EARTH SCIENCE, B.S. - ENVIRONMENTAL SCIENCE

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.southerncsu.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 http://catalog.southerncsu.edu/undergraduate/degree-requirements.html (General Education Requirements). Courses in the major and/or cognate may also be used to satisfy LEP requirements where noted below (*).

MAJOR REQUIREMENTS (56 Credits)

‘C-’ or better required

ESC 200 - Physical Geology
ESC 201 - Historical Geology (T2LE)*
ESC 205 - Principles of Meteorology
ESC 220 - Physical and Chemical Oceanography
ESC 235 - Computation and Visualization of Data in the Earth Science
ESC 303 – Environmental 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 three courses from:
ESC 315 - Geomorphology
ESC 404 - Air Pollution Meteorology
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 or above the 200-level

**COGNATE REQUIREMENTS (22 Credits)**

CHE 120 – General Chemistry I (T2PR)*
PHY 200 – General Physics I

Select one from:
BIO 102 – Biology I
BIO 103 - Biology II
BIO 120 – Microbiology
CHE 121 – General Chemistry II
PHY 201 – General Physics II

Select two from:
BIO 202 - Ecology
BIO 210 - Environmental Biology and Conservation
BIO 230 - Plant Anatomy and Morphology
CHE 240 - Analytical Chemistry
CHE 340 - Environmental Chemistry
PCH 202 -Introduction to Public Health
PCH 259 - Environmental Health

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

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