

B.S. in Geosciences

Degree-Specific Requirements*:

Chemistry 1411: General Chemistry I
Chemistry 1412: General Chemistry II
Choose 2 of the following (or more advanced):
Math 1314: Pre Calculus Algebra
Math 1316: Plane Trigonometry
Math 1410: Elementary Functions
Math 1420: Calculus I
Physics 1301: General Phy- Mechanics & Heat
Physics 1101: General Physics Lab I
Physics 1302: General Phy- Sound, Lght, Elec, & Mag
Physics 1102: General Physics Lab II

Major Core:

Choose 1 of the following 2:
Geology 1403: Physical Geology **OR**
Geology 1405: Geologic & Environmental Hazards
Geology 1404: Historical Geology
Geology 3301: Field Methods
Geology 3404: Mineralogy
Geology 3405: Petrology
Geology 4304: Geochemistry
Geology 4400: Stratigraphy & Sedimentation
Geology 4402: Structural Geology
Choose 1 of the following 2:
Geology 4320: Petroleum Geology **OR**
Geology 4426: Hydrogeology

Select 15 cr from the following advanced electives:

Geology 3326: Environmental Geology
Geology 3330: Oceanography
Geology 3415: Paleontology of Invertebrates
Geology 4312: Economic Geology
Geology 4320: Petroleum Geology
Geology 4331: Geology of North America
Geology 4337: Plate Tectonics
Geology 4426: Hydrogeology
Geography 4330: Hydrology & Water Resources
Geography 4432: Geomorphology

This track/concentration is designed for students that are not able to take or complete Field Camp (Geol 4360, 4361) and/or Calculus I, Calculus II, or Math 3379 in the Geology major.

B.S. in Geology

Degree-Specific Requirements*:

Chemistry 1411: General Chemistry I
Chemistry 1412: General Chemistry II
Math 1420: Calculus I
Choose 1 of the following 2:
Math 1430: Calculus II **OR**
Math 3379: Statistical Methods in Practice
Physics 1301: General Phy- Mechanics & Heat
Physics 1101: General Physics Lab I
Physics 1302: General Phy- Sound, Lght, Elec, & Mag
Physics 1102: General Physics Lab II

Major Core:

Choose 1 of the following 2:
Geology 1403: Physical Geology **OR**
Geology 1405: Geologic & Environmental Hazards
Geology 1404: Historical Geology
Geology 3301: Field Methods
Geology 3404: Mineralogy
Geology 3405: Petrology
Geology 4304: Geochemistry
Geology 4400: Stratigraphy & Sedimentation
Geology 4402: Structural Geology
Choose 1 of the following 2:
Geology 4320: Petroleum Geology **OR**
Geology 4426: Hydrogeology
Geology 4360: Field Geology
Geology 4361: Field Geology

Select 10 cr from the following advanced electives:

Geology 3326: Environmental Geology
Geology 3330: Oceanography
Geology 3415: Paleontology of Invertebrates
Geology 4312: Economic Geology
Geology 4320: Petroleum Geology
Geology 4331: Geology of North America
Geology 4337: Plate Tectonics
Geology 4426: Hydrogeology
Geography 4330: Hydrology & Water Resources
Geography 4432: Geomorphology

Suggested Course Sequence

Choose 1 of the following 2:
Geology 1403: Physical Geology (Fall, Spring, Summer) **OR**
Geology 1405: Geologic & Environmental Hazards (F, Sp, Su)

Geology 1404: Historical Geology (Fall, Spring)

In addition to the completion of the 2 required 1000-level Geology courses above, it is ***strongly recommended*** that students complete Chem I and II, Physics I and II, and their Math courses during their first two years and prior to enrolling in Geol 3404, Geol 4304, Geol 4320, Geol 4400, Geol 4402, or Geol 4426.

Geology 3301: Field Methods
(Summer after Soph. or Junior year - May minimester)

Geology 3404: Mineralogy (Fall)
Geology 3405: Petrology (Spring)
Ideally, Mineralogy and Petrology should be completed during the student's sophomore or junior year before enrolling in the following courses:

Geology 4400: Stratigraphy & Sedimentation (Fall)
Geology 4304: Geochemistry (Fall)

Geology 4402: Structural Geology (Spring)
Geology 4320: Petroleum Geology (Spring)

Geology 4360: Field Geology (Final summer)
Geology 4361: Field Geology (Final summer)

Geology Minor

Required:
Geology 1404: Historical Geology

Select 1 of the following:
Geology 1403: Physical Geology **OR**
Geology 1405: Geologic & Environmental Hazards

In addition, 12 advanced (3000 or 4000 level) Geology elective hours are required.

*Both the Geoscience and Geology B.S. degrees require an additional minor in order to complete state-mandated credit hour requirements; core curriculum not included in concentration requirements.