PLANT AND SOIL SCIENCES: SOIL AND WATER RESOURCES, BSAG

Requirements for Students Matriculating in or before Academic Year 2019-2020. 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

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 1113</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>or ENGL 1313</td>
<td>Critical Analysis and Writing I</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 1213</td>
<td>Composition II</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 1413</td>
<td>Critical Analysis and Writing II</td>
<td></td>
</tr>
<tr>
<td>ENGL 3323</td>
<td>Technical Writing</td>
<td></td>
</tr>
<tr>
<td>HIST 1103</td>
<td>Survey of American History</td>
<td>3</td>
</tr>
<tr>
<td>HIST 1483</td>
<td>American History to 1865 (H)</td>
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</tr>
<tr>
<td>HIST 1493</td>
<td>American History Since 1865 (DH)</td>
<td></td>
</tr>
<tr>
<td>POLS 1113</td>
<td>American Government</td>
<td>3</td>
</tr>
<tr>
<td>STAT 2013</td>
<td>Elementary Statistics (A)</td>
<td>3</td>
</tr>
<tr>
<td>AGEC 1113</td>
<td>Introduction to Agricultural Economics (S)</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 1314</td>
<td>Chemistry I (LN)</td>
<td>4</td>
</tr>
<tr>
<td>or CHEM 1215</td>
<td>Chemical Principles I (LN)</td>
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<tr>
<td>MATH 1513</td>
<td>College Algebra (A)</td>
<td>3</td>
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<tr>
<td>MATH 2144</td>
<td>Calculus I (A)</td>
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<tr>
<td>GEOL 1114</td>
<td>Physical Geology (LN)</td>
<td></td>
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<tr>
<td>GEOL 4453</td>
<td>Hydrogeology</td>
<td></td>
</tr>
<tr>
<td>or NREM 4443</td>
<td>Watershed Hydrology and Water Quality</td>
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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
  - or ENGL 1313 Critical Analysis and Writing I

**Analytical & Quantitative Thought (A)**

- STAT 2013 Elementary Statistics (A)
- MATH 1513 College Algebra (A)
  - or MATH 2144 Calculus I (A)

**Humanities (H)**

- Courses designated (H)
- 6

**Natural Sciences (N)**

- Must include one Laboratory Science (L) course
- CHEM 1314 Chemistry I (LN)
  - or CHEM 1215 Chemical Principles I (LN)

**Social & Behavioral Sciences (S)**

- AGEC 1113 Introduction to Agricultural Economics (S)
- SOIL 4893 Soil Chemistry and Environmental Quality
- SOIL 4463 Soil and Water Conservation
- GEOG 2344 Digital Tools for Environmental Exploration (LN)

**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**

**Agricultural Sciences and Natural Resources**

- AG 1011 First Year Seminar
- ENV 2113 Introduction to Agricultural Economics (S)
- or NREM 2013 Ecology of Natural Resources

- SOIL 2124 Fundamentals of Soil Science (N)
  - Additional Requirements
    - CHEM 1515 Chemistry II (LN)
    - or CHEM 1225 Chemical Principles II (LN)
    - BIOL 1114 Introductory Biology (LN)

- Select one of the following:
  - PHYS 1114 College Physics I (LN)
  - or PHYS 1014 Descriptive Physics (N)
  - BIOC 2344 Chemistry and Applications of Biomolecules
  - CHEM 3015 Survey of Organic Chemistry

- MATH 1513 College Algebra (A)
  - or MATH 2144 Calculus I (A)

### Written and Oral Communications

- 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)
  - SPCH 2713 Introduction to Speech Communication (S)
  - SPCH 3733 Elements of Persuasion (S)

**Hours Subtotal**: 30

### Major Requirements

**Core Courses**

- PLNT 1101 Orientation to Plant and Soil Sciences
- PLNT 1213 Introduction to Plant and Soil Systems
- PLNT 2041 Career Development in Plant and Soil Sciences
- PLNT 4571 Professional Preparation in Plant and Soil Sciences
- PLNT 4080 Professional Internship (3 hours)
  - or PLNT 4990 Senior Thesis in Plant and Soil Sciences
- SOIL 3433 Soil Genesis, Morphology, and Classification
- SOIL 4234 Soil Nutrient Management
- SOIL 4483 Soil Microbiology
- SOIL 4683 Soil, Water, and Weather
- SOIL 4893 Soil Chemistry and Environmental Quality
- SOIL 4463 Soil and Water Conservation
- GEOL 1114 Physical Geology (LN)
- GEOL 4453 Hydrogeology
  - or NREM 4443 Watershed Hydrology and Water Quality

**Related Courses**

- Select from the following:
  - GEOL 1224 Evolution of the Earth (LN)
  - GEOL 2254 Practical Mineralogy

**Hours Subtotal**: 11
### Upper-division GEOL courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>SOIL 4363</td>
<td>Environmental Soil Science</td>
</tr>
<tr>
<td>SOIL 4213</td>
<td>Precision Agriculture</td>
</tr>
<tr>
<td>SOIL 4470</td>
<td>Problems and Special Study</td>
</tr>
<tr>
<td>PLNT 2013</td>
<td>Applied Plant Science</td>
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<tr>
<td>PLNT 4033</td>
<td>Applied Agricultural Meteorology</td>
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<tr>
<td>PLNT 4470</td>
<td>Problems and Special Study</td>
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### Upper-division PLNT courses

<table>
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<tr>
<th>Course</th>
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<tbody>
<tr>
<td>NREM 3613</td>
<td>Principles of Rangeland Management</td>
</tr>
<tr>
<td>NREM 3013</td>
<td>Applied Ecology and Conservation</td>
</tr>
<tr>
<td>NREM 3012</td>
<td>Applied Ecology Laboratory</td>
</tr>
<tr>
<td>NREM 4043</td>
<td>Natural Resource Administration and Policy</td>
</tr>
<tr>
<td>GEOG 3023</td>
<td>Climatology (N)</td>
</tr>
<tr>
<td>GEOG 3033</td>
<td>Meteorology (N)</td>
</tr>
<tr>
<td>GEOG 3153</td>
<td>Conservation of Natural Resources (S)</td>
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<tr>
<td>GEOG 4333</td>
<td>Remote Sensing</td>
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<tr>
<td>AGEC 3703</td>
<td>Issues in Agricultural Policy</td>
</tr>
<tr>
<td>AGEC 3503</td>
<td>Natural Resource Economics</td>
</tr>
<tr>
<td>AGEC 3713</td>
<td>Agricultural Law</td>
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<tr>
<td>BAE 4314</td>
<td>Design Hydrology</td>
</tr>
</tbody>
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### Upper-division HORT and PLP courses that will count toward chosen minor

- **Hours Subtotal**: 50

### 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 GE requirements.
2. If used as (N) course above, hours in this block reduced by 5.
3. If used as (A) course above, hours in this block reduced by 3.
4. If ENGL 3323 Technical Writing is used to satisfy ENGL 1213 Composition II above; hours in this block are reduced by 3.
5. If used as (S) course above, hours in this block reduced by 3.

### 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 2025.