



**DEPARTMENT OF GEOLOGICAL SCIENCES**  
**GEOLOGY BACHELOR OF SCIENCE**  
**CLASS OF 2023**  
**(MAY GRADUATION)**



Geology B.S.

**NAME:**

TERM 1	TERM 2	TERM 3	TERM 4	TERM 5	TERM 6	TERM 7	TERM 8
GE B4 MATH 150A or MATH 130 4 units	MATH 150B or CHEM 120A 4/5 units	CHEM 120A or CHEM 120B 5 units	UD GE B5 MATH 338 or CHEM 120B 4/5 units	PHYS 211 or PHYS 225 3 units	PHYS 212 or PHYS 226 3 units	GEOL Elective 3 units	GEOL Quantitative Elective 3 units
GE B1 GEOL 101 or GEOL 110T 3 units	GE B2 BIO 101+101L 4 units	GEOL 303A 4 units	GEOL 303B 4 units	PHYS 211L or PHYS 225L 1 unit	PHYS 212L or PHYS 226L 1 unit	GEOL Elective 3 units	GEOL Elective or UD GE B5 GEOL 333 3 units
GE B3 GEOL 101L 1 unit	GEOL 201 3 units	GEOL 335 3 units	GEOL 380 3 units	GEOL 360 4 units	GEOL 321 4 units	GEOL 498 1 unit	GEOL 498 1 unit
GE A3 CNSM 101 3 units	GE A1 or A2 3 units	GE C3 3 units	GE C2 3 units	GE C1 3 units	GEOL 498 1 unit	4 units undesignated	GE E 3 units
GE A1 or A2 3 units				GE D1 3 units	GE D2 +D3 6 units	UD GE C4 3 units	UD GE D4 3 units
				2 units undesignated	GEOL 481A 4 units in SUMMER		
14 units	14-15 units	15 units	14-15 units	16 units	15+4 units	14 units	13 units

min. 30	related sciences
min. 48	Geology BS core
max. 33	additional lower division GE and undesignated units
min. 9	upper division GE
<b>120</b>	<b>TOTAL UNITS</b>

**INSTRUCTIONS FOR COMPLETING THE GEOLOGY BACHELOR OF SCIENCE**

1. Meet with your assigned faculty advisor each semester to plan and review your academic progress.
2. Visit your College of Natural Sciences and Mathematics Student Success Team in MH 488 to review GE and graduation requirements.
3. Complete GE courses in areas A1, A2, A3 and B4 with a C or better.
4. Complete a total of 12 units in GE Area B.
5. One course from GE Area Z can also fulfill a requirement in categories C3, D5 or E. Check your Titan Degree Audit for courses that appear in both categories.
6. Apply for Graduation through your Student Center at the start of Term 7.

## GEOLOGY BACHELOR OF SCIENCE

The Bachelor of Science in Geology degree provides a field- and lab-based understanding of planet Earth, along with a rigorous scientific foundation in the physical sciences. This degree is offered for students who are interested primarily in employment as geoscientists in industry or government, or further graduate studies in the geological sciences.

Though advisor-approved substitutions are possible, the following courses are required to complete the B.S. in Geology:

### CORE COURSES

- Complete the **thirteen** courses listed below:

Course	Course Title
GEOL 101	Physical Geology
GEOL 101L	Physical Geology Laboratory
GEOL 201	Earth History
GEOL 303A	Earth Materials
GEOL 303B	Igneous and Metamorphic Petrology
GEOL 321	Sedimentation and Stratigraphy
GEOL 335	Hydrology and Surface Processes
GEOL 360	Structural Geology
GEOL 380	Geologic Field Techniques
GEOL 481	Geology Field Camp
GEOL 498	Undergraduate Thesis (fulfills the University Upper Division GE writing requirement)
BIOL 101+Lab	Elements of Biology
CHEM 120A	General Chemistry I
CHEM 120B	General Chemistry II

### GEOLOGY ELECTIVE COURSES

- Complete **one** of the four quantitative elective courses listed below:

Course	Course Title
GEOL 406	Geochemistry
GEOL 456	Geophysics
GEOL 475	Quaternary Tectonics
GEOL 476	Engineering Geology

- Complete an **additional three** of the 17 elective courses listed below:

Course	Course Title
GEOL 322	Paleontology
GEOL 333	Oceanography
GEOL 336	GEO/BIO Field Investigations
GEOL 355	Earth's Interior
GEOL 381	Data Collection and Analysis for Earth Scientists
GEOL 406	Geochemistry
GEOL 408	Volcanology
GEOL 410	Planet Earth for Educators
GEOL 420	Earth Science Communication, Ed. & Outreach
GEOL 433	Coastal Processes
GEOL 436	Hydrogeology
GEOL 440	Paleoclimatology
GEOL 455	Earthquake Seismology
GEOL 456	Geophysics
GEOL 470	Environmental Geology
GEOL 475	Quaternary Tectonics
GEOL 476	Engineering Geology

### RELATED SCIENCE AND MATHEMATICS COURSES

- Complete **one** of the two physics sequences listed below:

Course	Course Title
PHYS 211+Lab	Elementary Physics
PHYS 212+Lab	Elementary Physics

or

PHYS 225+Lab	Fundamental Physics: Mechanics
PHYS 226+Lab	Fundamental Physics: Electricity & Magnetism

- Complete **one** of the two math sequences listed below:

Course	Course Title
MATH 150A	Calculus I
MATH 150B	Calculus II

or

MATH 130	A Short Course in Calculus
MATH 338	Statistics Applied to Natural Sciences

### GENERAL EDUCATION REQUIREMENTS

- Area A.** Complete one course in each subarea for a total of 9 units of lower division.

Subarea	Title
A1	Oral Communication
A2	Written Communication
A3	Critical Thinking: CNSM 101 Think Like Einstein

- Area B.** Complete one course in each subarea; the course in B3 must be associated with the course taken to satisfy B1 or B2. Area B courses must include 9 lower division and 3 upper division units.

Subarea	Title
B1	Physical Science: GEOL 101 or 110T
B2	Life Science: BIOL 101 or 152
B3	Laboratory Activity: GEOL 101L
B4	Mathematics/Quantitative Reasoning
B5	Science Exploration: MATH 338 or GEOL333

- Area C.** Complete 3 units from C.1; 3 units from C.2; 3 units from C.3; and 3 units from either C.1 or C.2 for a total of 9 lower division and 3 upper division units.

Subarea	Title
C1	Introduction to Arts
C2	Introduction to Humanities
C3	Exploration in the Arts/Humanities

- Area D.** Complete 9 lower division and 3 upper division units.

Area	Title
D1	Introduction to the Social Sciences
D2	American History, Institutions, and Values
D3	American Government
D4	Explorations in Social Sciences (upper division)

- Area E.** Complete 3 lower division units.

Area	Title
E	Lifelong Learning and Self Development