

EARTH SCIENCES, B.S.

Seven Penn State campuses are scheduled for closure after Spring 2027: DuBois, Fayette, New Kensington, Mont Alto, Shenango, Wilkes-Barre, and York. New students are not being admitted at these campuses.

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 2026-27 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

The course series listed below provides **only one** of the many possible ways to move through this curriculum. The University may make changes in policies, procedures, educational offerings, and requirements at any time. This plan should be used in conjunction with your degree audit (accessible in LionPATH as either an **Academic Requirements** or **What If** report). Please consult with a Penn State academic adviser on a regular basis to develop and refine an academic plan that is appropriate for you.

First Year

Fall	Credits	Spring	Credits
MATH 140 or 140G ^{††}	4	MATH 141 or 141G ^{††}	4
CHEM 110 (GN) [†]	3	CHEM 112	3
CHEM 111 (GN) [†]	1	CHEM 113	1
EMSC 100S (GWS) ^{††1}	3	ENGL 15, 30H, or ESL 15 (GWS) ^{††}	3
Intro GEOSC/EARTH elective ²	3	Intro GEOSC/EARTH elective ²	3
14		14	

Second Year

Fall	Credits	Spring	Credits
PHYS 211 (GN) [†]	4	PHYS 212	4
BIOL 114 (GN) [†]	3	Intro GEOSC/EARTH elective ²	3
BIOL 115 (GN) [†]	1	General Education knowledge domain	3
General Education knowledge domain	3	Minor course ^{*5}	3
General Education knowledge domain	3	Advanced EARTH elective ^{*4}	3
Supporting Course ³	3		
17		16	

Third Year

Fall	Credits	Spring	Credits
Advanced EARTH elective ^{*4}	3	Advanced GEOSC/EARTH elective ^{*4}	3
Intro GEOSC/EARTH elective ²	3	Intro GEOSC/EARTH elective ²	3
Supporting Course ³	2	Minor Course ^{*5}	3

Minor course ^{*5}	3	General Education knowledge domain	3
General Education knowledge domain	3	Supporting Course ³	3
		General Education Health and Wellness (GHW)	1.5
14		16.5	

Fourth Year

Fall	Credits	Spring	Credits
Advanced EARTH elective ^{*4}	3	Advanced EARTH elective ^{*4}	3
General Education Foundation selection (GWS) [†]	3	EARTH Field/lab experience	3
Minor Course ^{*5}	3	Writing across the curriculum course in EMS	3
General Education knowledge domain	3	Minor Course ^{*5}	3
General Education Health and Wellness (GHW)	1.5	Minor Course ^{*5}	3
Advanced Math/Stat/CMPSC/GEOSC 210	3-4		
16.5-17.5		15	

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

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 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:
- GEOGRAPHY
 - EARTH AND SUSTAINABILITY
 - PLANETARY SCIENCE
 - GEOGRAPHIC INFORMATION SCIENCE
 - GEOPHYSICS
 - CLIMATOLOGY
 - MARINE SCIENCE
 - WATERSHEDS & WATER RESOURCES
 - EARTH SYSTEMS
 - ENERGY BUSINESS & FINANCE

Earth Sciences, B.S. at Commonwealth Campuses

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First Year

Fall	Credits Spring	Credits
MATH 140 ^{††}	4 MATH 141 ^{††}	4
CHEM 110 (GN) [†]	3 CHEM 112	3
CHEM 111 (GN) [†]	1 CHEM 113	1
Intro GEOSC/EARTH elective ²	3 Intro GEOSC/EARTH elective ²	3
ENGL 15, 30H, or ESL 15 (GWS) ^{††}	3 General Education Foundation selection (GWS) ^{†1}	3
	14	14

Second Year

Fall	Credits Spring	Credits
PHYS 211 (GN) [†]	4 PHYS 212	4
BIOL 114 (GN) [†]	3 Intro GEOSC/EARTH elective ²	3
BIOL 115 (GN) [†]	1 General Education knowledge domain	3
General Education knowledge domain	3 Advanced Math/Stat/ CMPSC/GEOSC 210	3-4
General Education knowledge domain	3 General Education knowledge domain	3
Supporting Course ³	3	
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Third Year

Fall	Credits Spring	Credits
Advanced EARTH elective ^{*4}	3 Advanced GEOSC/EARTH elective ^{*4}	3
Intro GEOSC/EARTH elective ²	3 Intro GEOSC/EARTH elective ²	3
Supporting Course ³	2 Minor Course ^{*5}	3
Minor course ^{*5}	3 Supporting Course ³	3
General Education knowledge domain	3 Minor Course ^{*5}	3
	General Education Health and Wellness (GHW)	1.5
	14	16.5

Fourth Year

Fall	Credits Spring	Credits
Advanced EARTH elective ^{*4}	3 Advanced EARTH elective ^{*4}	3
General Education Foundation selection (GWS) [†]	3 EARTH Field/lab experience	3
Minor Course ^{*5}	3 Writing across the curriculum course in EMS	3
General Education knowledge domain	3 Minor Course ^{*5}	3

General Education Health and Wellness (GHW)	1.5 Minor Course ^{*5}	3
Advanced EARTH elective ^{*4}	3	
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Total Credits 123-124

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WATERSHEDS & WATER RESOURCES
EARTH SYSTEMS
ENERGY BUSINESS & FINANCE