PLANT AND SOIL SCIENCES: SOIL AND WATER RESOURCES, BSAG

Requirements for Students Matriculating in or before Academic Year 2023-2024. 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
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**General Education Requirements**

**English Composition**

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:

| ENGL 1213 | Composition II | 3 |
| ENGL 1413 | Critical Analysis and Writing II | |
| ENGL 3323 | Technical Writing | |

**American History & Government**

Select one of the following:

| HIST 1103 | Survey of American History | 3 |
| HIST 1483 | American History to 1865 (H) | |
| HIST 1493 | American History Since 1865 (DH) | |
| POLS 1113 | American Government | 3 |

**Analytical & Quantitative Thought (A)**

| STAT 2013 | Elementary Statistics (A) | 3 |

**Humanities (H)**

Courses designated (H) | 6
Natural Sciences (N) | |
Must include one Laboratory Science (L) course | |
CHEM 1314 | Chemistry I (LN) | 4
Course designated (N) | 3

**Social & Behavioral Sciences (S)**

AGEC 1113 | Introduction to Agricultural Economics (S) | 3

**Additional General Education**

Courses designated (A), (H), (N), or (S) | 9

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 Requirements**

AG 1011 | First Year Seminar | 1

ENVR 1113 | Elements of Environmental Science (N) | 3

or NREM 2013 | Ecology of Natural Resources | |

**Departmental Requirements**

Select one of the following:

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 | 

Select one of the following:

AGCM 3203 | Oral Communications in Agricultural Sciences & Natural Resources (S) | 3

SPCH 2713 | Introduction to Speech Communication (S) | |

SPCH 3733 | Elements of Persuasion (S) | 3

PLNT 1213 | Introduction to Plant and Soil Systems | 3

PLNT 2041 | Career Development in Plant and Soil Sciences | 1

PLNT 4033 | Applied Agricultural Meteorology | 3

PLNT 4080 | Professional Internship | 3

or PLNT 4990 | Senior Thesis in Plant and Soil Sciences | |

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:

MATH 1513 | College Algebra (A) | 4
MATH 2103 | Business Calculus (A) |
MATH 2144 | Calculus I (A) |
BIOL 1113 | Introductory Biology (N) |
& BIOL 1111 | Introductory Biology Laboratory (LN) | 4
or BIOL 1114 | Introductory Biology (LN) | |

CHEM 1515 | Chemistry II (LN) | 5
or CHEM 1225 | Chemical Principles II (LN) | |

Select one of the following:

CHEM 3013 | Survey of Organic Chemistry |
& CHEM 3012 | 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**

**Core Courses**

SOIL 3033 | Soils and Societies (S) | 3

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

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 |

**Related Courses**

Select 10 hours of the following:

GEOL 1224 | Evolution of the Earth (LN) |
### 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 2029.

### 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.

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<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>GEOL 2254</td>
<td>Practical Mineralogy</td>
</tr>
<tr>
<td>SOIL 4213</td>
<td>Precision Agriculture</td>
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<tr>
<td>SOIL 4463</td>
<td>Soil and Water Conservation</td>
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<td>SOIL 4470</td>
<td>Problems and Special Study</td>
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<td>PLNT 2011</td>
<td>Agronomic Problem Solving</td>
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<tr>
<td>PLNT 4443</td>
<td>Cropping Systems</td>
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<td>PLNT 4470</td>
<td>Problems and Special Study</td>
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<tr>
<td>ENVR 3113</td>
<td>Sampling and Analyses for Solving Environmental Problems</td>
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<tr>
<td>ENVR 4033</td>
<td>Ecology of Invasive Species</td>
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<tr>
<td>NREM 3012</td>
<td>Applied Ecology Laboratory</td>
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<tr>
<td>NREM 3013</td>
<td>Applied Ecology and Conservation</td>
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<tr>
<td>NREM 3613</td>
<td>Principles of Rangeland Management</td>
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<tr>
<td>NREM 4033</td>
<td>Ecology Of Invasive Species</td>
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<td>NREM 4043</td>
<td>Natural Resource Administration and Policy</td>
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<tr>
<td>GEOG 2344</td>
<td>Digital Tools for Environmental Problem-Solving (LN)</td>
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<td>GEOG 3023</td>
<td>Climatology (N)</td>
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<td>GEOG 3033</td>
<td>Meteorology (N)</td>
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<td>GEOG 3153</td>
<td>Conservation of Natural Resources (S)</td>
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<td>GEOG 4333</td>
<td>Remote Sensing</td>
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<td>AGEC 3503</td>
<td>Natural Resource Economics</td>
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<td>Issues in Agricultural Policy</td>
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- Hours Subtotal: 35

- Electives
- Select 0 hours or hours to complete required total for degree: 0
- Total Hours: 120

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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 (S) course above, hours in this block reduced by 3.

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

5. If used as (N) course above, hours in this block reduced by 5.