

GilletteCollege

Associate to Bachelors (A2B) Articulation Agreement

Prescribed Curriculum: Gillette College

Associate of Science – Engineering (Geological)

General Education Courses			27 CREDIT HOURS	
	Credit Hours	Community College Course No.	Course 1	Title or Category
Science	4	CHEM 1020	General Chemistry I	
Mathematics	4	MATH 2200	Calculus I	
	3	Select 1 course from	om Cultural Studies "Global Diversity" or "Foreign Language" categ	
Cultural Studies	3	Select 1 course from	Cultural Studies "Social and Be	ehavioral Sciences" category
US & WY Constitutions	3	HIST 1211, or 1221, or 1251, or 1251, or 1251	US to 1865, or US from 1865, or Wyoming History, or American and Wyoming Government	
Communication	3	ENGL 1010	English Composition I	
Communication	3	COMM 2010	Public Speaking	
Gen Ed Course of Choice	4	MATH 2205	Calculus II	

Required Courses			18 CREDIT HOURS
	Credit Hours	Course No.	Course Title
	4	MATH 2210	Calculus III
Mathematics & Science	3	MATH 2310	Applied Differential Equations
Science	4*	PHYS 1310	College Physics I
	1	ES 1000	Orientation of Engineering
Engineering	3	ES 2110	Statics
	3	ES 2120	Dynamics

Program Elective Courses			18 credit hours
	Credit Hours	Course No.	Course Title
ES Elective	3	ES 2410	Mechanics of Materials
	4*	CHEM 1030	General Chemistry II
	3	ES 2330	Fluid Dynamics
Program Elective	4*	GEOL 1100	Physical Geology
	4*	PHYS 1320	College Physics II

Associate of Science – Engineering (Geological) Total: 63 CREDIT HOURS (*59 credits apply)

Post-Associate Degree Prescribed Curriculum: South Dakota Mines

Bachelor of Science – Geological Engineering

General Education Co	6 CREDIT HOURS			
Credit Community College Hours Course No.			Course T	itle or Category
Written Communication	3	ENGL 289	Explorations in STEM Communications	
Arts & Humanities	3	Select 1 course from	General Education Arts and H	umanities (Goal 4)

Major Required Courses			43 CREDIT HOURS
	Credit Hours	Course No.	Course Title
	2	GEOE 201L	Surveying for Mining and Geological Engineering
	3	GEOL 212/212L	Mineralogy and Crystallography w/Lab
	3	GEOL 341/341L	Igneous and Metamorphic Petrology w/Lab
	3	GEOL 331/331L	Stratigraphy and Sedimentation w/Lab
	3	GEOL 416/416L	Introduction to GIS w/Lab
	3	GEOE 324/324L	Engineering Geophysics I w/Lab
Geology and	3	GEOL 322/322L	Structural Geology
Geological Engineering	3	GEOE 456/456L	Statistical Methods in Geology and Geological Engineering w/Lab
Lingineering	3	GEOE 466/466L	Engineering and Environmental Geology w/Lab
	3	GEOE 467	Introduction to Geomechanics
	3	GEOE 475/475L	Groundwater w/Lab
	3	GEOE 461	Geothermal and Production Engineering
	2	GEOE 464/464L	Geological Engineering Design Project I
	6	GEOE 410	Engineering Field Geology

Other Required Courses			16 credit hours	
	Credit Hours	Course No.	Course Title	
Economics	3	IENG 302 or MEM 302	Engineering Economics or Mineral Economics	
Computer Science	3	CSC 170/170L	Programming for Engineers and Scientists	
	3	CEE 346/346L	Geotechnical Engineering w/Lab	
Other Engineering	4	MET 320	Metallurgical Thermodynamics	
	3	MEM 304/304L	Theoretical and Applied Rock Mechanics w/Lab	

Elective Courses			6 CREDIT HOURS
	Credit Hours	Course No.	Course Title
Electives	6	Select from list	Professional Electives

Post-Associate Degree Total: 71 CREDIT HOURS

A2B Articulation Agreement Guarantees & Limitations

GUARANTEES

Students who:

- 1. complete the Associate of Science Engineering degree prescribed curriculum at Gillette College exactly as it is identified in this articulation agreement, **and**
- 2. have the degree conferred on their education record at Gillette College (post high school graduation), and
- 3. earn a minimum cumulative grade point average (GPA) of 2.75 at the Gillette College, and
- 4. pass all 63 credits for the associate degree, earning a grade C- or higher in each course

are guaranteed the following at the South Dakota School of Mines and Technology (South Dakota Mines):

- 1. junior standing at South Dakota Mines with no more than 71 remaining credits to meet the graduation requirements for the Bachelor of Science degree in Geological Engineering.
- 2. admission to South Dakota Mines
- 3. admission to the Bachelor of Science degree in Geological Engineering.

LIMITATIONS

- 1. This agreement is between the Associate of Science Engineering degree at Gillette College and the Bachelor of Science degree in Geological Engineering at South Dakota Mines only.
- 2. Students must meet all admission and application requirements at South Dakota Mines, including the submission of all required documentation by stated deadlines. Students are advised to contact the Office of Admissions at the South Dakota Mines early in their transfer planning.
- 3. Student must have a cumulative grade point average (GPA) at the Gillette College of 2.75 or higher **and** only courses with grades of C- or higher are guaranteed to be accepted in transfer by South Dakota Mines.
- 4. The credit and course transfer guarantees described in this agreement apply to the Associate of Science degree at Gillette College and the Bachelor of Science degree in Geological Engineering at South Dakota Mines. If the student changes majors at Gillette College or at South Dakota Mines, the student is no longer covered by this Articulation Agreement and none of the Guarantees of the Agreement apply.
- 5. Students utilizing any form of transfer credit, including but not limited to credit awarded from other higher education institutions, standardized exam (CLEP, AP, DSST, etc.), prior learning assessment (military, certifications, ACE recommended credit, portfolio, challenge exam, work experience equivalent credit, etc.) to satisfy any Associate degree requirements will have those credits evaluated by South Dakota Mines. Should South Dakota Mines not accept the transfer credits accepted by Gillette College, the student will be required to make up the credit deficiency at South Dakota Mines.
- 6. No course substitutions are allowed for the courses listed in the Prescribed Curriculum for the associate degree at Gillette College.

A2B CONTACT INFORMATION

South Dakota Mines Office of the Provost 605.394.2256 Provost@sdsmt.edu Gillette College Academic & Student Affairs 307.681.6000 Admissions@gillettecollege.org

RENEWAL, REVISION, and TERMINATION

- This Associate to Bachelor Articulation Agreement (A2B) shall be in effect July 1 June 30 each year and will
 automatically renew annually unless action is taken by South Dakota Mines or Gillette College to terminate or
 modify it.
- 2. The South Dakota Mines Office of the Provost and the Gillette College Academic and Student Affairs department will collaborate to coordinate a review the content of the associate and bachelor degrees on a three-year cycle to ensure this A2B is still appropriate.
- 3. South Dakota Mines and the Gillette College each reserve the right to seek revision of this agreement at any time.
- 4. Revision of any content of the agreement (except Appendices content) will be approved by each institution and result in a new agreement being signed, with copies retained by each institution.
 - a. Revision to any Appendices will be communicated to each institution, but do not need to be approved by each institution and will not result in a new agreement being signed by each institution.
- 5. South Dakota Mines and the Gillette College each reserve the right to seek termination of this agreement at any time.
- 6. Should the agreement be terminated, each institution agrees to collaborate and engage in appropriate plans to notify and work with impacted students, providing a minimum one-year advance notice of termination.

APPROVALS

DocuSigned by:		Signed by:	
Kance Bouts	1/22/2025	Janell Oberlander	1/17/2025
Lance Roberts, Ph.D.	Date	Janell Oberlander, Ed.D.	Date
Interim President		President	
South Dakota Mines		Gillette College	
President@sdsmt.edu		JOberlander@gillettecollege.org	
DocuSigned by:		Signed by:	
James Stone	1/18/2025	Barry Spriggs	1/14/2025
James Stone, Ph.D.	Date	Barry Spriggs, Ph.D.	Date
Interim Provost and Vice President f	or Academic Affairs	Vice President for Academic and Student	Affairs
South Dakota Mines		Gillette College	
Provost@sdsmt.edu		BSpriggs@gillettecollege.org	
DocuSigned by:		Signed by:	
	/18/2025	Martin Fashbaugh	12/19/2024
A STETE TA STEEL AND A STEEL A	Date	Artin Fashbaugh	Date
Department Head	Date	Dean of Arts and Sciences	Date
South Dakota Mines		Gillette College	
Rob.Hall@sdsmt.edu		MFashbaugh@gillettecollege.org	

Appendix A: Course Sequence

Course Sequence: Gillette College

Engineering - Geological (A.S.)

Semester	Course No.	Course Title	Credit Hours	Completed
Freshman	MATH 2200	Calculus I	4	
Year First Somostor	CHEM 1020	General Chemistry I	4	
First Semester	ES 1000	Orientation of Engineering	1	
	ENGL 1010	English Composition	3	
	GEOL 1100	Physical Geology (Program Elective)	4	
		Total Credits	16	

Semester	Course No.	Course Title		Credit Hours	Completed
Freshman	COMM 2010	Public Speaking (Advanced Writing)		3	
Year	CHEM 1030	General Chemistry II (Program Elective)		4	
Second Semester	ES 2110	Statics		3	
Semester	MATH 2205	Calculus II		4	
	PHYS 1310	College Physics I		4	
			Total Credits	18	

Semester	Course No.	Course Title	Credit Hours	Completed
Sophomore	MATH 2210	Calculus III	4	
Year	ES 2120	Dynamics	3	
First Semester	PHYS 1320	College Physics II (Program Elective)	4	
	ES 2410	Mechanics of Materials (ES Program Elective)	3	
		Total Cro	edits 14	

Semester	Course No.	Course Title	Credit Hours	Completed
Sophomore	MATH 2310	Applied Differential Equations	3	
Year	Select 1 course from:	Cultural Studies: Social & Behavioral Science area	3	
Second Semester	Select 1 course from:	Cultural Studies: Foreign Language or Global Diversity areas	3	
Semester	ES 2330	Fluid Dynamics (Program Elective)	3	
	Select 1 course from:	HIST 1211, HIST 1221, HIST 1251, POLS 1000 (US/WY Const)	3	
		Total Credits	15	
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General Education Coursework Total:	27* credit hours
Major and Elective Coursework Total:	36* credit hours
Gillette College Coursework Total:	63 CREDIT HOURS (*59 credits apply)

Course Sequence: South Dakota Mines – Fall Semester Start

Geological Engineering (B.S.)

Semester	Course No.	Course Title	Credit Hours	Completed
Junior Year First Semester - FALL	GEOE 201L	Surveying for Mining and Geological Engineers	2	
	GEOL 212/212L	Mineralogy & Crystallography w/lab	3	
	GEOE 467	Introduction to Geomechanics	3	
	GEOL 331/331L	Stratigraphy & Sedimentation w/lab	3	
	CSC 170/170L	Programming for Engineers and Scientists w/lab	3	
		Arts/Humanities Gen Ed Elective (Goal 4)	3	
		Total Credits	17	
Semester	Course No.	Course Title	Credit Hours	Completed
unior Year	GEOL 341/341L	Igneous & Metamorphic Petrology w/lab	3	
Second	GEOE 456/456L	Statistical Methods in Geology and Geological Eng w/lab	3	
Semester - SPRING	GEOE 324/324L	Engineering Geophysics w/lab	3	
	Select 1 from	IENG 302 Engineering Econ or MEM 302 Mineral Econ	3	
	ENGL 289	Explorations in STEM Communications	3	
		Professional Elective	3	
		Total Credits	18	
Semester	Course No.	Course Title	Credit Hours	Completed
Senior Year First Semester - FALL	MET 320	Metallurgical Thermodynamics	4	
	GEOL 416/416L	Introduction to GIS w/lab	3	
	GEOE 466/466L	Engineering & Environmental Geology w/lab	3	
	GEOE 475/475L	Groundwater w/lab	3	
	CEE 346/346L	Geotechnical Engineering w/lab	3	
		Total Credits	16	

Semester	Course No.	Course Title	Credit Hours	Completed
Senior Year Second Semester - SPRING	GEOE 461	Geothermal & Production Engineering	3	
	GEOE 464/464L	Geological Engineering Design Project I	2	
	MEM 304/304L	Theoretical & Applied Rock Mechanics w/lab	3	
	GEOL 322/322L	Structural Geology w/lab	3	
		Professional Elective	3	
		Total Crea	dits 14	

Semester	Course No.	Course Title	Credit Hours	Completed
Senior Year Third	GEOE 410	Engineering Field Geology	6	
Semester -				
Summer				
		Total Credits	6	

*General Education Coursework Total:	6 credit hours
Major and Elective Coursework Total:	<u>65 credit hours</u>
South Dakota Mines Coursework Total:	71 CREDIT HOURS