

Sustainable Energy Technology Minor

Return to [Department](#)

Minor Requirements:

Before beginning these courses, the student must meet the required course prerequisites. Minimum grade of C- required.

Three of the following:

- [CIEG 351 - Transportation Engineering](#) **Credit(s): 3** UL Tech Elective or Extra Tech
- [CIEG 402 - Introduction to Sustainability Principles in Civil Engineering](#) **Credit(s): 3**
- [CIEG 403 - Sustainability Applications in Infrastructure](#) **Credit(s): 3**
- [CIEG 465 - Global Sustainable Engineering](#) **Credit(s): 3** (Three-credit version only) UL Tech Elective or Extra Tech
- CHEG 612 - Applied Process Heat Transfer
- CHEG 613 - Energy and the Environment CHEG Elective
- CHEG 614 - Special Topics in Energy
- CHEG 616 - Chemistry and Physics of Surfaces and Interfaces
- CHEG 624 - Bio-Based Materials
- CHEG 625 - Green Engineering CHEG Elective
- CHEG 632 - Electrochemical Energy Engineering CHEG Elective

- [ELEG 415 - Electric Power Systems](#) **Credit(s): 3** UL Tech Elective or Extra Tech
- or
- ELEG 615 - Electric Power and Renewable Energy Systems UL Tech Elective or Extra Tech

- [ELEG 417 - The Smart Grid](#) **Credit(s): 3**
- or
- ELEG 617 - The Smart Grid

- [ELEG 428 - Solar Electric Technology & Applications](#) **Credit(s): 3**
- or
- ELEG 628 - Solar Energy Technology and Applications Has previously been approved by Undergrad Studies Committee to count as a tech elective

- [ELEG 437 - Energy Systems](#) **Credit(s): 3**
or
- ELEG 637 - Energy Systems

- [ELEG 456 - Electric Power II](#) **Credit(s): 3**
or
- ELEG 656 - Electric Power II

- [ELEG 457 - Design & Operation of Renewable Energy Microgrid](#) **Credit(s): 3**
or
- ELEG 657 - Design & Operations of Renewable Energy Microgrid

- [ELEG 493 - Electric Motors and Generators](#) **Credit(s): 3**
or
- ELEG 693 - Electric Motors and Generators

- [MAST 484 - Electric Vehicles and the Grid](#) **Credit(s): 3** UL Tech Elective or Extra Tech
- [MEEG 425 - Automotive Powertrain Theory](#) **Credit(s): 3** UL Tech Elective or Extra Tech
- [MEEG 435 - Wind Power Engineering](#) **Credit(s): 3** UL Tech Elective or Extra Tech
- [MEEG 442 - Introduction to Fuel Cells](#) **Credit(s): 3** UL Tech Elective or Extra Tech
- Three-credit Undergraduate Research in Energy

One of the following:

- [ENEP 250 - Introduction to Energy and Environmental Policy](#) **Credit(s): 3** LL Univ breadth Social & Behavioral

- [ENEP 425 - Energy Policy and Administration](#) **Credit(s): 3** UL Univ or COE Breadth Social & Behavioral (Fall)
or
- ENEP 625 - Energy Policy and Administration UL Univ Breadth Social & Behavioral or COE Breadth (Fall)

- [ENEP 485 - Senior Seminar in Energy and Environmental Policy](#) **Credit(s): 3**

One of the following:

- [APEC 343 - Environmental Economics](#) **Credit(s): 3** UL Univ Breadth Social & Behavioral or COE Breadth (Fall)
- CIEG 650 - Urban Transportation Systems
- [ECON 320 - Energy Economics](#) **Credit(s): 3**

- [ENEP 402 - Electricity Policy and Planning](#) **Credit(s): 3** **UL COE Breadth**
 - [ENEP 426 - Climate Change Policy](#) **Credit(s): 3**
 - [ENEP 427 - Sustainable Energy: Economics and Policy Analysis](#) **Credit(s): 3**
 - [GEOG 235 - Conservation of Natural Resources](#) **Credit(s): 3** **LL Univ Breadth Social & Behavioral**
 - [GEOG 236 - Humans and Environmental Sustainability](#) **Credit(s): 3**

 - [GEOG 422 - Resources, Development and the Environment](#) **Credit(s): 3** **LL COE Breadth**
- or
- GEOG 622 - Resources, Development and the Environment

 - MAST 628 - Offshore Wind Power: Science, Engineering, and Policy
 - MAST 662 - Conservation and Renewable Energy Policy
 - MAST 675 - Economics of Natural Resources
 - MAST 676 - Environmental Economics (prereq: [ECON 300](#))
 - [PHYS 143 - Energy Technology and Society](#) **Credit(s): 3**
 - [POSC 220 - Introduction to Public Policy](#) **Credit(s): 3** **LL Univ Breadth Social & Behavioral**
 - [POSC 350 - Politics and the Environment](#) **Credit(s): 3** **UL COE Breadth**
 - Other courses may be included upon approval of the minor administration committee.

Credits to Total a Minimum of 15

Last Revised for 2021-2022 Academic Year
