

BA IN GEOGRAPHY (GEOGRAPHIC INFORMATION SCIENCE)

Degree Roadmaps (2YR (https://www.csus.edu/academic-affairs/curriculum-workflow/_internal/_documents/program-road-maps/nsm_2yr/geography-geographic-information-science_transfer-roadmap-2024-25.pdf)) (4YR (https://www.csus.edu/academic-affairs/curriculum-workflow/_internal/_documents/program-road-maps/nsm_4yr/geography-geographic-information-science_4-year-roadmap-2024-25.pdf))

Units required for Major: 46

Total units required for BA: 120


Program Description

The Bachelor of Arts in Geography with a concentration in Geographic Information Science (GIScience) emphasizes student development of geospatial skills. Geographic Information Science, cartography, remote sensing, and qualitative and quantitative methods prepare students to tackle any problem with a spatial dimension—from advising an individual firm on good locations for a new branch or supplier to modeling the spread of wildfires across a region to analyzing the global spread of diseases or new technologies.

Note:

- Courses *cannot* double count for the core and the concentration.
- Courses in the concentration core requirements (Geog 109, Geog 110, Geog 150, and Geog 155) must be passed with a minimum grade of C- to satisfy requirements.

Program Requirements

| Code | Title | Units |
|---|---|-------|
| Required Lower Division Core Courses (10 Units) | | |
| GEOG 1 | Physical Geography: The Distribution of Natural Phenomena ¹ | 3 |
| GEOG 2 | Cultural Geography ¹ | 3 |
| GEOG 3 | Introduction to Maps and Geographic Technologies | 3 |
| GEOG 11 | Laboratory in Physical Geography | 1 |
| Required Upper Division Core Courses (9 Units) | | |
| GEOG 102 | Ideas and Skills in Geography | 3 |
| GEOG 118 | Earth Transformed | 3 |
| GEOG 190 | Senior Research Seminar in Geography  ¹ | 3 |
| Geography Core (9 Units) | | |
| Select one course from each of the following three areas: | | 9 |
| <i>Human Geography</i> | | |
| GEOG 141 | Geography of Economic Activity | |
| GEOG 143 | Environmental Hazards and Society | |
| GEOG 145 | Population Geography | |
| GEOG 147 | Urban Geography | |
| GEOG 148 | Urban and Regional Planning | |
| GEOG 149 | Transportation Geography | |

Physical Geography

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|----------|------------------------------|
| GEOG 111 | Elements Of Meteorology |
| GEOG 113 | Climate |
| GEOG 115 | Biogeography |
| GEOG 116 | Global Climate Change |
| GEOG 117 | Landforms |
| GEOG 161 | California's Water Resources |

Regional Geography

| | |
|-----------|--|
| GEOG 121 | United States and Canada |
| GEOG 125 | |
| GEOG 127 | Geography Of Africa |
| GEOG 128 | Geography Of Europe |
| GEOG 129A | Special Topics in Regional Geography A |
| GEOG 129B | Special Topics in Regional Geography B |
| GEOG 129C | Special Topics in Regional Geography C |
| GEOG 131 | California |

Concentration 18

Concentration Core Requirements

Complete all of the following:

| | |
|----------|---|
| GEOG 109 | Geographic Information Systems |
| GEOG 110 | Advanced Geographic Information Systems |
| GEOG 150 | Programming for GIS |
| GEOG 155 | GIS Data Acquisition and Management |

Concentration Electives

Select two of the following:

| | |
|---|-----------------------------------|
| GEOG 105 | Cartography |
| GEOG 107 | Remote Sensing |
| GEOG 151 | Programming for GIS II |
| GEOG 163 | Applied GIS |
| GEOG 181 | Quantitative Methods in Geography |
| GEOG 182 | Qualitative Methods in Geography |
| GEOG 195A | Geography Internship A |
| GEOG 199 | Special Problems |
| One of GEOG 193A, GEOG 193B, or GEOG 193C | |

Total Units 46

¹ Course also satisfies General Education (GE)/Graduation Requirement.

General Education Requirements ¹

| Code | Title | Units |
|---|-------|-------|
| Area A: Basic Subjects (9 Units) | | |
| A1 - Oral Communication | | 3 |
| A2 - Written Communication | | 3 |
| A3 - Critical Thinking | | 3 |
| Area B: Physical Universe and Its Life Forms (9 Units) | | |
| B1 - Physical Science ² | | 0 |
| B2 - Life Forms | | 3 |
| B3 - Lab (Note: Lab experience to be taken with one of the following: B1, B2 or B5) ² | | 0 |
| B4 - Math Concepts | | 3 |
| B5 - Additional Course (Any B to reach 12 units) - Take upper-division course to complete Area & upper division requirements. | | 3 |

Area C: Arts and Humanities (12 Units)

| | |
|--|---|
| C1 - Arts | 3 |
| C2 - Humanities | 3 |
| C1/C2 - Area C Course | 3 |
| C1/C2 - Area C Course - Take upper-division course to complete Area & upper division requirements. | 3 |

Area D: The Individual and Society (6 Units)

| | |
|--|---|
| Area D Course | 3 |
| Area D Course ² | 0 |
| Area D Course - Take upper-division course to complete Area & upper division requirements. | 3 |

Area E: Understanding Personal Development (3 Units)

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|---------------|---|
| Area E Course | 3 |
|---------------|---|

Area F: Ethnic Studies (3 Units)

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|---------------|---|
| Area F Course | 3 |
|---------------|---|

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|--------------------|-----------|
| Total Units | 42 |
|--------------------|-----------|

¹ To help you complete your degree in a timely manner and not take more units than absolutely necessary, there are ways to use single courses to meet more than one requirement (overlap). For further information, please visit the General Education page (<http://catalog.csus.edu/colleges/academic-affairs/general-education/>).

Note: There is no way to list all possible overlaps so please consult with a professional advisor. The Academic Advising Center can be visited online (<http://www.csus.edu/acad/>), by phone (916) 278-1000, or email (advising@csus.edu).

² Required in Major; also satisfies GE.

Graduation Requirements ¹

| Code | Title | Units |
|--|-------|-------|
| Graduation Requirements (required by CSU) (6 Units) | | |
| American Institutions: U.S. History | | 3 |
| American Institutions: U.S. Constitution & CA Government | | 3 |
| Writing Intensive (WI) ² | | 0 |
| Graduation Requirements (required by Sacramento State) (12 Units) | | |
| English Composition II | | 3 |
| Race and Ethnicity in American Society (RE) | | 3 |
| Foreign Language Proficiency Requirement ³ | | 6 |

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² Required in Major; also satisfies Graduation Requirement.

³ If not satisfied before entering Sacramento State, it may be satisfied in General Education Area C2 (Humanities). "C- or better required." The alternative methods for satisfying the Foreign Language Proficiency Requirement are described here: <https://www.csus.edu/college/arts-letters/world-languages-literatures/foreign-language-requirement.html>

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