EARTH SCIENCE, B.S. - NATURAL RESOURCES

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 (45 Credits)

'C-' or better required

ESC 200 - Physical Geology
ESC 201 - Historical Geology (T2LE)*
ESC 205 - Principles of Meteorology
ESC 235 - Computation and Visualization of Data in the Earth Science
ESC 311 - Mineralogy
ESC 312 - Petrology OR 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 8 credits from:
ESC 220 - Physical and Chemical Oceanography
ESC 303 - Environmental Earth Science
ESC 312 - Petrology
ESC 315 - Geomorphology
ESC 325 - Stratigraphy and Sedimentation
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 following two:
ESC 492 – Undergraduate Thesis Proposal and ESC 493 – Undergraduate Thesis
Two additional ESC courses at the 200-level or above

**COGNATE REQUIREMENTS (32 Credits)**

BIO 102 - Biology I  
BIO 103 - Biology II  
CHE 120 - General Chemistry I (T2PR)*  
CSC 152 or MAT 107 or MAT 221 - Computer Science/Mathematics  
MAT 120 or MAT 122 or MAT 150 - Mathematics Cognate (T1QR)*  
PHY 200 - General Physics I

Select three from:  
BIO 202 - Ecology  
BIO 210 - Environmental Biology and Conservation  
BIO 215 - Animal Behavior  
BIO 228 - Vertebrate Zoology  
BIO 229 - Invertebrate Zoology  
BIO 230 - Plant Anatomy and Morphology  
BIO 232 - Morphology of Non-Vascular Plants  
BIO 233 - Introductory Microbiology  
BIO 250 - Plant Diversity  
BIO 327 - Field Natural History  
BIO 429 - Limnology

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