

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.