# EARTH AND SPACE SCIENCE (BS) - GEOLOGY TRACK

## Program of Study

Click on the Program Map tab to view a term-by-term guide for completing the program requirements.

## Core Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 1101</td>
<td>English Composition I (minimum grade of C)</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 1102</td>
<td>English Composition II (minimum grade of C)</td>
<td>3</td>
</tr>
</tbody>
</table>
| MATH 1113 | Pre-Calculus 1
 or MATH 1131 | Calculus with Analytic Geometry I  | 4            |

**Area A Total**: 9 credit hours

**Area B Institutional Options**: 2 credit hours

**B1**: Select 3 hours of following courses:

- COMM 1110 Public Speaking
- Any Foreign Language 1001, 1002, 2001, 2002

**B2**: Select 1 hour of the following courses:

- ITDS 1779 Scholarship Across the Disciplines
- LEAD 1705 Introduction to Servant Leadership
- PERS 1506 Perspectives 1-hour
- PERS 1507 Perspectives 2-hour

**Area B Total**: 4 credit hours

**Area C Humanities/Fine Arts/Ethics**: 6 credit hours

Select one of the following humanities courses:

- ENGL 2111 World Literature I
- ENGL 2112 World Literature II
- ITDS 1145 Comparative Arts
- ITDS 1155 The Western Intellectual Tradition
- ITDS 2125 Historical Perspectives on the Philosophy of Science and Mathematics
- PHIL 2010 Introduction to Philosophy

Select one of the following fine arts courses:

- ARTH 1100 Art Appreciation
- ITDS 1145 Comparative Arts
- MUSC 1100 Music Appreciation
- THEA 1100 Theatre Appreciation
- ARTH 2125 Introduction to the History of Art I – Prehistoric through Gothic
- ARTH 2126 Introduction to the History of Art II – Renaissance through Modern

**Area C Total**: 6 credit hours

**Area D Science/Math/Technology**: 2 credit hours

**D1**: Select two of the following lab science courses:

- CHEM 1211 Principles of Chemistry I
- CHEM 1211L Principles of Chemistry I Lab
- CHEM 1212 Principles of Chemistry II
- CHEM 1212L Principles of Chemistry II Lab

**Area D Total**: 11 credit hours

**Area E Social Sciences**: 3 credit hours

- HIST 2111 U. S. History to 1865
 or HIST 2112 U. S. History since 1865
- POLS 1101 American Government

Select one of the following behavioral science courses:

- ECON 2105 Principles of Macroeconomics
- ECON 2106 Principles of Microeconomics
- PHIL 2030 Moral Philosophy
- PSYC 1101 Introduction to General Psychology
- SOCI 1101 Introduction to Sociology

Select one of the following world culture courses:

- ANTH 1105 Cultural Anthropology
- ANTH 1107 Discovering Archaeology
- ANTH 2105 Ancient World Civilizations
- ANTH/ENGL 2136 Language and Culture
- GEOG 1101 World Regional Geography
- HIST 1111 World History to 1500
- HIST 1112 World History since 1500
- INTS 2105 Introduction to International Studies and Cross-Cultural Learning
- ITDS 1156 Understanding Non-Western Cultures

**Area E Total**: 12 credit hours

**Wellness Requirement**: 2 credit hours

- PHED 1205 Concepts of Fitness

Select one PEDS course (https://catalog.columbusstate.edu/course-descriptions/peds/#peds)

**Wellness Total**: 3 credit hours

**Total Credit Hours**: 45 credit hours

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1. Extra hour applied to Area F.
2. Note: Students whose majors require 2 lab science courses in Area D complete Area B and Area D with a combined total of 15 credit hours. Any additional hours may be applied to Area F or beyond, depending on the program of study. Students should consult their advisors.
   - Area B1, 3 hours;
   - Area B2, 1 hour;
   - Area D1, 8 hours;
   - Area D2, 3 hours.
3. ITDS 1145 Comparative Arts, though listed under both humanities and fine arts, may be taken only once.

## Major Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
</table>
|        | Core Requirements
|        | Complete the core requirements for this program                      | 45           |
|        | Core Total                                                             | 45           |
|        | Area F Courses Related to Major
|        | Minimum grade of C is required                                         |              |

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1. ITDS 1145 Comparative Arts, though listed under both humanities and fine arts, may be taken only once.
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>GEOL 1121</td>
<td>Introductory Geoscience I: Physical Geology</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 1121L</td>
<td>Introductory Geoscience I: Physical Geology Lab</td>
<td>1</td>
</tr>
</tbody>
</table>

Select one of the following sequences: 8

Sequence 1:
- PHYS 1111  Introductory Physics I
- PHYS 1112  Introductory Physics II
- PHYS 1311  Introductory Physics I Lab
- PHYS 1312  Introductory Physics II Lab

Sequence 2:
- PHYS 2211  Principles of Physics I
- PHYS 2212  Principles of Physics II
- PHYS 2311  Principles of Physics I Lab
- PHYS 2312  Principles of Physics II Lab

Select 3 or more credits from the following: 3

- ASTR 1105  Descriptive Astronomy: The Solar System
- ASTR 1305  Descriptive Astronomy Lab
- ASTR 1106  Descriptive Astronomy: Stars and Galaxies
- ATSC 1112  Understanding the Weather
- BIOL 1215K Principles of Biology
- ENVS 1105  Environmental Studies
- ENVS 1205K Sustainability and the Environment
- GEOL 1110  Natural Disasters: Our Hazardous Environment
- GEOL 1122  Introductory Geo-sciences II: Historical Geology

1 hour from Area A (MATH 1113 or MATH 1131) 1
1 hour from Area D (MATH 1131 or MATH 1132) 1
Apply one hour of ASTR, ATSC, CPSC, CHEM, ENGR, ENVS, GEOL, MATH, PHYS, or PERS (with science topic) at the 1000-2000 level 1

Area F Total 18

Area G Program Requirements
Minimum grade of C is required

- ASTR 1105  Descriptive Astronomy: The Solar System 3
- ASTR 1305  Descriptive Astronomy Lab 1
- GEOL 1122  Introductory Geo-sciences II: Historical Geology 3
- GEOL 1322  Introductory Geo-sciences II: Historical Geology Lab 1
- GEOL 2225  The Fossil Record 4
- GEOL 3215  Igneous and Metamorphic Geology 4
- GEOL 3235  Sedimentary Geology 4
- GEOL 3266  Mineralogy 4
- GEOL 4275  Structural Geology 4
- GEOL 5255U Environmental Geology 4
- GEOL 5165U Hydrology 3
  or GEOL 5215U Geomorphology

Area G Total 35

Area H Program Electives
Select 25 credits from the following: 25

- ENGR 2206  Digital Logic
- ENGR 2217  Robotics Engineering Design

Any 3000+ level GEOL or ENVS. Up to 12 hours of ASTR, ATSC, ENGR, GEOG and/or MATH courses may count towards Area H with advisor approval if the 39 hour upper-level course requirement is met.