PhD in Sustainable Energy
The transdisciplinary PhD program in Sustainable Energy prepares students for innovative careers in research, teaching and academia developing sustainable energy solutions and policies.

Course Requirements
Students may be admitted to the PhD program with either a bachelor’s or a master’s degree. If admitted with a bachelor’s degree, students must complete a minimum of 84-credit hours (and have the opportunity to earn a master’s in passing). If admitted with a master’s degree, they must complete a minimum of 54 credit hours. In summary:

<table>
<thead>
<tr>
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<th>Admitted with a Master’s</th>
<th>Admitted with a Bachelor’s</th>
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</thead>
<tbody>
<tr>
<td>Core Courses</td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>Research</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Dissertation</td>
<td>12</td>
<td>12</td>
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<tr>
<td>Electives</td>
<td>12*</td>
<td>42</td>
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<tr>
<td>Total Credit Hours</td>
<td>54</td>
<td>84</td>
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*Assuming relevant coursework at the master’s level.

Core Courses
The core courses are designed to provide students from diverse backgrounds with knowledge, methods and theories for the transdisciplinary study of complex energy systems. They explore the nexus of science and policy as well as develop the integrative methods needed to work across disciplines. Students coming from a science or engineering perspective will be exposed to social science and policy issues and vice versa. They also provide students with a strong foundation (content knowledge, big theory, and big studies) in the main themes of the School.

Required Core Courses
- SOS 571: Sustainable Energy I: Technologies and Systems (Required for all students)
- SOS 572: Sustainable Energy II: Transitions (Required for all students)
- SOS 573: Sustainable Energy III: Futures Analysis, Negotiation, and Governance (Required for all students)
- SOS 574: Sustainable Energy Analytics in Context (Required for all students)
- SOS 575: Sustainable Energy Research Seminar (Required for all students)
- SOS 589: Community of Scholars (Required for all students)

Research and Dissertation Hours
At least 12 credit hours of the approved PhD program must be SOS 792 Research, and at least 12 credit hours must be SOS 799 Dissertation. Students must achieve candidacy before being eligible to enroll in SOS 799 Dissertation.

Elective Courses
Electives should be chosen in consultation with the student’s committee. Electives can be taken outside of the School of Sustainability.
Supervisory Committee
Students’ supervisory committee must include members from at least two diverse disciplines to reflect the transdisciplinary nature of the degree.

Comprehensive Exam, Dissertation Prospectus, and Candidacy
When students have completed or are close to completing the coursework, they may request permission to take the comprehensive exam. The PhD comprehensive exam is administered by the student’s supervisory committee. PhD. students achieve candidacy status after passing the comprehensive exam and successfully defending a dissertation prospectus.

Dissertation
A dissertation and final oral examination in defense of the dissertation is required. The dissertation must reflect the transdisciplinary nature of the degree by integrating research from multiple disciplines.