (4 units) (ES, GP, SJ)
Upper-division courses in Urban Studies are particularly appropriate as well.

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 units)
GEOG 688 Geographic Internship (2-6 units)

To Do at SF State:
Enough total units to reach 120 minimum for graduation; 40 units minimum at the upper-division level; to include the following:

University-Wide Requirements: 9–15 Units
- American Institutions (0–6 units): US History, US Government, California State and Local Government requirements if not taken before transfer.
- Upper-Division GE, Areas B, C, and D (9 units): Courses required for the major may double-count if approved for UD GE.
- Students entering the major with the AA-T in Geography are not required to fulfill SF State Studies requirements.
- Complementary Studies: Consult with a department advisor on how transfer units and/or SF State units can be applied to ensure degree completion within 60 units.

Geography Major: 30–37 Units
GEOG 101 - GEOG 102 met in transfer.
• Core (3-6 units): GEOG 205 (if not met in transfer), GEOG 500GW.
• Distribution Requirement (12-16 units): Choose one GEOG course from four different areas: Physical Geography (310–399 level); Human Geography (400 level); Human-Environment Interaction in a Regional Context; Geographic Techniques (601–639) OR Applied Geography (640–668).
• Guided Electives (12 units): Choose upper-division courses organized around a coherent theme in consultation with an advisor.
• Capstone (3 units): GEOG 690.

**University Electives: 12 or More Units**

Depends on course choices made at the community college, how transferred units are applied to the requirements above, and course choices at SF State. Some courses may meet more than one requirement, e.g. in both UD GE and the major.