ENERGY ANALYSIS AND POLICY, GRADUATE/PROFESSIONAL CERTIFICATE

REQUIREMENTS

Each EAP student must complete five courses (13 credits), including an introductory course, a capstone course, a professional skills seminar, and one course from each of two categories: Energy Analysis and Energy Policy. Courses in the Energy Analysis category involve quantitative analysis of the technical and economic factors that shape society’s use of energy resources. Courses in the Energy Policy category involve the social, political, and environmental factors that underly decision-making around energy choices.

Some courses listed in the Energy Analysis category may have some overlap with the Energy Policy category, and vice versa. Students who wish to use a course for the opposite category that it is listed in should submit a written request to the EAP Academic Coordinator or Faculty Chair. Students should provide a course syllabus and a written justification for why the course should qualify for the other category in the context of their overall course of study, with the EAP Chair making the final decision on whether to accept the request.

The following courses are offered regularly, though other courses (with approval by the EAP faculty program committee) may fulfill one of the requirements below (see note under Other Qualifying Courses (p. 2)).

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Courses</td>
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<tr>
<td>ENVIR ST/ PUB AFFR/ URB R PL 809</td>
<td>Introduction to Energy Analysis and Policy</td>
<td>3</td>
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<tr>
<td>ENVIR ST/ PUB AFFR/ URB R PL 810</td>
<td>Energy Analysis and Policy Capstone</td>
<td>3</td>
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<tr>
<td>Seminar</td>
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<td>1</td>
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<tr>
<td>ENVIR ST 909</td>
<td>Professional Skills in Energy Analysis and Policy</td>
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<td>or</td>
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<tr>
<td>ENVIR ST 900</td>
<td>Seminar (Topic: Prof Skills in Energy Analysis and Policy)</td>
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<tr>
<td>Energy Analysis</td>
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<td>3</td>
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<tr>
<td>Choose one of the following:</td>
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<tr>
<td>A A E/ECON 371</td>
<td>Energy, Resources and Economics</td>
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<tr>
<td>A A E/ENVIR ST/ POP HLTH/ PUB AFFR 881</td>
<td>Benefit-Cost Analysis</td>
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<tr>
<td>AGROECOL/ AGRONOMY/ ENVIR ST 724</td>
<td>Agroecosystems and Global Change</td>
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<tr>
<td>ENVIR ST/ A A E/ECON/ URB R PL 671</td>
<td>Energy Economics</td>
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<tr>
<td>BSE 460</td>
<td>Biorefining: Energy and Products from Renewable Resources</td>
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<tr>
<td>CBE 512</td>
<td>Energy Technologies and Sustainability</td>
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<tr>
<td>CIV ENGR/ G LE 421</td>
<td>Environmental Sustainability Engineering</td>
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<tr>
<td>CIV ENGR/ G LE 535</td>
<td>Wind Energy Balance-of-Plant Design</td>
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<tr>
<td>E C E 356</td>
<td>Electric Power Processing for Alternative Energy Systems</td>
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<tr>
<td>E C E 427</td>
<td>Electric Power Systems</td>
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<tr>
<td>ENVIR ST/ BSE 367</td>
<td>Renewable Energy Systems</td>
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<td>E P D 731</td>
<td>Energy Efficiency in Buildings</td>
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<tr>
<td>M E 466</td>
<td>Air Pollution Effects, Measurements and Control</td>
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<tr>
<td>or CIV ENGR 42 Air Pollution Effects, Measurement and Control</td>
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<tr>
<td>M E 469</td>
<td>Internal Combustion Engines</td>
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<tr>
<td>M E/CBE 567</td>
<td>Solar Energy Technology</td>
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<tr>
<td>N E 571</td>
<td>Economic and Environmental Aspects of Nuclear Energy</td>
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<tr>
<td>Total Credits</td>
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<td>13</td>
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</table>

Because this is a 2-credit course, students selecting this course option are required to take an additional 1-credit course in consultation with the certificate coordinator.
OTHER QUALIFYING COURSES
Because the scheduling of the preceding courses is coordinated with the needs of their home departments, EAP cannot guarantee that specific courses will always be offered at specific times or rotations. Each semester, the EAP program faculty will consider other qualifying courses for the upcoming semester that fulfill one of the categories above. Once approved, the EAP Academic Coordinator will distribute a list of course offerings for the upcoming semester to students in the EAP program.

COURSE SUBSTITUTIONS
Students may propose course substitutions by contacting the Academic Coordinator or the Faculty Chair. The EAP Chair makes the final decision. Students should provide a course syllabus and a letter of endorsement from the faculty member teaching the course, preferably before the start of the course. The substitution proposal will be considered based upon the following criteria:

1. the extent to which the course content is devoted to energy
2. the rigor of methodology applied to the course material
3. the context of the class with respect to the student’s study plan