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

Program Description
By the time current undergraduates send their children to college, Earth’s population will have increased to more than eight billion people. Our climate will be warmer and characterized by more frequent extreme weather events including droughts. One or more major metropolitan areas in our increasingly crowded world will have experienced a devastating hurricane or typhoon, sea level rise will be inundating low-lying coastal cities along with whole island nations, energy resources will be less available and more expensive, clean drinking water will be more scarce, and it will be increasingly difficult to feed the global population. How we choose to plan for and attempt to mitigate these “grand challenges” will have consequences for individuals, nations, and our global socioeconomic and political systems.

The goal of the 12-credit Certificate Program in Earth Sustainability is to dramatically increase geoscience literacy of all undergraduate students, including the large majority that do not major on the geosciences, future K-12 teachers, and also those who are historically underrepresented in the geosciences, such that they are better positioned to make sustainable decisions in their lives and as part of the broader society.

What is Earth Sustainability?
The Earth Sustainability certificate program is designed to provide students with the knowledge needed to make well-informed, environmentally sustainable decisions. It increases geoscience literacy and addresses key sustainability issues, such as the impact of climate change on Earth and its inhabitants, access to clean drinking water, sustainable energy, and the hazards posed by our overpopulated coastal regions.

You Might Like This Program If...
- You are passionate about sustainability and the environment.
- You want a better understanding of the science behind and potential effects of climate change.
- You want to know more about the complexities, challenges, and opportunities involved in planning for the Earth’s future.
- You would like to explore both the scientific and the social aspects of big problems like population growth, resource management, and climate change.

Program Requirements
To earn an undergraduate certificate in Earth Sustainability, a minimum of 12 credits is required.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tr>
<td>EARTH 103</td>
<td></td>
<td>3</td>
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<td>Select 9 credits from the following:</td>
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<tr>
<td>EARTH 104N</td>
<td>Climate, Energy and Our Future</td>
<td></td>
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<tr>
<td>EARTH 107N</td>
<td>Coastal Processes, Hazards and Society</td>
<td></td>
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<tr>
<td>EARTH 109</td>
<td>The Fundamentals of Shale Energy Development</td>
<td></td>
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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 (https://senate.psu.edu/policies-and-rules-for-undergraduate-students/32-00-advising-policy/)

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https://www.worldcampus.psu.edu/degrees-and-certificates/penn-state-online-earth-sustainability-certificate/overview/