BACHELOR OF SCIENCE ENVIRONMENTAL GEOSCIENCES

NEW program

DYNAMIC INTERDISCIPLINARY PROGRAM

PREPARES STUDENTS FOR CAREERS ADDRESSING THE CHALLENGES SURROUNDING ENVIRONMENTAL AND EARTH SYSTEMS ISSUES

CLIMATE CHANGE, EMERGING POLLUTANTS, AND SUSTAINABILITY SCIENCE

AVAILABLE NOW

GEOLOGY.COFC.EDU
SCAN FOR PROGRAM INFO
Program of Study Guidelines  
122 total credit hours for the degree
63+ credits for GENV
Full time schedule: 15+ credits per semester  
Environmental Geosciences B.S.

**Step 1**
- GEOL 103 (Environmental Geology)
- MATH 111 (Pre-Calc)*
- GEOL 105 (Earth History)
- CHEM 111
- BIOL 101/111 or PHYS 101/111

**Step 2**
- GEOL 250^ or CHEM 112
- GEOL 253** (Earth Syst.)
- GEOL 272^ (Strat./Sed.)
- GEOL 291 (Water Resour.)
- GEOL 313^ (Critical Zone)
- BIOL 102/112 or PHYS 102/112
- MATH 250 (Statistics)
- Elective

**Step 3**
- GEOL 303, 491 or 499
  (Independent Study, Senior Thesis or Bachelor Essay)
- GEOL 492 (Senior Seminar)
  Elective
- Elective
- Elective
- Field Studies course (Summer)

* Students should first complete MATH 110 (formerly MATH 101) if they did not place into MATH 111 (Pre-Calc).

** Usually Fall only  ^ Usually Spring only

‡ Students must take 3 credits from a selected list of BIOL, CHEM, ECON, PHYS, POLS or URST courses

Contact the Department for more information:
[callahant@cofc.edu](mailto:callahant@cofc.edu) or [whitekl@cofc.edu](mailto:whitekl@cofc.edu)
Required Courses:

- GEOL 103 Environmental Geology (3)
- GEOL 103L Environmental Geology Laboratory (1)
- GEOL 105 Earth History (3)
- GEOL 105L Earth History Laboratory (1)
- GEOL 256 Earth Systems Science (4)
- GEOL 272 Stratigraphy and Sedimentation (4)
- GEOL 291 Water Resources (4)
- GEOL 313 Critical Zone Science (3)
- GEOL 362 (4) OR GEOL 364 (4) OR GEOL 365 (4) [All are Field Studies]
- GEOL 492 Senior Seminar (1)

Complete 15 or more Credit Hours of:
(at least 6 of these credit hours must be at the 250-level):

- GEOL 213 Natural Hazards (3)
- GEOL 240 Special Topics in Geology (1-4)
- GEOL 253 Earth Systems Science (4)
- GEOL 257 Marine Geology (4)
- GEOL 275 Geomorphology (4)
- GEOL 288 Global Change (3)
- GEOL 303 Independent Study in Geology (1-3)
- GEOL 312 Environmental Field Methods (3)
- GEOL 320 Earth Resources (3)
- GEOL 339 Seafloor Research (3)
- GEOL 357 Oceanographic Research-the Transect Program (4)
- GEOL 360 Field Studies (4)
- GEOL 364 Field Studies: Environmental Geology and Water Resources in the Developing World (4)
- GEOL 365 Field Studies: Geology and Environmental Geosciences in Africa (4)
- GEOL 385 Internship (1-4)
- GEOL 395 Special Topics in Geology (1-4)
- GEOL 397 Research (0)
- GEOL 399 Tutorial (1-3)
- GEOL 402 Geospatial Science (4)
- GEOL 412 Crustal Geophysics (3)
- GEOL 438 Hydrogeology (4)
- GEOL 441 Pollution in the Environment (4)
- GEOL 442 Geological Application of Remote Sensing (4)
- GEOL 449 Geographical Information Systems (4)
- GEOL 469 Advanced GIS - Environmental and Hazards Modeling (4)
- GEOL 491 Senior Thesis
- GEOL 495 Special Topics (1-4)
- GEOL 499A Bachelor’s Essay (3)
- GEOL 499B Bachelor’s Essay (3)
122 total credit hours for the degree
Full time schedule: 15+ credits per semester

**GEOLOGY & ENVIRONMENTAL GEO SCIENCES SCHEDULE**

Core courses listed are for GEOL and for **GENV** majors.
Courses are 4 credits/6 contact-hour, lecture + lab format, unless noted.

<table>
<thead>
<tr>
<th>FALL 2021</th>
<th>SPRING 2022</th>
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<tbody>
<tr>
<td>253: Earth System Science*</td>
<td>250: Introduction to Geochemistry <em>(or CHEM 112</em>)</td>
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<tr>
<td>256: Mineralogy/Petrology</td>
<td>272: Stratigraphy and Sedimentation</td>
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<td>352: Structural Geology</td>
<td>291: Water Resources</td>
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<td>492: Senior Seminar</td>
<td>333: Paleobiology</td>
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**SUMMER FIELD STUDIES COURSES (choose one)**


Core courses for GENV are in red.

* New Course

^See Chemistry Department for course schedule
Program of Study Guidelines
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Full time schedule: 15+ credits per semester

**University requirements:**

<table>
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<tr>
<th>Humanities</th>
<th>First Year Experience</th>
<th>English</th>
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<td>English 110 OR a combination of approved courses (101*, 102*, 215); Exemption is possible</td>
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<td>12 credits from approved Humanities courses with no more than 6 from the same discipline</td>
<td>FYE or Hons BGS</td>
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<th>Foreign Language</th>
<th>History</th>
<th>Social Science</th>
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<td>Completion of 202 or its equivalent; Exemption is possible</td>
<td>Pre-modern History</td>
<td>Social Science 1</td>
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<td>Modern era History</td>
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<td></td>
<td></td>
<td>Social Science 2</td>
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</tbody>
</table>

**Course number, semester**

**First Year Experience:**

**Foreign Language:**

**Humanities**

**Social Sciences:**

**English**:

*English 101 and 102 are not offered by College of Charleston but continue to be available through approved credit [Advanced Placement (AP, International Baccalaureate (IB), or Transfer (TR)].