



**SOUTH DAKOTA BOARD OF REGENTS
ACADEMIC AFFAIRS FORMS**

Substantive Program Modification Form

UNIVERSITY:	SDSU
CURRENT PROGRAM TITLE:	Geography (M.S.) – Geographic Information Sciences Specialization
CIP CODE:	45.0701 – Major CIP 45.0702 - Geographic Information Sciences Specialization CIP
UNIVERSITY DEPARTMENT:	Grad Study Geography & Geospatial Sciences
BANNER DEPARTMENT CODE:	SGGO
UNIVERSITY DIVISION:	Graduate School
BANNER DIVISION CODE:	3G

University Approval

To the Board of Regents and the Executive Director: I certify that I have read this proposal, that I believe it to be accurate, and that it has been evaluated and approved as provided by university policy.

Dennis D. Hedge

5/3/2021

Vice President of Academic Affairs or
President of the University

Date

1. This modification addresses a change in:

- | | |
|--|--|
| <input checked="" type="checkbox"/> Total credits required within the discipline | <input type="checkbox"/> Total credits of supportive course work |
| <input checked="" type="checkbox"/> Total credits of elective course work | <input type="checkbox"/> Total credits required for program |
| <input type="checkbox"/> Program name | <input checked="" type="checkbox"/> Existing specialization |
| <input type="checkbox"/> CIP Code | <input checked="" type="checkbox"/> Other: Additional Admission Requirements |

2. Effective date of change: 2021-2022 Academic Year

3. Program Degree Level: Associate Bachelor's Master's Doctoral

4. Category: Certificate Specialization Minor Major

5. If a name change is proposed, the change will occur:

- On the effective date for all students
- On the effective date for students new to the program (enrolled students will graduate from existing program)

Proposed new name:

6. Primary Aspects of the Modification:

Existing Curriculum

Proposed Curriculum (highlight changes)

Pref.	Num.	Title	Cr. Hrs.	Pref.	Num.	Title	Cr. Hrs.
GEOG	710	Evolution of Geographic Thought	3	GEOG	710	Evolution of Geographic Thought	3
GEOG	714	Research and Writing	3	GEOG	714	Research and Writing	3
				GEOG	790	Seminar (Geospatial Science)	1
<i>Select 3 of the following:</i>			9	<i>Select 3 of the following:</i>			9
GEOG	571	Introduction to GIS Programming	3	GEOG	571	Introduction to GIS Programming	3
GEOG	573-573L	GIS: Data Creation and Integration	3	GEOG	573-573L	GIS: Data Creation and Integration	3

Existing Curriculum

Proposed Curriculum (highlight changes)

Pref.	Num.	Title	Cr. Hrs.	Pref.	Num.	Title	Cr. Hrs.
		Lab				Lab	
GEOG	574-574L	GIS: Vector and Raster Modeling and Lab	3	GEOG	574-574L	GIS: Vector and Raster Modeling and Lab	3
GEOG	575-575L	GIS Applications and Lab	3	GEOG	575-575L	GIS Applications and Lab	3
GEOG	576-576L	Web GIS and Lab	3	GEOG	576-576L	Web GIS and Lab	3
GEOG	577-577L	Spatial Databases and Lab	3	GEOG	577-577L	Spatial Databases and Lab	3
GEOG	583-583L	Aerial Remote Sensing and Lab	3	GEOG	583-583L	Aerial Remote Sensing and Lab	3
GEOG	584-584L	Remote Sensing and Lab	3	GEOG	584-584L	Remote Sensing and Lab	3
GEOG	585-585L	Quantitative Remote Sensing and Lab	3	GEOG	585-585L	Quantitative Remote Sensing and Lab	3
GEOG	741	Quantitative Remote Sensing for Terrestrial Monitoring	3	GEOG	741	Quantitative Remote Sensing for Terrestrial Monitoring	3
GEOG	743	Geospatial Analysis	3	GEOG	743	Geospatial Analysis	3
GEOG	760	Advanced Methods in Geospatial Modelling: Topical Credits	3	GEOG	760	Advanced Methods in Geospatial Modelling: Topical Credits	3
GEOG	786	Geographic Information Systems	3	GEOG	786	Geographic Information Systems	3
<i>Select one of the following options:</i>				<i>Select one of the following options:</i>			
<i>Option A: Thesis</i>				<i>Option A: Thesis</i>			
GEOG	798	Thesis	6	GEOG	798	Thesis	5-6
		Electives	9			Electives	8-9
<i>Option B: Research/Design Paper</i>				<i>Option B: Research/Design Paper</i>			
GEOG	788	Research Paper in Geography	6	GEOG	788	Research Paper in Geography	3-5
		Electives	11			Electives	10-11
<i>Option C: Coursework Only</i>				<i>Option C: Coursework Only</i>			
		Electives	21			Electives	20
Total number of hours required for degree				Total number of hours required for degree			
		Option A	30			Option A	30
		Option B	32			Option B	32
		Option C	36			Option C	36

Master's Graduation Requirements

Option A - Thesis

- Thesis Proposal
- Thesis and Oral Defense

Option - B - Research/Design Paper

- Research Project Proposal
- Research Project and Oral Defense

Option C - Coursework Only

- Oral Defense of Course Work

Additional Admission Requirements

Current:

GRE: Required

TOEFL: Department requirement of 590 paper-based, 80 Internet-based

IELTS: 6.5

The Department of Geography has listed the following additional admission requirements:

- Submission of Graduate Record Examination (GRE) scores.

- Submission of 1-2 page statement describing applicants' interests in the master's program in Geography at SDSU.
- Submission of two (2) letters of recommendation from persons acquainted with the academic ability and professional competency of the applicant.
- Bestow conditional status on those applicants who have not completed the following courses or their equivalents prior to entering the program:
 - GEOG 131 (Physical Geography: Weather & Climate) or GEOG 132 (Physical Geography: Natural Landscapes)
 - GEOG 200 (Human Geography) or GEOG 210 (World Regional)
 - GEOG 372 (Introduction to GIS)

These courses may be completed pass/fail.

Proposed:

GRE: Not Required

TOEFL: 79 Internet-based

IELTS: 6.5

Duolingo: 110

The Department of Geography has listed the following additional admission requirements:

- Submission of 1-2 page statement describing applicants' interests in the master's program in Geography at SDSU.
- Submission of two (2) letters of recommendation from persons acquainted with the academic ability and professional competency of the applicant.
- A minimum of 9 semester credits of undergraduate coursework in geography, preferably physical geography. An additional 6 credits in the fields cognate to geography are required.

7. Explanation of the Change:

The changes aid in the alignment of the MS and PhD programs in our department.