

ENVIRONMENTAL GEOSCIENCE, BS

Degree Requirements

Requirements for Students Matriculating in or before Academic Year 2024-2025. Learn more about University Academic Regulation 3.1 (<http://catalog.okstate.edu/university-academic-regulations/#matriculation>).

Minimum Overall Grade Point Average: 2.00

Total Hours: 120

Code	Title	Hours
General Education Requirements		
<i>English Composition</i>		
See Academic Regulation 3.5 (http://catalog.okstate.edu/university-academic-regulations/#english-composition)		
ENGL 1113	Composition I	3
or ENGL 1313	Critical Analysis and Writing I	
Select one of the following:		3
ENGL 1213	Composition II	
ENGL 1413	Critical Analysis and Writing II	
ENGL 3323	Technical Writing	
<i>American History & Government</i>		
HIST 1103	Survey of American History	3
or HIST 1483	American History to 1865 (H)	
or HIST 1493	American History Since 1865 (DH)	
POLS 1113	American Government	3
<i>Analytical & Quantitative Thought (A)</i>		
MATH 1513	College Algebra (A)	3
<i>Humanities (H)</i>		
Courses designated (H)		6
<i>Natural Sciences (N)</i>		
Must include one Laboratory Science (L) course		
CHEM 1314	Chemistry I (LN)	4
Select 4 hours from the following:		4
BIOL 1113	Introductory Biology (N)	
& BIOL 1111	and Introductory Biology Laboratory (LN)	
BIOL 1114	Introductory Biology (LN)	
NREM 1014	Introduction to Natural History (LN)	
<i>Social & Behavioral Sciences (S)</i>		
Course designated (S)		3
<i>Additional General Education</i>		
Courses designated (A), (H), (N), or (S)		8
Hours Subtotal		40
Diversity (D) & International Dimension (I)		
May be completed in any part of the degree plan		
Select at least one Diversity (D) course		
Select at least one International Dimension (I) course		
College/Departmental Requirements		
<i>First Year Seminar</i>		
(Transfer students with 15 hours exempt)		1

Arts & Humanities

See note 2.a. 3

Natural & Mathematical Sciences

GEOL 1214	Introductory Geological Processes (LN)	4
or GEOL 1114	Physical Geology (LN)	
or GEOL 1014	Geology and Human Affairs (LN)	
PHYS 1114	College Physics I (LN)	4
GEOL 4300	Geology Colloquium	1

Foreign Language

0-6 hours. See note 3.

Upper-Division General Education

Select 6 hours outside major department. See note 2.c.

Hours Subtotal 13

Major Requirements

Minimum grade of "C" in all Geology courses.

GEOL 2103	Fundamentals of Geophysics ¹	3
or PHYS 1214	College Physics II (LN)	
GEOL 2403	Chemistry of Earth Systems ¹	3
or CHEM 1515	Chemistry II (LN)	
GEOL 2464	Rocks and Minerals	4
GEOL 3503	Environmental Geology (N)	3
GEOL 4453	Hydrogeology	3
GEOG 4073	Climate Change: Past, Present, and Future	3
GEOG 4203	Fundamentals of Geographic Information Systems	3
GEOG 4343	Geographic Information Systems: Resource Management Applications	3
NREM 3013	Applied Ecology and Conservation ¹	3
or BIOL 3034	General Ecology	
or ENVR 3113	Environmental Sampling and Analysis	
SOIL 2124	Fundamentals of Soil Science (N)	4
POLS 4363	Environmental Law And Policy	3
Select 18 hours from the following:		18
GEOL 1224	Evolution of the Earth (LN)	
GEOL 3014	Structural Geology	
GEOL 3034	Principles of Stratigraphy and Sedimentology	
GEOL 3073	Geomorphology	
GEOL 3103	Paleontology	
GEOL 4503	Introduction to Oceanography (N)	
GEOL 4513	Marine Geology	
GEOL 4463	Physical Hydrogeology	
GEOL 4583	Environmental Data Analytics	
GEOL 4673	Critical Earth Materials	
GEOL 4753	Volcanology	
GEOG 3333	Spatial Analysis (A)	
GEOG 4053	Biogeography, Biodiversity, and Humankind	
GEOG 4333	Remote Sensing	
GEOG 4263	Geospatial Applications for Unmanned Aerial Systems	
ENVR 1113	Elements of Environmental Science (N)	
NREM 3153	Forest Health and Disturbance Ecology	
BIOL 4434	Limnology	

Hours Subtotal	53
Electives	
Select 14 hours ¹	14
Hours Subtotal	
Total Hours	120

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Elective credit hours will be reduced accordingly if PHYS 1214 or CHEM 1515 or BIOL 3034 are selected.

Other Requirements

- See the College of Arts and Sciences Requirements.
- **Upper-Division Credit:** Total hours must include at least 40 hours in courses numbered 3000 or above.

College of Arts and Sciences Requirements

- Hours in One Department:** For B.A. and B.S. degrees, no more than 54 hours in one department may be required to meet degree requirements. Courses used to satisfy the General Education English Composition, U.S. History, American Government, and Mathematics or Statistics requirements will not count toward the 54-hour maximum required from one department.
- A&S College/Departmental Requirements**
 - Arts and Humanities are defined as any course carrying an (H) designation or courses from AMST, ART, DANC, ENGL (except ENGL 3323 Technical Writing) HIST, MUSI, PHIL (except PHIL 1313 Logic and Critical Thinking (A), PHIL 3003 Symbolic Logic (A) and PHIL 4003 Mathematical Logic and Computability), REL, TH, and foreign languages.
 - Natural and Mathematical Sciences are defined as any course from the following prefixes: ASTR, BIOC, BIOL, CHEM, CS (except CS 4883 Social Issues in Computing), GEOL, MATH, MICR, PBIO, PHYS, and STAT; or courses from other departments that carry an (A) or (N) general education designation.
 - Six upper-division hours are required from General Education or any CAS courses outside the student's major department (<http://catalog.okstate.edu/college-arts-sciences-major-departments/>). This requirement may be satisfied by courses also used to satisfy any part of a student's degree program (i.e., in General Education, College Departmental Requirements, Major Requirements or Electives).
 - Non-Western Studies Requirement for B.A. and B.F.A.; One course in Non-Western Studies (N.W.). This requirement may be satisfied by courses also used to satisfy any part of a student's degree program (i.e., in General Education, College Departmental Requirements, Major Requirements or Electives).
 - The College of Arts & Sciences requires a minimum 2.0 GPA in all major requirements and a minimum 2.0 GPA in all major-prefix courses applied to the degree.
- Foreign Language Proficiency**
 - The foreign language requirement for the B.A. may be satisfied by 9 hours college credit in the same language, which must include 3 hours at the 2000-level, or equivalent proficiency (e.g., passing an advanced standing examination; TOEFL exam; presenting a high school transcript which demonstrates the high school was primarily conducted in a language other than English; etc.). Computer Science courses may not be used to satisfy this

requirement. Currently Arabic and Mvskoke are not offered at the 2000-level at OSU.

- The foreign language requirement for the B.S., B.M. and B.F.A. may be satisfied by presenting a high school transcript which demonstrates two years of study of a single foreign language (passing grades at second-year level of study). It may also be satisfied by 6 hours college credit in the same language, which must include language courses 1713 and 1813, or equivalent proficiency (e.g., passing an advanced standing examination; TOEFL exam; presenting a high school transcript which demonstrates the high school was primarily conducted in a language other than English; etc.). Computer Science courses may not be used to satisfy this requirement.
- In addition to a. and b., students pursuing teacher certification must meet novice-high foreign language proficiency by presenting a high school transcript which demonstrates two years of study of a single foreign language with no grade below B. Or, students may complete 3 hours college credit in a single language with no grade below C (or pass an advanced standing examination, College Level Examination Program (CLEP) exam, or Oral Proficiency Interview developed by the American Council on the Teaching of Foreign Languages, equivalent to 3 hours of college credit.) Or, students may meet the requirement by transfer of documentation of meeting the foreign language competency from one of the teacher education programs in the State of Oklahoma approved by the Oklahoma State Regents for Higher Education.
- Exclusions.** Courses with ATHL or LEIS prefixes and leisure activity courses may not be used for degree credit.

Additional State/OSU Requirements

- At least: 60 hours at a four-year institution; 30 hours completed at OSU; 15 of the final 30 or 50% of the upper-division hours in the major field completed at OSU.
- Limit of: one-half of major course requirements as transfer work; one-fourth of hours earned by correspondence; 8 transfer correspondence hours.
- Students will be held responsible for degree requirements in effect at the time of matriculation and any changes that are made, so long as these changes do not result in semester credit hours being added or do not delay graduation.
- Degrees that follow this plan must be completed by the end of Summer 2030.

Example Plan of Study

Finish in Four Plan of Study

The plan below is an **example** of how students can successfully complete degree requirements in four years. This suggested class schedule plan may be used as a guide and can be adjusted based on individual needs. Students are required to meet with an academic advisor prior to enrollment each semester to plan their class schedule, and students are ultimately responsible for completing all degree requirements.

Course	Title	Hours
Freshman		
Fall		
NREM 1014 or BIOL 1113 <i>and</i> BIOL 1111	Introduction to Natural History (LN) or Introductory Biology (N) <i>and</i> Introductory Biology Laboratory (LN)	4

GEOL 1214 or GEOL 1114 or GEOL 1014	Introductory Geological Processes (LN) or Physical Geology (LN) or Geology and Human Affairs (LN)	4
MATH 1513	College Algebra (A)	3
General Education courses		4
Hours		15
Spring		
CHEM 1314	Chemistry I (LN)	4
General Education, College, and Major courses		12
Hours		16
Sophomore		
Fall		
GEOL 2464	Rocks and Minerals	4
PHYS 1114	College Physics I (LN)	4
General Education courses		6
Hours		14
Spring		
GEOL 2403 or CHEM 1515	Chemistry of Earth Systems or Chemistry II (LN)	3
GEOL 2403 offered every even Spring semester		
GEOL 4300	Geology Colloquium	1
SOIL 2124	Fundamentals of Soil Science (N)	4
Major, College, or Elective courses		7
Hours		15
Junior		
Fall		
GEOG 4073	Climate Change: Past, Present, and Future	3
GEOG 4203	Fundamentals of Geographic Information Systems	3
NREM 3013 or BIOL 3034 or ENVR 3113	Applied Ecology and Conservation or General Ecology or Environmental Sampling and Analysis	3
Major, College, and Elective courses		6
Hours		15
Spring		
GEOL 2103 or PHYS 1214	Fundamentals of Geophysics or College Physics II (LN)	3
GEOL 2103 offered every odd Spring semester		
GEOL 3503	Environmental Geology (N)	3
Major, College, and Elective courses		9
Hours		15
Senior		
Fall		
GEOG 4343	Geographic Information Systems: Resource Management Applications	3
GEOL 4453	Hydrogeology	3
NREM 4043	Natural Resource Administration and Policy (if needed)	3
Major, College, and Elective courses		6
Hours		15
Spring		
POLS 4363	Environmental Law And Policy	3
Major, College, and Elective courses		12
Hours		15
Total Hours		120