The graduate certificate in Sustainability Management and Policy is designed specifically for current and aspiring practitioners who seek advanced skills for advancing sustainability practice. The program is offered by the Department of Energy and Mineral Engineering through Penn State's World Campus.

Courses taken in the certificate program may be applied toward the Master of Professional Studies in Renewable Energy and Sustainability Systems (RESS) if the student has earned a B- or better in each course, subject to restrictions outlined in GCAC-309 Transfer Credit (http://gradschool.psu.edu/graduate-education-policies/gcac/gcac-300/transfer-credit/). Certificate students who wish to have certificate courses applied towards the M.P.S. in RESS must apply and be admitted to that degree program. Admission to the RESS graduate degree program is a separate step and is not guaranteed.

Effective Semester: Fall 2018
Expiration Semester: Summer 2023

Admission Requirements
Applicants apply for admission to the program via the Graduate School application for admission (http://gradschool.psu.edu/prospective-students/how-to-apply/). Requirements listed here are in addition to Graduate Council policies listed under GCAC-300 Admissions Policies (http://gradschool.psu.edu/graduate-education-policies/gcac/gcac-300/). International applicants may be required to satisfy an English proficiency requirement; see GCAC-305 Admission Requirements for International Students (http://gradschool.psu.edu/graduate-education-policies/gcac/gcac-300/gcac-305-admission-requirements-international-students/) for more information.

Certificate Requirements
Requirements listed here are in addition to requirements listed in Graduate Council policy GCAC-212 Postbaccalaureate Credit Certificate Programs (http://gradschool.psu.edu/graduate-education-policies/gcac/gcac-200/gcac-212-postbaccalaureate-credit-certificate-programs/).

Certificate students earn the certificate and 12 graduate credits by successfully completing each of the four required 3-credit, instructor-led online courses with a grade of C or better.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tr>
<td>BA 850</td>
<td>Sustainability Driven Innovation</td>
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<tr>
<td>EME 803</td>
<td>Applied Energy Policy</td>
<td>3</td>
</tr>
<tr>
<td>EME 805</td>
<td>Renewable Energy and Nonmarket Enterprise</td>
<td>3</td>
</tr>
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Courses
Graduate courses carry numbers from 500 to 699 and 800 to 899. Advanced undergraduate courses numbered between 400 and 499 may be used to meet some graduate degree requirements when taken by graduate students. Courses below the 400 level may not. A graduate student may register for or audit these courses in order to make up deficiencies or to fill in gaps in previous education but not to meet requirements for an advanced degree.

Learning Outcomes
1. SUSTAINABILITY: Students will be able to demonstrate knowledge of the fundamental principles of sustainability and apply various methods for assessing sustainability indicators.
2. ANALYSIS: Students will be able to analyze market and non-market conditions for renewable energy enterprise and sustainable technology or product development.
3. COMMUNICATION: Students will be able to identify and communicate key policy features for renewable energy and sustainability pathways.
4. SYSTEMS THINKING: Students will be able to address and assess key features of coupled human-environment systems.

Contact
Campus: World Campus
Graduate Program Head: Erich William Schienke
Director of Graduate Studies (DGS) or Professor-in-Charge (PIC): Erich William Schienke
Program Contact: Noelle Fetzer Capparelle
Department of Energy and Mineral Engineering
2217 Earth Engr Sciences
University Park PA 16802
nlf5@psu.edu
(814) 867-5401

Program Website: View (https://www.ress.psu.edu/certificates/)