**AGRICULTURAL AND EXTENSION EDUCATION, B.S.**

**Begin Campus:** Any Penn State Campus  
**End Campus:** University Park

### Degree Requirements

For students seeking teacher certification, the Bachelor of Science degree in Agricultural and Extension Education, a minimum of 125 credits is required:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Education</td>
<td>45</td>
</tr>
<tr>
<td>Electives</td>
<td>0-1</td>
</tr>
<tr>
<td>Requirements for the Major</td>
<td>107-113</td>
</tr>
</tbody>
</table>

28 of the 45 credits for General Education are included in the Requirements for the Major. This includes: 6 credits of GS courses; 9 credits of GN courses; 4 credits of GQ courses; 9 credits of GWS courses.

### Requirements for the Major

To graduate, a student enrolled in the major must earn a grade of C or better in each course designated by the major as a C-required course, as specified by Senate Policy 82-44 ([https://senate.psu.edu/policies-and-rules-for-undergraduate-students/82-00-and-83-00-degree-requirements/#82-44](https://senate.psu.edu/policies-and-rules-for-undergraduate-students/82-00-and-83-00-degree-requirements/#82-44)).

#### Common Requirements for the Major (All Options)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prescribed Courses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AEE 100</td>
<td>Agricultural Education Orientation</td>
<td>3</td>
</tr>
<tr>
<td>AEE 311</td>
<td>Developing Youth Leadership through Organization and Program Structure</td>
<td>3</td>
</tr>
<tr>
<td>AEE 349</td>
<td>Shop Processes for Agricultural Educators</td>
<td>3</td>
</tr>
<tr>
<td>AEE 350</td>
<td>Teaching Methods for Agricultural and Environmental Laboratories</td>
<td>3</td>
</tr>
<tr>
<td>AEE 495</td>
<td>Internship</td>
<td>12</td>
</tr>
<tr>
<td>AGBM 101</td>
<td>Economic Principles of Agribusiness Decision Making</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 110</td>
<td>Biology: Basic Concepts and Biodiversity</td>
<td>3</td>
</tr>
<tr>
<td>INTAG 100N</td>
<td>Everyone Eats: Hunger, Food Security &amp; Global Agriculture</td>
<td>3</td>
</tr>
<tr>
<td>WFED 413</td>
<td>Vocational Education for Special-Needs Learners</td>
<td>3</td>
</tr>
<tr>
<td>WFED 414</td>
<td>Teaching Career and Technical Education Content to Diverse Learners</td>
<td>3</td>
</tr>
<tr>
<td>WFED 450</td>
<td>Cultural Diversity in the Workplace</td>
<td>3</td>
</tr>
<tr>
<td>Additional Courses: Require a grade of C or better</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AEE 295</td>
<td>Observation of Teaching in Agriculture and Environmental Science</td>
<td>3</td>
</tr>
<tr>
<td>AEE 313</td>
<td>School-Based Program Planning and Instructional Development</td>
<td>2</td>
</tr>
<tr>
<td>AEE 412</td>
<td>Methods of Teaching Agriculture and Environmental Science</td>
<td>4</td>
</tr>
<tr>
<td>AEE 413</td>
<td>Program Planning and Instructional Development</td>
<td>3-4</td>
</tr>
<tr>
<td>EDPSY 14</td>
<td>Learning and Instruction</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Environmental Science Option (28 Credits)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prescribed Courses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AGRO 28</td>
<td>Principles of Crop Management</td>
<td>3</td>
</tr>
<tr>
<td>ANSC 201</td>
<td>Animal Science</td>
<td>4</td>
</tr>
<tr>
<td>Supporting Courses and Related Areas</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Select 3 credits of W courses offered in the College</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Select 3 credits in biological, physical ecosystems</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Select 6 credits in environmental impact management</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Select 6 credits in environmental learning</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Select 3 credits in social, political, and legal aspects of environmental science</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

#### Production Option (23 credits)

| Supporting Courses and Related Areas    |         |
| Select 3 credits of W courses offered in the College | 3       |
| Select 8 credits in agriculture         | 8       |
| Select 6 credits in animal science      | 6       |
| Select 6 credits in plant/soil science  | 6       |

### General Education

Connecting career and curiosity, the General Education curriculum provides the opportunity for students to acquire transferable skills necessary to be successful in the future and to thrive while living in interconnected contexts. General Education aids students in developing intellectual curiosity, a strengthened ability to think, and a deeper sense of aesthetic appreciation. These are requirements for all baccalaureate students:

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<tr>
<th>Code</th>
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<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDTHP 115</td>
<td>Education in American Society</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 202C</td>
<td>Effective Writing: Technical Writing</td>
<td>3</td>
</tr>
<tr>
<td>SOILS 101</td>
<td>Introductory Soil Science</td>
<td>3</td>
</tr>
<tr>
<td>STAT 200</td>
<td>Elementary Statistics</td>
<td>4</td>
</tr>
</tbody>
</table>

#### Additional Courses

Select 4 credits of the following:

- BIOL 220W | Biology: Populations and Communities  
- BIOL 230W | Biology: Molecules and Cells  
- BIOL 240W | Biology: Function and Development of Organisms

Select 3 credits from the following:

- ENGL 15 | Rhetoric and Composition  
- ENGL 30H | Honors Rhetoric and Composition  
- ESL 15 | ESL Composition for American Academic Communication II

Select an option

#### Requirements for the Option

Select an option:

- Environmental Science Option (28 Credits)  
- Production Option (23 credits)
students and are often partially incorporated into the requirements of a program. For additional information, see the General Education Requirements (https://bulletins.psu.edu/undergraduate/general-education/baccalaureate-degree-general-education-program/) section of the Bulletin and consult your academic adviser.

The keystone symbol appears next to the title of any course that is designated as a General Education course. Program requirements may also satisfy General Education requirements and vary for each program.

**Foundations (grade of C or better is required and Inter-Domain courses do not meet this requirement.)**
- Quantification (GQ): 6 credits
- Writing and Speaking (GWS): 9 credits

**Breadth in the Knowledge Domains (Inter-Domain courses do not meet this requirement.)**
- Arts (GA): 3 credits
- Health and Wellness (GHW): 3 credits
- Humanities (GH): 3 credits
- Social and Behavioral Sciences (GS): 3 credits
- Natural Sciences (GN): 3 credits

**Integrative Studies**
- Inter-Domain Courses (Inter-Domain): 6 credits

**Exploration**
- GN, may be completed with Inter-Domain courses: 3 credits
- GA, GH, GN, GS, Inter-Domain courses. This may include 3 credits of World Language course work beyond the 12th credit level or the requirements for the student’s degree program, whichever is higher: 6 credits

**University Degree Requirements**

**First Year Engagement**
All students enrolled in a college or the Division of Undergraduate Studies at University Park, and the World Campus are required to take 1 to 3 credits of the First-Year Seminar, as specified by their college First-Year Engagement Plan.

Other Penn State colleges and campuses may require the First-Year Seminar; colleges and campuses that do not require a First-Year Seminar provide students with a first-year engagement experience.

First-year baccalaureate students entering Penn State should consult their academic adviser for these requirements.

**Cultures Requirement**
6 credits are required and may satisfy other requirements
- United States Cultures: 3 credits
- International Cultures: 3 credits

**Writing Across the Curriculum**
3 credits required from the college of graduation and likely prescribed as part of major requirements.

**Total Minimum Credits**
A minimum of 120 degree credits must be earned for a baccalaureate degree. The requirements for some programs may exceed 120 credits. Students should consult with their college or department adviser for information on specific credit requirements.

**Quality of Work**
Candidates must complete the degree requirements for their major and earn at least a 2.00 grade-point average for all courses completed within their degree program.

**Limitations on Source and Time for Credit Acquisition**
The college dean or campus chancellor and program faculty may require up to 24 credits of course work in the major to be taken at the location or in the college or program where the degree is earned. Credit used toward degree programs may need to be earned from a particular source or within time constraints (see Senate Policy 83-80 (https://senate.psu.edu/policies-and-rules-for-undergraduate-students/82-00-and-83-00-degree-requirements/#83-80)). For more information, check the Suggested Academic Plan for your intended program.