

PLANT AND SOIL SCIENCES: SOIL AND WATER RESOURCES, BSAG

Requirements for Students Matriculating in or before Academic Year 2026-2027. Learn more about University Academic Regulation 3.1 (<https://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 (https://catalog.okstate.edu/university-academic-regulations/#english-composition/) | | |
| ENGL 1113 or ENGL 1313 | Composition I Critical Analysis and Writing I | 3 |
| 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> | | |
| Select one of the following: | | 3 |
| HIST 1103 | Survey of American History | |
| HIST 1483 | American History to 1865 (H) | |
| HIST 1493 | American History Since 1865 (DH) | |
| POLS 1113 | American Government | 3 |
| <i>Quantitative Thought & Logical Reasoning (Q)</i> | | |
| STAT 2013 | Elementary Statistics (Q) ¹ | 3 |
| <i>Understanding Humanities-Human Heritage & Cultures (H)</i> | | |
| Courses designated (H) | | 3 |
| Courses designated (DH) | | 3 |
| <i>Reasoning in the Natural Sciences (N)</i> | | |
| Must include one Laboratory-Based Inquiry (L) course | | |
| CHEM 1314 | Chemistry I (LN) ¹ | 4 |
| Course designated (N) | | 3 |
| <i>Exploring Society & Human Behavior (S)</i> | | |
| AGEC 1113 | Introduction to Agricultural Economics (S) ¹ | 3 |
| <i>Diversity (D)</i> | | |
| Courses designated (D) | | |
| May be paired with another designated course | | |
| <i>Global Cultural Competency (G)</i> | | |
| Courses designated (G) | | 3 |
| <i>Additional General Education</i> | | |
| Additional general education credit hours (at least 6 hours) are required to meet the total 40-hour minimum. If courses carry more than one general education designation and can be used to meet multiple minimum general education designation hours above, more than 6 hours of additional general education will be required here to meet the 40-hour minimum. | | |
| Courses designated (Q), (H), (N), (S), (D), (G), or (F). | | 6 |

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| Hours Subtotal | | 40 |
| College Requirements | | |
| UNIV 1111 | First Year Seminar (or other approved first year seminar course) | 1 |
| ENVR 1113 or NREM 2013 | Elements of Environmental Science (N) Ecology of Natural Resources | 3 |
| Departmental Requirements | | |
| Select one of the following: | | 3 |
| AGCM 3103 | Written Communications in Agricultural Sciences and Natural Resources | |
| BCOM 3113 | Written Communication | |
| BCOM 3443 | Business Communication for International Students | |
| ENGL 3323 | Technical Writing ² | |
| Select one of the following: | | 3 |
| AGCM 3203 | Oral Communications in Agricultural Sciences & Natural Resources (S) | |
| SPCH 2713 | Introduction to Speech Communication (S) | |
| SPCH 3733 | Elements of Persuasion (S) ³ | |
| PLNT 1213 | Introduction to Plant and Soil Systems (N) | 3 |
| PLNT 2041 | Career Development in Plant and Soil Sciences | 1 |
| PLNT 4033 | Applied Agricultural Meteorology | 3 |
| PLNT 4080 or PLNT 4990 | Professional Internship Senior Thesis in Plant and Soil Sciences | 3 |
| PLNT 4571 | Professional Preparation in Plant and Soil Sciences | 1 |
| SOIL 2124 | Fundamentals of Soil Science (N) | 4 |
| SOIL 4234 | Soil Nutrient Management | 4 |
| Select one of the following: | | 3 |
| MATH 1513 | College Algebra (Q) ⁴ | |
| MATH 2103 | Business Calculus (Q) | |
| MATH 2144 | Calculus I (Q) | |
| BIOL 1113 & BIOL 1111 or BIOL 1114 | Introductory Biology (N) and Introductory Biology Laboratory (LN) Introductory Biology (LN) | 4 |
| CHEM 1515 or CHEM 1225 | Chemistry II (LN) ⁵ Chemical Principles II (LN) | 5 |
| Select one of the following: | | 4 |
| CHEM 3013 & CHEM 3012 | Survey of Organic Chemistry and Survey of Organic Chemistry Laboratory | |
| BIOC 2344 | Chemistry and Applications of Biomolecules | |
| PHYS 1014 | Descriptive Physics (N) | |
| PHYS 1114 | College Physics I (LN) | |
| Hours Subtotal | | 45 |
| Major Requirements | | |
| <i>Core Courses</i> | | |
| SOIL 3433 | Soil Genesis, Morphology, and Classification | 3 |
| SOIL 4363 | Environmental Soil Science | 3 |
| SOIL 4483 | Soil Microbiology | 3 |
| SOIL 4683 | Soil, Water, and Weather | 3 |

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| SOIL 4893 | Environmental Soil Chemistry | 3 |
| GEOL 1114 | Physical Geology (LN) | 4 |
| GEOL 4463 | Physical Hydrogeology | 3 |
| or NREM 4443 | Watershed Hydrology and Water Quality | |
| AST 4203 | Agricultural Water Management | 3 |

Related Courses

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| Select 10 hours of the following: | | 10 |
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| GEOL 1224 | Evolution of the Earth (LN) | |
| GEOL 2254 | Practical Mineralogy | |
| Upper-division GEOL courses | | |
| SOIL 3033 | Soils and Societies (S) | |
| SOIL 4213 | Precision Agriculture | |
| SOIL 4011 | Professional Preparation for Soil Profilers | |
| SOIL 4463 | Soil and Water Conservation | |
| SOIL 4470 | Problems and Special Study | |
| PLNT 2011 | Agronomic Problem Solving | |
| PLNT 4443 | Cropping Systems | |
| PLNT 4470 | Problems and Special Study | |
| Other upper-division PLNT courses | | |
| ENVR 3113 | Environmental Sampling and Analysis | |
| ENVR 4033 | Ecology of Invasive Species | |
| NREM 3012 | Applied Ecology Laboratory | |
| NREM 3013 | Applied Ecology and Conservation | |
| NREM 3613 | Principles of Rangeland Management | |
| NREM 4033 | Ecology Of Invasive Species | |
| NREM 4043 | Natural Resource Administration and Policy | |
| GEOG 2344 | Digital Tools for Environmental Problem-Solving (LN) | |
| GEOG 3023 | Climatology (N) | |
| GEOG 3033 | Meteorology (N) | |
| GEOG 3153 | Conservation of Natural Resources (S) | |
| GEOG 4333 | Remote Sensing | |
| AGEC 3503 | Natural Resource Economics | |
| AGEC 3703 | Issues in Agricultural Policy | |
| AGEC 3713 | Agricultural Law | |
| AST 4112 | Land Measurement and Site Analysis | |
| Upper-division HORT or PLP courses that will count towards chosen minor | | |

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| Hours Subtotal | | 35 |
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Electives

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| Select 0 hours or hours to complete required total for degree | | 0 |
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| Total Hours | | 120 |
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⁵ If used as an additional (N) course above, hours in this block reduced by 5.

Other Requirements

- A minimum of 40 semester credit hours and 100 grade points must be earned in courses numbered 3000 or above.
- A 2.00 GPA or higher in upper-division hours.

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 2032.

¹ College & Departmental requirements that may be used to meet General Education requirements.

² If ENGL 3323 Technical Writing is used to satisfy ENGL 1213 Composition II above; hours in this block are reduced by 3.

³ If used as an additional (S) course above, hours in this block reduced by 3.

⁴ If used as an additional (Q) course above, hours in this block reduced by 3.