

BA IN GEOGRAPHY (GEOGRAPHIC INFORMATION SYSTEMS AND ANALYSIS)

In Workflow

1. GEOG Chair (tsk@csus.edu)
2. NSM College Committee Chair (tsk@csus.edu)
3. NSM Dean (datwyler@csus.edu)
4. Academic Services (torsetj@csus.edu;%20212408496@csus.edu;%20cnewsome@skymail.csus.edu)
5. Senate Curriculum Subcommittee Chair (curriculum@csus.edu)
6. Dean of Undergraduate (james.german@csus.edu;%20celena.showers@csus.edu)
7. Dean of Graduate (cnewsome@skymail.csus.edu)
8. Catalog Editor (212408496@csus.edu;%20torsetj@csus.edu;%20cnewsome@skymail.csus.edu)
9. Registrar's Office (wwd22@csus.edu;%20w lindsey@csus.edu;%20sac19595@csus.edu;%20danielle.ambrose@csus.edu;%20h.skocilich@csus.edu;%20205109584@csus.edu)

Approval Path

1. Tue, 01 Oct 2019 20:55:33 GMT
Thomas Krabacher (tsk): Approved for GEOG Chair
2. Wed, 02 Oct 2019 23:19:54 GMT
Thomas Krabacher (tsk): Approved for NSM College Committee Chair
3. Thu, 03 Oct 2019 20:53:07 GMT
Shannon Datwyler (datwyler): Approved for NSM Dean

History

1. May 1, 2018 by clmig-jwehrheim
2. Aug 13, 2018 by 212408496
3. Oct 2, 2018 by 212408496

Date Submitted: Tue, 01 Oct 2019 20:54:59 GMT

Viewing: BA in Geography (Geographic Information Systems and Analysis)

Last approved: Tue, 02 Oct 2018 20:27:09 GMT

Last edit: Wed, 02 Oct 2019 23:14:13 GMT

Changes proposed by: Thomas Krabacher (101016405)

Academic Group: (College)

Natural Sciences & Mathematics

Academic Organization: (Department)

Geography

Catalog Year Effective:

2020-2021 Catalog

Individual(s) primarily responsible for drafting the proposed degree major program:

Name (First Last)	Email	Phone 999-999-9999
Thomas Krabacher	krabacherts@csus.edu	916-278-6338

Type of Program Proposal:

Concentration

Program Change Type:

Non-Substantive

Title of the Program:

BA in Geography (Geographic Information Systems and Analysis)

Designation: (degree terminology)

Bachelor of Arts

Briefly describe the program proposal (new or change) and provide a justification:

The changes add new course options from which students may choose to both the Breadth and Concentration requirements; these additions reflect the addition of new course to the programs course offerings as a result of new faculty hires in recent years. It also eliminates the subcategory distribution requirements (Data Analysis, Data Output) in the concentration since, increasingly the distinction has become meaningless in the field.

Objectives of the degree program:

The Bachelor of Arts in Geography with a concentration in Geographic Information Systems & Analysis emphasizes student development of geospatial skills. Geographic Information Science, cartography, remote sensing, 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.

University Learning Goals**Undergraduate Learning Goals:**

Competence in the disciplines
 Knowledge of human cultures and the physical and natural world
 Integrative learning
 Intellectual and practical skills

Will this program be required as part of a teaching credential program, a single subject, or multiple subject waiver program (e.g., Liberal Studies, Biology) or other school personnel preparation program (e.g., School of Nursing)?

No

Do these changes impact the Smart Planner roadmap?

No

Catalog Description:

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 Systems and Analysis emphasizes student development of geospatial skills. Geographic Information Science, cartography, remote sensing, 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:

- Every candidate must complete **all** of the Geography Core and **one** Concentration.
- Courses *cannot* double count for the core and the concentration.
- Students must take at least **FOUR** courses, with at least one each from Data Analysis and Data Output categories.

Admission Requirements: Course prerequisites and other criteria for admission of students to the degree major program, and for their continuation in it.

None.

As defined by policy <http://www.csus.edu/umannual/acadaff/fsm00010.htm>, a change in units constitutes a substantive change to the program. If your changes constitute a substantive change, please refer back to the "Program Change Type" field above to ensure that "Substantive" is selected.

Program Requirements: (If new courses are being created as part of a new program, it will be useful to propose courses first.)

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 (33 Units)		
Select one course from each of the following four areas:		12
<i>Geographic Techniques</i>		
GEOG 105	Computer Cartography	
GEOG 107	Remote Sensing	
GEOG 109	Geographic Information Systems	
GEOG 110	Advanced Geographic Information Systems	
GEOG 150	Programming for GIS	3
GEOG 151	Geography 151: Programming for GIS II (Geog 151 course proposal is submitted concurrently with these program changes.)	3
GEOG 163	Applied GIS	
GEOG 181	Quantitative Methods in Geography	
GEOG 193A	Field Geography: Urban-Metropolitan	
GEOG 193B	Field Geography: Suburban-Rural	
GEOG 193C	Field Geography: Physical	
<i>Human Geography</i>		
GEOG 141	Geography of Economic Activity	
GEOG 143	Environmental Hazards and Society	3
GEOG 145	Population Geography	
GEOG 147	Urban Geography	
GEOG 148	Urban and Regional Planning	
GEOG 149	Transportation Geography	
GEOG 163	Applied GIS	
<i>Physical Geography</i>		
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	
<i>Regional Geography</i>		
GEOG 121	United States and Canada	
GEOG 125	Geography Of East Asia	
GEOG 127	Geography Of Africa	3
GEOG 128	Geography Of Europe	
GEOG 129A	Special Topics in Regional Geography A	3
GEOG 129B	Special Topics in Regional Geography B	3
GEOG 129C	Special Topics in Regional Geography C	3
GEOG 131	California	
Concentrations (15 Units)		
Select a concentration from the following:		15
Geographic Information Systems and Analysis Concentration		
Human Geography Concentration		
Metropolitan Area Planning Concentration		
Physical Geography Concentration		

Total Units 67

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

Concentration in Geographic Information Systems and Analysis (15 units)

Code	Title	Units
GEOG 109	Geographic Information Systems	3
Select four of the following:		12
GEOG 105	Computer Cartography	
GEOG 107	Remote Sensing	
GEOG 110	Advanced Geographic Information Systems	
GEOG 150	Programming for GIS	3

GEOG 151	Geography 151: Programming for GIS II	3
GEOG 163	Applied GIS	
GEOG 181	Quantitative Methods in Geography	
GEOG 199	Special Problems	

Total Units		21
-------------	--	----

It is recommended that students take the following to satisfy their Geographic Techniques core area requirement:

Code	Title	Units
GEOG 193A	Field Geography: Urban-Metropolitan	3
GEOG 193B	Field Geography: Suburban-Rural	3
GEOG 193C	Field Geography: Physical	3

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 (9 Units)		
Area D Course		3
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)		
Area E Course		3
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

- 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 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/wll/flgr/>

Fiscal Impact to Change an Existing Program

Indicate programmatic or fiscal impact which this change will have on other academic units' programs, and describe the consultation that has occurred with affected units:

The changes are expected to have no programmatic or fiscal impact with other academic units' programs since are changes simple involve the Department's own class offerings. As a result no consultation took place.

Provide a fiscal analysis of the proposed changes:

The changes only involve classes already regularly scheduled by the Department; any changes in enrollment can be accommodated by the Department's current scheduling practices. There is no anticipated fiscal impact.

How will the above changes be accommodated within the department/College existing fiscal resources?

The courses are already currently offered in the class schedule. No additional resources will be required.

Will the proposed changes require additional resources?

No

What additional space, equipment, operating expenses, library, computer, or media resources, clerical/technical support, or other resources will be needed?

None will be required.

Estimate the cost and indicate how these resource needs will be accommodated:

There are no additional resource needs to be accommodated.

Key: 310