



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

Institutional Substantive Program Modification Requests

Institution: South Dakota Mines **Date:** 10/20/20

Institutional representatives should provide direct links to PDF documents for each of the program modification requests represented below. All requests should be posted on the campus Curriculum and Instruction website one week prior to the Academic Affairs Council meeting where the program modification request is being considered.

<i>Program Title</i>	<i>Approval</i>
BS Geology	JL

Program modifications referenced above for approval have been reviewed by the Academic Affairs Council and the System Vice President for Academic Affairs and may be advanced forward for entry in the student information system. For those program modifications listed above that did not receive approval, additional clarification or justification will be necessary and should be re-routed through the review process on a separate "Institutional Substantive Program Modification Requests" form once all issues have been resolved.

 **Signature: System Vice President for Academic Affairs** 12/11/2020 **Date**



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Substantive Program Modification Form

Use this form to request minor changes in existing programs (majors, minors, certificates, or specializations).

UNIVERSITY:	SDSM&T
CURRENT PROGRAM TITLE:	BS in Geology
CIP CODE:	
UNIVERSITY DEPARTMENT:	Geology and Geological Engineering
UNIVERSITY DIVISION:	

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.

<hr/> Vice President of Academic Affairs or President of the University	Click here to enter a date. <hr/> Date
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1. This modification addresses a change in (place an "X" in the appropriate box):

- | | |
|---|---|
| <input type="checkbox"/> Total credits required within the discipline | <input checked="" 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 type="checkbox"/> Existing specialization |
| <input type="checkbox"/> CIP Code | <input type="checkbox"/> Other (explain below) |

2. Effective date of change: 8/24/2020

3. Program Degree Level (place an "X" in the appropriate box):

Associate Bachelor's Master's Doctoral

4. Category (place an "X" in the appropriate box):

Certificate Specialization Minor Major

5. If a name change is proposed, the change will occur (place an “X” in the appropriate box):

- 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: _____

Reminder: Name changes may require updating related articulation agreements, site approvals, etc.

6. Primary Aspects of the Modification (add lines or adjust cell size as needed):

<i>Existing Curriculum</i>				<i>Proposed Curriculum (highlight changes)</i>			
Pref.	Num.	Title	Cr. Hrs.	Pref.	Num.	Title	Cr. Hrs.
MATH	123	Calculus I	4	MATH	123	Calculus I	4
MATH	125	Calculus II	4	MATH	125	Calculus II	4
MATH	381	Intro to Statistics	3	MATH	381	Intro to Statistics	3
CHEM	112	General Chemistry I	3	CHEM	112	General Chemistry I	3
CHEM	112L	Exp. Gen. Chem. I	1	CHEM	112L	Exp. Gen. Chem. I	1
CHEM	114	General Chemistry II	3	CHEM	114	General Chemistry II	3
CHEM	114L	Exp. Gen. Chem. II	1	CHEM	114L	Exp. Gen. Chem. II	1
PHYS	211	Univ. Physics I	3	PHYS	211	Univ. Physics I	3
				PHYS	211L	Univ. Physics I Lab	1
PHYS	213	Univ. Physics II	3	PHYS	213	Univ. Physics II	3
				PHYS	213L	Univ. Physics II Lab	1
CSC	111 or 150 or 170	Intro to Computer Program. Computer Science I or Programming for Eng. & Sci.	2 or 3 or 3	CSC	111/L or 150/L or 170/L	Intro to Computer Program. or Computer Science I or Programming for Eng. & Sci.	2 or 3 or 3
GEOE Or GEOL	324/L*** Or 456/L***	Eng. Geophysics Or Global Geophysics	3 Or 3	GEOE Or GEOL	324/L*** Or 456/L***	Eng. Geophysics Or Global Geophysics	3 Or 3
GEOE	482/L	Applied Geomorphology	3	GEOE	482/L	Applied Geomorphology	3
GEOL	110L	Introduction to Geology, Geological Engineering and Mining Engineering	1	GEOL	110L	Introduction to Geology, Geological Engineering and Mining Engineering	1
GEOL	201	Physical Geology	3	GEOL	201	Physical Geology	3

GEOL	201L	Physical Geology Lab	1	GEOL	201L	Physical Geology Lab	1
GEOL	212/L**	Mineral. And Crystallog.	3	GEOL	212/L**	Mineral. and Crystallog.	3
GEOL	322/L**	Structural Geology	3	GEOL	322/L**	Structural Geology	3
GEOL	323**	Search for Our Past	3	GEOL	323**	Search for Our Past	3
GEOL	323L**	Search for Our Past Lab	1	GEOL	323L**	Search for Our Past Lab	1
GEOL	331/L**	Strat. And Sedimentation	3	GEOL	331/L**	Strat. And Sedimentation	3
GEOL	341/L**	Intro to Ign/Met Petrology	3	GEOL	341/L**	Intro to Ign/Met Petrology	3
GEOL	410**	Field Geology	6	GEOL	410**	Field Geology	6
GEOL	416/L**	Intro to GIS	3	GEOL	416/L**	Intro to GIS	3
GEOL	421**	Aqueous Geochemistry	3	GEOL	421**	Aqueous Geochemistry	3
GEOL	461/L**	Invert. Paleontology	3	GEOL	461/L**	Invert. Paleontology	3
GEOL	464**	Senior Research I	1	GEOL	464**	Senior Research I	1
GEOL	465**	Senior Research II	3	GEOL	465**	Senior Research II	3
Select one of the following 4 courses:			3	Select one of the following 4 courses:			3
GEOE	475/L	Groundwater		GEOE	475/L	Groundwater	
GEOL	476	Petroleum Geology		GEOL	476	Petroleum Geology	
GEOL	351	Earth Resources and the Environment		GEOL	351	Earth Resources and the Environment	
GEOL	451/L	Economic Geology		GEOL	451/L	Economic Geology	
		GE GOAL 1 & 2 Electives	9			GE GOAL 1 & 2 Electives	9
		GE Hum Electives	6			GE Hum Electives	6
		GE SS Electives	6			GE SS Electives	6
		Program Electives	12*			Program Electives	12*
		Free Electives****	10-11			Free Electives****	8-9
Total number of hours required for major, minor, or specialization			120	Total number of hours required for major, minor, or specialization			120
Total number of hours required for degree			120	Total number of hours required for degree			120

*At least 6 credit hours must be at the 400 level.	*At least 6 credit hours must be at the 400 level.
** A grade of C or better is required for graduation.	** A grade of C or better is required for graduation.
***A C or better course requirement applies only to the course used to fulfil the geophysics requirement. If the other course is taken as a	***A C or better course requirement applies only to the course used to fulfil the geophysics requirement. If the other course is taken as a

program elective, the grade requirement does not apply.	program elective, the grade requirement does not apply.
**** Free electives are courses with any prefix that are approved by the academic advisor. Excluded are CHEM 106/L, CSC 105, MATH 100, MATH 101/L, MATH 103/L, MATH 104, MATH 114/L, MATH 115, MATH 116/L, MATH 120, MATH 121/L, MATH 281, PHYS 101/L, PHYS 104/L, PHYS 111/L, PHYS 113/L. In addition, no courses of ENGL 0XX can be used.	**** Free electives are courses with any prefix that are approved by the academic advisor. Excluded are CHEM 106/L, CSC 105, MATH 100, MATH 101/L, MATH 103/L, MATH 104, MATH 114/L, MATH 115, MATH 116/L, MATH 120, MATH 121/L, MATH 281, PHYS 101/L, PHYS 104/L, PHYS 111/L, PHYS 113/L. In addition, no courses of ENGL 0XX can be used.

7. Explanation of the Change:

With the addition of PHYS course options on the SD Mines campus, the Geology BS program plans to retain the 3-credit options of PHYS 211 and 213. In addition, PHYS 211L and PHYS 213L are added as requirements to increase the exposure of geology students to the fundamentals of physics.

To accommodate these modifications, the number of free electives were modified from 10-11 to 8-9.