**UNIVERSITY GRADUATION REQUIREMENTS:** OSU's minimum credit hour requirements are met by combining Baccalaureate Core and Major courses plus other electives of your choice. Additional electives may be needed to reach the university degree requirements.

- 180 credits – Minimum number of credits required for a BS degree
- 60 credits – Minimum number of upper division credits required
- 2.00 Cumulative OSU GPA
- 45 of the last 75 credits (or 150 total credits) of coursework must be from OSU

**BACCALAUREATE CORE REQUIREMENTS:** Total of 48 credits plus WIC course. No single course may be used to satisfy more than one area of the Bacc Core. Courses fulfilled through the major are checked.

**Skills (15 credits)**
- Writing I (3)
- Writing II (3)
- Speech (3)
- Math 105 or higher (3)
- HHS 231 Lifetime Fitness for Health (2)
- Fitness lab (HHS 241-248 or any PAC course) (1)

**Perspectives Courses (24 credits – no more than two courses taken from the same department)**
- Biological Science w/lab (4)
- Physical Science w/lab (4) (Met by GEO 201)
- Biological or Physical Science w/lab (4) (Met by GEO 202)
- Cultural Diversity (3)
- Literature and the Arts (3)
- Social Processes and Institutions (3)
- Western Culture (3)

**Difference, Power and Discrimination (3 credits)**
- Difference, Power and Discrimination (3)

**Synthesis (6 credits – These two classes must be upper division and from different subjects.)**
- Contemporary Global Issues (3)
- Science, Technology and Society (3)

**Writing Intensive Course within Earth Sciences (4 credits)**
- Met by GEO 463 (4)

**EARTH SCIENCES MAJOR REQUIREMENTS - GEOLOGY OPTION:** Students must earn at least a C minus in upper division (300 or higher) courses required for the major and a 2.0 overall GPA in major coursework. Students cannot S/U major requirements.

**Basic Math and Science Requirements (38-41 credits)**
- MTH 251 Differential Calculus (4)
- MTH 252 Integral Calculus (4)
- ST 351 Intro to Statistical Methods (4)
- (CH 231 + CH 261) or CH 121 (5)
- (CH 232 + CH 262) or CH 122 (5)
- PH 211 or PH 201 (4-5)
- PH 212 or PH 202 (4-5)
- (CH 233 + CH 263) or CH 123 (5)
- PH 213 or PH 203 (4-5)
- (CH 234 + CH 264) or CH 124 (5)
Earth Sciences Core Courses (20-24 credits)
- GEO 201 Physical Geology (4) [FW]
- GEO 202 Earth Systems Science (4) [W]
- GEO 203 Evolution of Planet Earth (4) [Sp]
- OC 201 Oceanography (4) [FW]
- ATS 201 Climate Science (4) [FSp]

Choose one additional skills course
- CBEE 102 Engineering Problem Solving and Computations (3)
- ENGR 112 Introduction to Engineering Computing (3)
- GEOG 360 GISci. I: Geog. Info Systems and Theory (4) [FSp]
- PH 265 Scientific Computing (3)
- ST 352 Introduction to Statistical Methods (4)

Geology Courses (45 credits)
- GEO 310 Earth Materials I: Mineralogy (4) [F]
- GEO 315 Earth Materials II: Petrology (4) [W]
- GEO 415 Earth Materials III: Igneous Petrography (4) [Sp]
- GEO 370 Stratigraphy & Sedimentology (4) [W]
- GEO 340 Structural Geology (4) [Sp]
- GEO 322 Surface Processes (4) [F]
- GEO 487 Hydrogeology (4) [F]
- GEO 430 Geochemistry (4) [W]
- GEO 463 Geophysics and Tectonics \( ^{WIC} \) (4) [Sp]

Prerequisite
- GEO 201 and (CH 231 or 121)
- GEO 310
- GEO 202 and GEO 203
- GEO 201
- GEO 202, MTH 251, and (PH 211 or 201)
- MTH 252 and GEO 202
- GEO 315 and (CH 231 and 232)
- MTH 251 and (PH 212 or 202)

Experiential Learning
- GEO 295 Introduction to Field Geology (3) [Fall - late Sept]
- GEO 495 Advanced Field Geology (6) [Summer - June/July]

Geology Electives (9-12 credits): Take three electives from the lists below:

Earth Surface
- BI 427 Paleobiology (3) (requires permission)
- GEO 431 Environmental Geochemistry (3) [Sp Alt E]
- GEO 432 Applied Geomorphology (3) [Sp]
- GEO 481 Glacial Geology (4) [F Alt E]
- GEO 484 Introduction to Biogeochemistry (3) [W Alt E]
- GEO 486 Quaternary Paleoclimatology (3) [W Alt O]  

Natural Hazards
- GEO 427 Volcanology (4) [Sp Alt O]
- GEO 433 Coastal Geomorphology (3) [W Alt O]
- GEO 461 Geology of Earthquakes (3) [F Alt E]

Solid Earth
- GEO 488 Quaternary Stratigraphy of No. Am. (3) [F Alt O]
- GEOG 423 Snow Hydrology (3) [W]
- GEOG 480 Remote Sensing I: Practices and Appl. (4) [F]
- SOIL 466 Soil Morphology and Classification (4) [Sp Alt E]
- SOIL 468 Soil Landscape Analysis (4) [W Alt E, SOIL 466 prereq]
- OC 460 Geological Oceanography (3) [Sp]
- GEO 412 Igneous Petrology (4) [F Alt O]
- GEO 440 Economic Geology (4) [W Alt E]
- GEO 497 Field Mapping of Ore Deposits (3) [Sp Alt O]

The following categories MAY count toward an elective with approval from the Program Head. You may not use GEO 401 or 410.

- 400 level courses in other departments or programs (ATS, OC etc.)
- GEO 499 Special Topics
- GEO 403 Thesis (3 credits)
- 500 level courses

Alt = alternating
O=odd, E=even
F = fall, W = winter, Sp = spring
WIC = Writing Intensive