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

Program Description
The 12-credit Certificate in Environment and Society Geography will engage students with issues, knowledge, and diverse forms of learning, analysis, and exposition related to the interactions of human societies and environments. This certificate is based on the twin foundations of this sub-field of geography, namely human-environment interactions and nature-society relations. Its purpose is to train students to use frameworks such as political ecology and environmental geography to provide the tools and concepts of change and sustainability necessary to analyze human-environment systems, environmental problems, and remediation across local-to-global scales, and the political economy of resource use and management.

Learning objectives: Identify, describe, and analyze human-environment systems and processes across the globe; recognize how humans depend on, alter, and manage their environment in various places; and think critically about addressing complex human-environment challenges.

What is Environment and Society Geography?
Environment and society geography examines how human society and the natural world are interconnected. This certificate specifically addresses how geographers approach questions concerning human-environment relations, environmental processes, and environmental justice. Students who enroll in this certificate program will engage frameworks such as political ecology, environmental geography, sustainability, and globalization. Courses that contribute to this certificate cover topics such as conservation, agriculture, food, water, energy, climate change and health, as well as the complex ways these elements interact. Upon completing the certificate, students will be able to analyze human-environment systems, the political economy of resource use and management, environmental problems, and remediation across local-to-global scales. Focus areas include: conservation and protected areas; development; environmental health and inequality; urban-rural dynamics; food-energy-water nexus; and environment-society interactions involving agriculture, nutrition, and well-being.

You Might Like This Program If...
- You are interested in the complex interactions between environments and society.
- You want to obtain the tools needed to address both the social and natural dimensions of environmental issues associated with health, sustainability, food scarcity, climate change, energy alternatives, water resources and urban and industrial growth.

Program Requirements
To earn an undergraduate certificate in Environment and Society Geography, a minimum of 12 credits is required.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>GEOG 230</td>
<td>Geographic Perspectives on Environment, Society and Sustainability</td>
<td>3</td>
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<td>Select 9 credits from the following:</td>
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<tr>
<td>GEOG 330N</td>
<td>Political Ecology</td>
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<tr>
<td>GEOG 333</td>
<td>Human Dimensions of Natural Hazards</td>
<td></td>
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<tr>
<td>GEOG 430</td>
<td>Human Use of Environment</td>
<td></td>
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<tr>
<td>GEOG 431</td>
<td>Geography of Water Resources</td>
<td></td>
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<tr>
<td>GEOG 432</td>
<td>Energy Policy</td>
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<td>GEOG 433</td>
<td>Geographies of Justice</td>
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<tr>
<td>GEOG 434</td>
<td>Politics of the Environment</td>
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<tr>
<td>GEOG 436</td>
<td>Ecology, Economy, and Society</td>
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<tr>
<td>GEOG 438W</td>
<td>Human Dimensions of Global Warming</td>
<td></td>
</tr>
<tr>
<td>GEOG 439</td>
<td>Property and the Global Environment</td>
<td></td>
</tr>
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</table>

Non-Course Requirements
Per University policy, all credit courses for a certificate require a grade of 'C' or higher, and at least two-thirds (2/3) of the credits used to complete a certificate must be earned at Penn State. If student is completing multiple certificates in Geography, no more than one (1) course may double-count for each.

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
Jodi Vender
Undergraduate Advising Coordinator
305 Walker Building
University Park, PA 16802
814-863-5730
advising@geog.psu.edu

Career Paths
Students earning the Environment and Society Geography certificate learn a wide range of research and analytical skills that are highly valued by employers. Students who are trained at the intersection of the environment and society find jobs in all levels of government, nonprofit organizations, and in industry. This is one of several geography-related certificates that students can use to tailor their educational experience in preparation for the job market. In addition to Environment and Society Geography, the Department of Geography offers certificates in Geospatial Big Data Analytics; Geographic Information Systems; Human Geography;
Landscape Ecology; Justice, Ethics, Diversity in Space; and Physical Geography.

**Careers**

Students earning the certificate in Environment and Society Geography are well positioned to find employment with diverse organizations spanning business, government, and nonprofit sectors. Such organizations may include (but are not limited to): American Red Cross, Amnesty International, Federal Emergency Management Agency, Heifer International, National Park Service, U.S. Army Corps of Engineers, U.S. Environmental Protection Agency, U.S. Forest Service, U.S. State Department, local, regional, and state planning agencies, environmental and engineering consulting firms, policy research institutes, private corporations, and humanitarian organizations.

MORE INFORMATION ABOUT POTENTIAL CAREER OPTIONS FOR GRADUATES WITH A CERTIFICATE IN ENVIRONMENT AND SOCIETY GEOGRAPHY (http://www.geog.psu.edu)

**Opportunities for Graduate Studies**

A certificate in the dynamic intersections of the environment with society is useful for students who are interested in pursuing graduate degrees in the environmental and social sciences. Alumni enter graduate and professional studies in a variety of programs, including (but not limited to) geography, planning, international development, urban studies, sustainability, environmental sciences, ecology, public policy, emergency management, and law. They sometimes begin graduate or professional programs directly after finishing undergraduate studies, but often get several years’ work experience before returning to school, either full or part-time.

MORE INFORMATION ABOUT OPPORTUNITIES FOR GRADUATE STUDIES (http://www.geog.psu.edu)

**Professional Resources**

- American Association of Geographers (AAG) (http://www.aag.org)
- American Geographic Society (AGS) (http://americangeo.org)
- National Geographic Society (NGS) (https://www.nationalgeographic.com)
- International Geographic Union (IGU) (http://iswg.org)

**Contact**

**University Park**

DEPARTMENT OF GEOGRAPHY

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