

## Geoscience Curriculum

<u>Core, required of all (semester typically offered)</u>	<u>Credits</u>
GEOSCI 100 or 106: General or Environmental Geology (Fall & Spr)	3
GEOSCI 202 Introduction to Geologic Structures (Fall)	4
GEOSCI 204 Geologic Evolution of the Earth (Spr)	4
GEOSCI 360 Principles of Mineralogy (Fall)	3
GEOSCI 370 Introductory Petrology (Spr)	<u>3</u>
<b>Total:</b>	<b>17</b>

## Geology track

### **Required:**

GEOSCI 350 Intro to Geophysics: The Dynamic Earth	3
GEOSCI 375 Principles of Geochemistry	3
GEOSCI 430 Sedimentology and Stratigraphy	3
GEOSCI 455 Structural Geology	4
Geoscience electives numbered 300 and above (excluding GEOSCI 331)	<u>4</u>
<b>Total:</b>	<b>17</b>

## Geophysics and Engineering Geology track

### **Required:**

GEOSCI 431 Sedimentology and Stratigraphy Lab	1
GEOSCI 455 Structural Geology	4
GEOSCI 474 Rock Mechanics	3
GEOSCI 594 Introduction to Applied Geophysics	3
GEOSCI 595 Field Methods in Applied Geophys & Engr Geophys	1
GEOSCI 627 Hydrogeology	<u>4</u>
	<b>16</b>

Students choosing this track may not take Physics 103 & 104. A student may substitute EMA 201 & 202 for Physics 201, 207, or 247, and complete the major Physics requirement with Physics 202, 208 or 248. Additional semester of Physics and Math are also required.

- a) EMA 303 OR ME 306 OR Physics 311 OR Physics 322  
b) Math 234 OR Math 319 OR Math 320 OR Math 340

Students who are not GLE majors may substitute GEOSCI 350 for either GEOSCI 474 or GEOSCI 627

## Environmental Geoscience track

### **Directed Electives: take one from each category**

#### Surface Environments

GEOSCI 420 Glacial and Pleistocene Geology	3
GEOSCI 430 Sedimentology and Stratigraphy	3
GEOSCI 627 Hydrogeology	4
GEOSCI 320 Geomorphology	3

#### Geochemistry

GEOSCI 375 Principles of Geochemistry	3
GEOSCI 610 Geochronology, Timescales, and Rates of Geologic Processes	3
GEOSCI 629 Contaminant Hydrogeology	3

#### Geobiology

GEOSCI 304 Geobiology	3
GEOSCI 541 Paleobiology	3
GEOSCI 542 Invertebrate Paleontology	3

#### Earth Resources

GEOSCI 410 Minerals as a Public Problem	3
GEOSCI 411 Energy Resources	3
GEOSCI 455 Structural Geology	4
GEOSCI 515 Principles of Economic Geology	4
GEOSCI 594 Introduction to Applied Geophysics	3
Geoscience electives numbered 300 and above (excluding GEOSCI 331)	<u>3-5</u>
<b>Total:</b>	<b>17</b>

## General Geoscience track

**Choose 17 credit hours of geoscience electives  
numbered 300 and above (excluding GEOSCI 331)**