Agricultural Stewardship and Conservation, Certificate

Requirements for an undergraduate certificate may be completed at any campus location offering the specified courses for the certificate.

Program Description
The Chesapeake Bay Program and other local, state, and federal initiatives to protect surface and groundwater resources have increasingly focused on agricultural best management practices. A significant demand has been created for professionals trained in these best management practices and the ability to plan and implement them in a wide variety of agricultural systems. The goal of the certificate program in Agricultural Stewardship and Conservation is to provide enhanced knowledge for planning, designing, and implementing best management practices on agricultural lands that contribute to soil health while preventing soil erosion, controlling runoff and managing nutrient inputs and outputs, all of which serve to protect ground and surface waters. Local, state and federal policies and regulations pertaining to agricultural stewardship are addressed, as well as certification requirements for agricultural and nutrient management specialists to work in the field of agricultural erosion and sediment control and nutrient management in the Commonwealth of Pennsylvania.

You Might Like This Program If...
• You are interested in monitoring and implementing best management practices.
• You have a passion for conservation and natural resource issues.

The certificate was developed to offer classroom and hands-on learning in the sustainability of agricultural soil and water resources. The Agricultural Stewardship and Conservation certificate may appeal to a variety of Penn State majors, including Environmental Resource Management, BioRenewable Systems, Animal Science, Agricultural Science, and Plant Sciences, as well as non-degree students.

Program Requirements
To earn an undergraduate certificate in Agricultural Stewardship and Conservation, a minimum of 11 credits is required.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ERM 426</td>
<td>Nutrient Management Specialist Preparation</td>
<td>1</td>
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<tr>
<td>ERM 495</td>
<td>Internship</td>
<td>1-3</td>
</tr>
<tr>
<td>or ERM 496</td>
<td>Independent Studies</td>
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<tr>
<td>SOILS 101</td>
<td>Introductory Soil Science</td>
<td>3</td>
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<tr>
<td>SOILS 418</td>
<td>Nutrient Management in Agricultural Systems</td>
<td>3</td>
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<td>Select one of the following:</td>
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<td>3-4</td>
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<tr>
<td>ASM 327</td>
<td>Soil and Water Resource Management</td>
<td></td>
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<tr>
<td>BE 307</td>
<td>Principles of Soil and Water Engineering</td>
<td></td>
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<tr>
<td>SOILS 422</td>
<td>Natural Resources Conservation and Community Sustainability</td>
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Certificate Learning Objectives
1. Mastery of calculations to determine soil erosion and water runoff; design of best management practices to control soil erosion and water runoff
2. Managing nutrient inputs and outputs on agricultural land to protect surface and groundwaters and comply with environmental regulations
3. Provide reports to evaluate, integrate, and explain information from PLO 1 & 2 in on-farm scenarios

Academic Advising
The objectives of the university’s academic advising program are to help advisees identify and achieve their academic goals, to promote their intellectual discovery, and to encourage students to take advantage of both in-and out-of class educational opportunities in order that they become self-directed learners and decision makers.

Both advisers and advisees share responsibility for making the advising relationship succeed. By encouraging their advisees to become engaged in their education, to meet their educational goals, and to develop the habit of learning, advisers assume a significant educational role. The advisee’s unit of enrollment will provide each advisee with a primary academic adviser, the information needed to plan the chosen program of study, and referrals to other specialized resources.

READ SENATE POLICY 32-00: ADVISING POLICY (http://senate.psu.edu/policies-and-rules-for-undergraduate-students/32-00-advising-policy/)

University Park
Robert Shannon
Associate Professor and Program Coordinator
114 Ferguson Building
University Park, PA 16802
814-865-6942
rds13@psu.edu

Contact
University Park
DEPARTMENT OF ENVIRONMENTAL RESOURCE MANAGEMENT
114 Ferguson Building
University Park, PA 16802
814-865-6942
rds13@psu.edu

http://agsci.psu.edu/erm (http://agsci.psu.edu/erm/)