**EARTH SCIENCES, B.S.**

**Begin Campus:** Any Penn State Campus  
**End Campus:** University Park

**Suggested Academic Plan**

The suggested academic plan(s) listed on this page are the plan(s) that are in effect during the 2024-25 academic year. To access previous years’ suggested academic plans, please visit the archive (https://bulletins.psu.edu/undergraduate/archive/) to view the appropriate Undergraduate Bulletin edition.

**Earth Sciences, B.S. at University Park Campus**

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### First Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Spring</th>
<th>Credits</th>
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<tbody>
<tr>
<td>MATH 140 or 140G†</td>
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<tr>
<td>CHEM 110 (GN)†</td>
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### Second Year

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<tr>
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<th>Credits</th>
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<tbody>
<tr>
<td>PHYS 211 (GN)†</td>
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<td>BIOL 110 (GN)†</td>
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<td>General Education knowledge domain</td>
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<tr>
<td>General Education knowledge domain</td>
<td>3</td>
<td>Minor course⁵</td>
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<tr>
<td>Supporting Course³</td>
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<td>Advanced EARTH elective⁴</td>
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### Third Year

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<th>Course</th>
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<tbody>
<tr>
<td>Advanced EARTH elective⁴</td>
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<td>Intro GEOSC/EARTH elective²</td>
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<tr>
<td>Supporting Course³</td>
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<td>Minor Course⁵</td>
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<td>Supporting Course³</td>
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### Fourth Year

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<tr>
<td>General Education Foundation selection</td>
<td>3</td>
<td>EARTH Field/lab experience</td>
<td>3</td>
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<tr>
<td>Minor Course⁵</td>
<td>3</td>
<td>Writing across the curriculum course</td>
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<tr>
<td>General Education knowledge domain</td>
<td>3</td>
<td>Minor Course⁵</td>
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<tr>
<td>General Education Health and Wellness (GHW)</td>
<td>1.5</td>
<td>Minor Course⁵</td>
<td>3</td>
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<tr>
<td>Advanced Math/Stat/CMPSC/GEOSC 210</td>
<td>3-4</td>
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<tr>
<td><strong>Total Credits</strong></td>
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### University Requirements and General Education Notes:

US and IL are abbreviations used to designate courses that satisfy Cultural Diversity Requirements (United States and International Cultures).

W, M, X, and Y are the suffixes at the end of a course number used to designate courses that satisfy University Writing Across the Curriculum requirement.

General Education includes Foundations (GWS and GQ), Knowledge Domains (GHW, GN, GA, GH, GS) and Integrative Studies (Inter-domain) requirements. N or Q (Honors) is the suffix at the end of a course number used to help identify an Inter-domain course, but the inter-domain attribute is used to fill audit requirements. Foundations courses (GWS and GQ) require a grade of ‘C’ or better.

All incoming Schreyer Honors College first-year students at University Park will take ENGL 137H/CAS 137H in the fall semester and ENGL 138T/CAS 138T in the spring semester. These courses carry the GWS designation and satisfy a portion of that General Education requirement. If the student’s program prescribes GWS these courses will replace both ENGL 15/ENGL 30H and CAS 100A/CAS 100B/CAS 100C. Each course is 3 credits.

1. Students who begin their studies at non-UP locations and/or join the college after their first year should substitute CAS 100 (GWS), CAS 100A, CAS 100B, or CAS 100C; or ENGL 202C (GWS) for EM SC 100S (GWS). EM SC 100S Earth and Mineral Sciences First year Seminar (3) is a required course only for students who begin their studies at UP in the College of Earth and Mineral Sciences.
2. Select 15 credits of introductory earth science from the following list (courses may not double count with minor requirements): EARTH 2 GN(3), EARTH 101 GN(3), EARTH 103N GN(3), EARTH 105 GN(3), METEO 3 GN(3), GEOG 30N GN/GS;US/IL(3), GEOG 110 GN(3), GEOG 110S GN(3), GEOG 110T GN(3), and GEOG 110U GN(3).

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<table>
<thead>
<tr>
<th>General Education Health and Wellness (GHW)</th>
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<tr>
<th>Fall</th>
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<tr>
<td>Advanced EARTH elective⁴</td>
<td>3 Advanced EARTH elective⁴</td>
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<tr>
<td>General Education Foundation selection</td>
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<td>Minor Course⁵</td>
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<td>3 Minor Course⁵</td>
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<tr>
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<tr>
<td>Advanced Math/Stat/CMPSC/GEOSC 210</td>
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</table>
115 GN(3), GEOG 160 GS(3), GEOSC 1(3), GEOSC 21 GN(3), SOILS 101 GN(3).

3 Supporting Course: Select 8-9 credits in other approved courses (Students may apply 6 credits of ROTC).

4 Advanced EARTH elective: Select 15 credits of advanced earth science from the following list (courses may not double count with minor requirements): GEOG 430(3), GEOG 438W(3), GEOG 412(3), GEOSC 204(4), GEOSC 320(3), GEOSC 340(3), GEOSC 402Y(3), GEOSC 416(3), METEO 300(4), METEO 431(3), METEO 475(3).

5 Complete one of the following interdisciplinary minors, in consultation from an adviser:
   CLIMATOLOGY
   MARINE SCIENCE
   WATERSHEDS & WATER RESOURCES
   EARTH SYSTEMS
   ENERGY BUSINESS & FINANCE
Earth Sciences, B.S. at Commonwealth Campuses

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<th>First Year</th>
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<th>Credits</th>
<th>Spring</th>
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<td>MATH 140‡†</td>
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<td>ENGL 15, 30H, or ESL 15 (GWS)††</td>
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<td>BIOL 110 (GN)‡</td>
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<td>Supporting Course³</td>
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<td>Supporting Course³</td>
<td>2 Minor Course *⁵</td>
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<td>Minor course *⁵</td>
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General Education Health and Wellness (GHW) 1.5 Minor Course *⁵ 3

Total Credits 123-124

* Course requires a grade of C or better for the major
† Course requires a grade of C or better for General Education
# Course is an Entrance to Major requirement
‡ Course satisfies General Education and degree requirement

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