EARTH SCIENCE, B.S. - GEOLOGY

The program outline and graduation requirements are listed below. In addition, free electives are selected to reach 120 credits overall required for graduation.

The department website provides an overview of the program, admission requirements (when applicable), faculty biographies, learning outcomes, and careers: https://www.southernct.edu/academics/earth-science/programs

GENERAL EDUCATION REQUIREMENTS

All bachelor’s degree programs include liberal education (LEP) and writing (W) course requirements. To review more detailed information regarding these requirements, please visit Degree Requirements >> General Education (LEP) Requirements. Courses in the major and/or cognate may also be used to satisfy LEP requirements where noted below (*).

MAJOR REQUIREMENTS (59 Credits)

‘C-’ or better required

ESC 200 — Physical Geology
ESC 201 — Historical Geology (T2LE)*
ESC 210 — Principles of Astronomy (T2TP)*
ESC 235 - Computation and Visualization of Data in the Earth Science
ESC 311 — Mineralogy
ESC 312 – Petrology
ESC 325 – Stratigraphy and Sedimentation
ESC 332 – Invertebrate Paleontology OR ESC 461 - Glacial Geology (T3)*
ESC 350 – Structural Geology and Tectonics
ESC 430 — Field Methods

Select six courses courses from:
ESC 205 — Principles of Meteorology
ESC 220 — Physical and Chemical Oceanography
ESC 303 – Environmental Earth Science
ESC 315 – Geomorphology
ESC 420 – Earth Resources
ESC 421 – Marine Geology
ESC 457 — Hydrology
ESC 458 — Soil Science
ESC 459 - Engineering Geology
ESC 460 - Geochemistry

Select one option from the two listed below:
ESC 492 – Undergraduate Thesis Proposal and ESC 493 – Undergraduate Thesis
Two additional ESC courses at or above the 200-level

**COGNATE REQUIREMENTS (16 Credits)**

- CHE 120 – General Chemistry I (T2PR)*
- PHY 200 - General Physics I OR PHY 230 - Physics for Scientists and Engineers I

Select one from:
- BIO 102 – Biology I
- BIO 120 – Microbiology
- CHE 121 – General Chemistry II
- PHY 201 – General Physics II or PHY 231 - Physics for Scientists and Engineers II

Select one from: (T1QR)*
- MAT 122 – Precalculus
- MAT 150 – Calculus I

**Non-Course Requirements:**
Pass Praxis® II with a score of 157 or higher