Energy and Environmental Policy

Bachelor of Science

Handbook 2018-2019
WELCOME TO THE ENEP-BS DEGREE PROGRAM

An Interdisciplinary, Intercollegiate Degree

The undergraduate Baccalaureate of Science in Energy and Environmental Policy (ENEP-BS) is an interdisciplinary degree offered with the support of 5 Colleges of the University of Delaware. It is part of the College of Arts and Sciences. The ENEP-BS equips students for careers in energy and environmental fields through courses focused on knowledge advancement and research experiences to develop competitive skills for participation in this fast-growing field.

The ENEP-BS degree, although independently offered, builds upon the collaboration with the Center for Energy and Environmental Policy (CEEP) in energy and environmental policy analysis and development. Established in 1980, CEEP offered the nation’s first interdisciplinary graduate degrees in energy and environmental policy, while also directing numerous research projects in collaboration with local, state, national, international and non-governmental partner organizations, and pressing for the integration of social justice in energy and environmental policy development by engaging academic and professional discourses.

The ENEP-BS degree fits within this context of rigorous academic studies, praxis in the analysis and development of energy and environmental policies through coordination with partner organizations and governments, and the wider dissemination of knowledge about the need for the consideration of equitable futures in the analysis and development of energy and environmental policies.

Choose Your Career Path

Students who graduate with an ENEP-BS degree are prepared for rewarding academic or professional careers in renewable energy, environmental protection, sustainable development, climate change policy and green jobs. Careers include energy and environmental planning, policy analysis, management and administration, and research in the public, private and non-profit sectors. Graduates of the program will be qualified to assume positions in local and national governments, international agencies, research and policy institutions, consulting firms, energy utilities, and corporate departments with responsibilities in energy and environmental matters. Energy and environmental policy is a burgeoning field with numerous career opportunities.
**Core Faculty**

**Dr. Ismat Shah**  
Director of the Energy and Environmental Policy Program  
Professor, Materials Science & Engineering, Physics & Astronomy, and Energy & Environmental Policy  
Office: 201 Dupont Hall  
Office Phone: 831-1618  
Email: ismat@udel.edu

**Dr. Lawrence Agbemabiese**  
Research Associate Professor, Energy and Environmental Policy  
Office: 272 Graham Hall  
Office Phone: 831-3623  
Email: agbe@udel.edu

**Dr. Saleem Ali**  
Blue and Gold Distinguished Professor of Energy and the Environment, Geography and Energy & Environmental Policy  
Office: 220 Pearson Hall  
Office Phone: 302-831-0871  
Email: saleem@udel.edu

**Dr. John Byrne**  
Director, Center for Energy and Environmental Policy  
Distinguished Professor of Energy and Climate Policy  
Office: 278 Graham Hall  
Office Phone: 302-831-8405  
Email: c/o PhD Candidate Jeongseok Seo jsseo@udel.edu

**Dr. Ray Scattone**  
Assistant Research Professor, Energy & Environmental Policy  
Office: 274 Graham Hall  
Office Phone: 831-3232  
Email: rayscatt@udel.edu

**Dr. Kalim Shah**  
Assistant Professor, Energy and Environmental Policy  
Office: 270C Graham Hall  
Office Phone: 302-831-4700  
Email: kalshah@udel.edu
ENEP Faculty

Core Faculty (cont.)

Dr. Casey Taylor
Assistant Professor, Energy & Environmental Policy
Office: 274 Graham Hall
Office Phone: 302-831-7111
Email: taylorc@udel.edu

Affiliated Faculty

Dr. Cristina Archer
Associate Professor, Physical Ocean Science & Engineering, Marine Science & Policy, and Geography
Office: 371 ISE Lab
Office Phone: 302-831-6640
Email: carcher@udel.edu

Dr. Nii Attoh-Okine
Professor, Civil & Environmental Engineering
Office: 352 Dupont Hall
Office Phone: 831-4532
Email: okine@udel.edu

Dr. Steven Hegedus
Scientist, Energy Conversion
Office: 174 IEC Building
Office Phone: 302-831-6253
Email: ssh@udel.edu

Dr. Willet Kempton
Professor, Marine Science & Policy, Public Policy & Administration, and Electrical & Computer Engineering
Office: 374 ISE Lab
Office Phone: 302-831-0049
Email: willet@udel.edu

Dr. Tom Powers
Director of the Center for Science, Ethics & Public Policy
Associate Professor, Ethics and Public Policy & Administration
Office: 15 Kent Way, Room 206
Office Phone: 302-831-3229
Email: tpowers@udel.edu
In order to fulfill the requirements for graduation, students must successfully complete 125 credit hours that fulfill university, major, concentration-specific course requirements and electives, and must maintain a 2.0 grade point average (GPA).

**Degree Concentrations**

Our choice of degree concentrations enables students to choose an approach toward energy and environmental policy that suits individual career interests.

**Energy, Environment and Society (EES)** - Students prepare for careers in local, national or international energy/environmental policy analysis and planning and sustainability research. Coursework integrates the social sciences, economics, statistical analysis, science and technology for students to develop a broad interdisciplinary understanding of the challenges and proposed solutions for major environmental and energy challenges, including climate change, the transitions to a clean energy economy, and the promotion of ecological justice.

**Energy, Science and Technology (EST)** - Students prepare for careers in sustainable energy technology development, policy analysis, and planning. Coursework bridges scientific and technological knowledge of sustainable energy with the policies that influence energy technology design, market infiltration, and consumer choice to analyze and assess sustainable and renewable energy technology options.

**Energy, Economics and Public Policy (EEP)** - Students prepare for careers in sustainable energy economics, environmental economics, and Utility regulatory analysis. Coursework emphasizes public policy and economics approaches to public and private sector sustainable energy development and environmental protection.

**University Requirements**

The University of Delaware requires all students to complete the following 10 credit hours of courses:

**ENGL 110 Seminar in Composition (3 credits):** Prepares students for writing college essays, including essay and thesis statement development, grammar, and scholarship.

**First Year Experience: UNIV 101 (1 credit)**

**Discovery Learning Experience:** *ENEP 364: Research Internship* (3 credits) fulfills the DLE requirement. (See course descriptions)

**Multicultural Requirement (3 credits):** Introduces students to international perspectives and cultural, ethnic, and religious diversity so that students may live and work more effectively in an increasingly global society. Numerous courses are offered that meet this multicultural requirement, some of which may also be used to fulfill breadth requirements. A list of these courses is searchable in the UD online course catalog.
College of Arts and Science Requirements

Please see https://www.cas.udel.edu/current-students/academic-planning/cas-degree-requirements.

Breadth Requirements

All majors have Breadth Requirements in order to develop well-rounded scholars who are familiar with diverse fields and perspectives. Students in the ENEP major are required to meet the following distribution of 31 credit hours of Breadth Requirements (essentially 19 credits in addition to the University Breadth Requirements):

- Group A: Creative Arts and Humanities (9 credits)
- Group B: History and Cultural Change (6 credits)
- Group C: Social and Behavioral Sciences (6 credits)
- Group D: Mathematics, Natural Sciences, and Technology (10 credits)

If chosen carefully, up to 3 credits from each of the University Breadth Requirement categories may be used to simultaneously satisfy the College of Arts and Sciences Breadth Requirements for this major.

Of the 31 credits, 3 credits may be used to simultaneously satisfy the University Multicultural Requirement (recommended for timely progress toward degree completion.)

Some of the qualifying breadth courses also fulfill requirements for the major, enabling students to meet two requirements with the same course. Doing so reserves credits towards the 125 required to graduate that students can fulfill with electives. When a student uses one course to fulfill two requirements, this does not reduce the total of 125 credits needed to graduate in the major.

Electives in the major or non-major electives are taken to assure completion of the 125 credit requirement. All courses must be passed with a minimum grade of C-.

Note: The 31 credit hours of Breadth Requirements specified by the ENEP Program includes the 12-credit minimum required by University Policy. ENEP majors do not need to take any Breadth Requirement courses beyond the 31 credits specified above.

Major Requirements

The ENEP-BS degree requires all students in any concentration to complete a 3-credit second writing course, 15 credit hours of core curriculum courses, and 21 credit hours of Advanced/Capstone coursework.
Minimum Mathematics Requirement (3 or 4 credits): *Group D Breadth

**MATH 114** or higher is required for EEP and EES concentrations and is a prerequisite for other required courses in the concentration.

**MATH 241** or higher is required for the EST concentration and is a prerequisite for other required courses in the concentration.

Second Writing Course (3 credits): Must be taken after completion of 60 credit hours. Provides students with the opportunity to develop writing skills through guided writing exercises. This requirement will be satisfied for ENEP students by courses that are required for the ENEP major.

Core Curriculum Courses (15 credits): Fundamental courses offer the foundation for energy and environmental policy study. These courses include:

- **ENEP 250** Introduction to Energy Policy *Group C Breadth*
- **PHYS 143** Energy Technology and Society *Group D Breadth*
- **ECON 101** Introduction to Microeconomics *Group C Breadth*
- **UAPP 110** Changing the World: Role of Public Policy *Group C Breadth*
- **UAPP 225** Crafting Public Policy *Group C Breadth*

Advanced Courses (15 credits): Advanced courses provide opportunities for students to integrate and explore and research sustainable energy and environmental issues.

- **ECON 343** Environmental Economics *Group C Breadth*
- **UAPP 325** Public Policy Analysis

**Choose three of the following (9 credits):**

- **ENEP 410** Environmental Sustainability: Economic and Policy Analysis *Group C Breadth*
- **ENEP 425** Energy Policy and Administration *Group C Breadth*
- **ENEP 426** Climate Change Policy *Group C Breadth*
- **ENEP 427** Sustainable Energy: Economics and Policy Analysis *Group C Breadth*

Capstone (6 credits):

**Students choose from two options:**

**Option 1**
- ENEP 485 Senior Seminar (3 credits) (See course descriptions)

AND
- ENEP 364 Internship (3 credits) (See course descriptions)

**Option 2**
- ENEP 472 Senior Thesis (6 credits) (See course descriptions)

*Note: All students are encouraged to complete an internship regardless of the capstone option chosen. ENEP 364 may be completed as an elective in the requirements for the concentration (see below).
Concentration-Specific Courses

While all ENEP-BS students must fulfill the same university and major requirement categories, each concentration requires different advanced courses.

Energy, Environment and Society (EES)

Advanced Course Requirements (ACR) (18 credits)

- ECON 300 Intermediate Microeconomic Theory

**Choose one of the following (3 or 4 credits):**

- MATH 201 Introduction to Statistical Methods I *Group D Breadth
- STAT 200 Basic Statistical Practice
- MATH 221 Calculus 1 *Group D Breadth
- MATH 241 Analytic Geometry and Calculus A (4 credits) *Group D Breadth

**Choose two of the following (6 credits):**

- GEOG 422 Resources, Development and the Environment
- PHIL 448 Environmental Ethics *Group A Breadth
- UAPP 406
- GEOG 434 Plan Sustainable Communities & Regions *Group A Breadth
- POSC 350 Politics and the Environment *Group C Breadth

**Choose two of the following (6 credits):**

- ENEP 420 Water Resources Management
- ENWC 201 Wildlife Conservation and Ecology *Group D Breadth
- GEOG 271 Introduction to Geographic Data Analysis *Group D Breadth
- GEOG 372 Introduction to GIS

Advanced Course Elective (ACE) (12 credits)

Students are strongly encouraged to complete a minor or concentrate electives in a particular area of study that will complement the ENEP degree. Below is a list of approved courses for the ACE requirement. Additional courses may be approved by an advisor. Courses listed, but not used as ACR above, may be used as ACE.

**Approved Elective Courses for Energy, Environment and Society**

*Note:* Some of the courses listed below may also fulfill a Breadth requirement.

- APEC 324 Introduction to Resource Economics
- APEC 406 Agricultural and Natural Resource Policy
- APEC 424 Resource Economics
- APEC 444 Economics of Environmental Management
- APEC 450 Topics in Environmental Law
- BISC 321 Environmental Biology
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIEG 402</td>
<td>Introduction to Sustainability Principles in Civil Engineering</td>
</tr>
<tr>
<td>ENEP 366</td>
<td>Independent Study (1 to 3 credits)</td>
</tr>
<tr>
<td>ENEP 402</td>
<td>Electricity Policy and Planning</td>
</tr>
<tr>
<td>ENEP 468</td>
<td>Research in Energy and Environment (3 to 6 credits)</td>
</tr>
<tr>
<td>ENEP 470</td>
<td>Readings in Energy and Environment</td>
</tr>
<tr>
<td>ENGL 365</td>
<td>Studies in Literary Genres, Types and Movements</td>
</tr>
<tr>
<td>ENWC 325</td>
<td>Wildlife Management</td>
</tr>
<tr>
<td>ENWC 413</td>
<td>Wildlife Policy and Administration</td>
</tr>
<tr>
<td>ENWC 456</td>
<td>Conservation Biology</td>
</tr>
<tr>
<td>GEOG 412</td>
<td>Physical Climatology (4 credits)</td>
</tr>
<tr>
<td>GEOL 421</td>
<td>Environmental and Applied Geology</td>
</tr>
<tr>
<td>HIST 223</td>
<td>Nature and History</td>
</tr>
<tr>
<td>MATH 202</td>
<td>Introduction to Statistical Methods II</td>
</tr>
<tr>
<td>POSC 300</td>
<td>Research Methods for Political Science</td>
</tr>
<tr>
<td>POSC 311</td>
<td>Politics of Developing Nations</td>
</tr>
<tr>
<td>POSC 316</td>
<td>International Political Economy</td>
</tr>
<tr>
<td>SOCI 470</td>
<td>Environmental Sociology</td>
</tr>
<tr>
<td>SOCI 471</td>
<td>Disasters, Vulnerability &amp; Development</td>
</tr>
<tr>
<td>STAT 408</td>
<td>Statistical Research Methods</td>
</tr>
<tr>
<td>STAT 470</td>
<td>Intro to STAT Analysis I</td>
</tr>
<tr>
<td>STAT 471</td>
<td>Intro to STAT Analysis II</td>
</tr>
<tr>
<td>STAT 475</td>
<td>Environmental Statistics</td>
</tr>
<tr>
<td>UAPP 427</td>
<td>Evaluating Public Policy</td>
</tr>
</tbody>
</table>
# B.S. Degree in Energy and Environmental Policy

## Energy, Environment and Society Concentration

### FIRST YEAR

#### FALL SEMESTER

<table>
<thead>
<tr>
<th>COURSE</th>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNIV 101</td>
<td>First Year Experience</td>
</tr>
<tr>
<td>ECON 101</td>
<td>Intro to Microeconomics</td>
</tr>
<tr>
<td>PHYS 143</td>
<td>Energy, Technology and Society</td>
</tr>
<tr>
<td>UAPP 110</td>
<td>Changing the World</td>
</tr>
<tr>
<td>MATH 114</td>
<td>College Algebra</td>
</tr>
<tr>
<td>BR</td>
<td>Breadth Req/Free Elective</td>
</tr>
</tbody>
</table>

**TOTAL CREDITS** | 16

#### SPRING SEMESTER

<table>
<thead>
<tr>
<th>COURSE</th>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 110</td>
<td>Seminar in Composition</td>
</tr>
<tr>
<td>ENEP 250</td>
<td>Intro to Energy Policy</td>
</tr>
<tr>
<td>UAPP 225</td>
<td>Crafting Public Policy</td>
</tr>
<tr>
<td>BR</td>
<td>Breadth Req/Free Elective</td>
</tr>
<tr>
<td>BR</td>
<td>Breadth Req/Free Elective w/ lab</td>
</tr>
</tbody>
</table>

**TOTAL CREDITS** | 16

### SECOND YEAR

#### FALL SEMESTER

<table>
<thead>
<tr>
<th>COURSE</th>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 343</td>
<td>Environmental Economics</td>
</tr>
<tr>
<td>UAPP 325</td>
<td>Public Policy Analysis</td>
</tr>
<tr>
<td>ACR</td>
<td>MATH 201, 221, 241, or STAT 200</td>
</tr>
<tr>
<td>BR</td>
<td>Breadth Req/Free Elective</td>
</tr>
<tr>
<td>Elective</td>
<td>Breadth Req/Free Elective</td>
</tr>
</tbody>
</table>

**TOTAL CREDITS** | 15

#### SPRING SEMESTER

<table>
<thead>
<tr>
<th>COURSE</th>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 300</td>
<td>Intermediate Economic Theory</td>
</tr>
<tr>
<td>ACR</td>
<td>ENEP420, ENWC201, GEOG271, GEOG372</td>
</tr>
<tr>
<td>ACE</td>
<td>Advanced Course Elective I</td>
</tr>
<tr>
<td>BR</td>
<td>Breadth Req/Free Elective</td>
</tr>
<tr>
<td>Elective</td>
<td>Breadth Req/Free Elective</td>
</tr>
</tbody>
</table>

**TOTAL CREDITS** | 15

### THIRD YEAR

#### FALL SEMESTER

<table>
<thead>
<tr>
<th>COURSE</th>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENEP 410</td>
<td>Environmental Sustainability W</td>
</tr>
<tr>
<td>ACR</td>
<td>ENEP420, ENWC201, GEOG271, GEOG372</td>
</tr>
<tr>
<td>ACR</td>
<td>GEOG422, PHIL448, GEOG434, POSC350</td>
</tr>
<tr>
<td>ACE</td>
<td>Advanced Course Elective II</td>
</tr>
<tr>
<td>Elective</td>
<td>Breadth Req/Free Elective</td>
</tr>
</tbody>
</table>

**TOTAL CREDITS** | 15

#### SPRING SEMESTER

<table>
<thead>
<tr>
<th>COURSE</th>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENEP 427</td>
<td>Sustainable Energy Analysis W</td>
</tr>
<tr>
<td>ENEP 426</td>
<td>Climate Change Policy W</td>
</tr>
<tr>
<td>ACR</td>
<td>GEOG422, PHIL448, GEOG434, POSC350</td>
</tr>
<tr>
<td>ACE</td>
<td>Advanced Course Elective III</td>
</tr>
<tr>
<td>Elective</td>
<td>Breadth Req/Free Elective</td>
</tr>
</tbody>
</table>

**TOTAL CREDITS** | 15

### FOURTH YEAR

#### FALL SEMESTER

<table>
<thead>
<tr>
<th>COURSE</th>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENEP 364</td>
<td>Internship*</td>
</tr>
<tr>
<td>ENEP 472</td>
<td>Senior Thesis W</td>
</tr>
<tr>
<td>ACE</td>
<td>Advanced Course Elective IV</td>
</tr>
<tr>
<td>Elective</td>
<td>Breadth Req/Free Elective</td>
</tr>
<tr>
<td>Elective</td>
<td>Breadth Req/Free Elective</td>
</tr>
<tr>
<td>Elective</td>
<td>Breadth Req/Free Elective</td>
</tr>
</tbody>
</table>

**TOTAL CREDITS** | 18

#### SPRING SEMESTER

<table>
<thead>
<tr>
<th>COURSE</th>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENEP 485</td>
<td>Senior Seminar</td>
</tr>
<tr>
<td>ENEP 472</td>
<td>Senior Thesis</td>
</tr>
<tr>
<td>Elective</td>
<td>Breadth Req/Free Elective</td>
</tr>
<tr>
<td>Elective</td>
<td>Breadth Req/Free Elective</td>
</tr>
<tr>
<td>Elective</td>
<td>Breadth Req/Free Elective</td>
</tr>
<tr>
<td>Elective</td>
<td>Breadth Req/Free Elective</td>
</tr>
</tbody>
</table>

**TOTAL CREDITS** | 15

**Total credits for the degree:** 125
Energy, Science and Technology (EST)

Advanced Course Requirements (ACR) (18 credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
<th>Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 103</td>
<td>General Chemistry</td>
<td>4</td>
<td>Group D Breadth</td>
</tr>
<tr>
<td>MATH 241</td>
<td>Analytic Geometry and Calculus A</td>
<td>4</td>
<td>Group D Breadth</td>
</tr>
<tr>
<td>PHYS 201</td>
<td>Introductory Physics I</td>
<td>4</td>
<td>Group D Breadth</td>
</tr>
<tr>
<td>CHEG 625</td>
<td>Green Engineering</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Choose one of the following (3 credits):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENEP 402</td>
<td>Electricity Policy and Planning</td>
</tr>
<tr>
<td>ENEP 460</td>
<td>Financial Analysis of Sustainable Energy</td>
</tr>
</tbody>
</table>

Advanced Course Elective (ACE) (12 credits)

Students are strongly encouraged to complete a minor or concentrate electives in a particular area of study that will complement the ENEP degree. Below is a list of approved courses for the ACE requirement. Additional courses may be approved by an advisor. Courses listed, but not used as ACR above, may be used as ACE.

**Approved Elective Courses for Energy, Science and Technology**

*Note: Some of the courses listed below may also fulfill a Breadth requirement.*

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUAD 301</td>
<td>Introduction to Marketing</td>
<td></td>
</tr>
<tr>
<td>BUAD 472</td>
<td>Marketing, Society and the Environment</td>
<td></td>
</tr>
<tr>
<td>CHEM 108</td>
<td>General Chemistry for Life Sciences II</td>
<td>4 credits</td>
</tr>
<tr>
<td>CIEG 402</td>
<td>Introduction to Sustainability Principles in Civil Engineering</td>
<td></td>
</tr>
<tr>
<td>ECON 311</td>
<td>Economics of Developing Countries</td>
<td></td>
</tr>
<tr>
<td>ELEG 415</td>
<td>Electric Power and Renewable Energy Systems</td>
<td></td>
</tr>
<tr>
<td>ELEG 491</td>
<td>Ethics/Impacts of Engineering</td>
<td></td>
</tr>
<tr>
<td>ENEP 366</td>
<td>Independent Study</td>
<td>(1 to 3 credits)</td>
</tr>
<tr>
<td>ENEP 420</td>
<td>Water Resources Management</td>
<td></td>
</tr>
<tr>
<td>ENEP 468</td>
<td>Research in Energy and Environment</td>
<td>(3 to 6 credits)</td>
</tr>
<tr>
<td>ENEP 470</td>
<td>Readings in Energy and Environment</td>
<td></td>
</tr>
<tr>
<td>ENWC 413</td>
<td>Wildlife Policy and Administration</td>
<td></td>
</tr>
<tr>
<td>GEOG 271</td>
<td>Introduction to Geographic Data Analysis</td>
<td></td>
</tr>
<tr>
<td>GEOG 372</td>
<td>Introduction to GIS</td>
<td></td>
</tr>
<tr>
<td>GEOG 412</td>
<td>Physical Climatology</td>
<td>(4 credits)</td>
</tr>
<tr>
<td>GEOG 422</td>
<td>Resources, Development and the Environment</td>
<td></td>
</tr>
<tr>
<td>GEOG 434</td>
<td>Plan Sustainable Communities &amp; Regions</td>
<td></td>
</tr>
<tr>
<td>GEOL 421</td>
<td>Environmental and Applied Geology</td>
<td></td>
</tr>
<tr>
<td>MATH 242</td>
<td>Analytic Geometry and Calculus B</td>
<td>(4 credits)</td>
</tr>
<tr>
<td>MEEG 435</td>
<td>Wind Power Engineering</td>
<td></td>
</tr>
<tr>
<td>MEEG 442</td>
<td>Introduction to Fuel Cells</td>
<td></td>
</tr>
<tr>
<td>POSC 350</td>
<td>Politics and the Environment</td>
<td></td>
</tr>
<tr>
<td>STAT 470</td>
<td>Intro to STAT Analysis I</td>
<td></td>
</tr>
<tr>
<td>STAT 471</td>
<td>Intro to STAT Analysis II</td>
<td></td>
</tr>
<tr>
<td>UAPP 427</td>
<td>Evaluating Public Policy</td>
<td></td>
</tr>
</tbody>
</table>
# B.S. Degree in Energy and Environmental Policy
## Energy, Science and Technology Concentration

### FIRST YEAR

<table>
<thead>
<tr>
<th>COURSE</th>
<th>FALL SEMESTER</th>
<th>CREDITS</th>
<th>SPRING SEMESTER</th>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNIV 101</td>
<td>First Year Experience</td>
<td>1</td>
<td>ENGL 110</td>
<td>Seminar in Composition</td>
</tr>
<tr>
<td>ECON 101</td>
<td>Intro to Microeconomics</td>
<td>3</td>
<td>ENEP 250</td>
<td>Intro to Energy Policy</td>
</tr>
<tr>
<td>PHYS 143</td>
<td>Energy, Technology and Society</td>
<td>3</td>
<td>MATH 241</td>
<td>Analytic Geometry and Calculus A</td>
</tr>
<tr>
<td>UAPP 110</td>
<td>Changing the World</td>
<td>3</td>
<td>UAPP 225</td>
<td>Crafting Public Policy</td>
</tr>
<tr>
<td>MATH 117</td>
<td>Pre-Calculus</td>
<td>4</td>
<td>BR</td>
<td>Breadth Req/Free Elective</td>
</tr>
<tr>
<td>BR</td>
<td>Breadth Req/Free Elective</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL CREDITS</strong></td>
<td></td>
<td><strong>17</strong></td>
<td><strong>TOTAL CREDITS</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

### SECOND YEAR

<table>
<thead>
<tr>
<th>COURSE</th>
<th>FALL SEMESTER</th>
<th>CREDITS</th>
<th>SPRING SEMESTER</th>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 343</td>
<td>Environmental Economics</td>
<td>3</td>
<td>PHYS 201</td>
<td>Introductory Physics I</td>
</tr>
<tr>
<td>UAPP 325</td>
<td>Public Policy Analysis</td>
<td>3</td>
<td>ACE</td>
<td>Advanced Course Elective I</td>
</tr>
<tr>
<td>CHEM 103</td>
<td>General Chemistry</td>
<td>4</td>
<td>BR</td>
<td>Breadth Req/Free Elective</td>
</tr>
<tr>
<td>BR</td>
<td>Multicultural Requirement</td>
<td>3</td>
<td>Elective</td>
<td>Breadth Req/Free Elective</td>
</tr>
<tr>
<td>BR</td>
<td>Breadth Req/Free Elective</td>
<td>3</td>
<td>Elective</td>
<td>Breadth Req/Free Elective</td>
</tr>
<tr>
<td><strong>TOTAL CREDITS</strong></td>
<td></td>
<td><strong>16</strong></td>
<td><strong>TOTAL CREDITS</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

### THIRD YEAR

<table>
<thead>
<tr>
<th>COURSE</th>
<th>FALL SEMESTER</th>
<th>CREDITS</th>
<th>SPRING SEMESTER</th>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENEP 425</td>
<td>Energy Policy and Admin. W</td>
<td>3</td>
<td>ENEP 427</td>
<td>Sustainable Energy Analysis W</td>
</tr>
<tr>
<td>ACR</td>
<td>ENEP 402 or ENEP 460</td>
<td>3</td>
<td>ENEP 426</td>
<td>Climate Change Policy W</td>
</tr>
<tr>
<td>ACE</td>
<td>Advanced Course Elective II</td>
<td>3</td>
<td>ACE</td>
<td>Advanced Course Elective III</td>
</tr>
<tr>
<td>Elective</td>
<td>Breadth Req/Free Elective</td>
<td>3</td>
<td>Elective</td>
<td>Breadth Req/Free Elective</td>
</tr>
<tr>
<td>Elective</td>
<td>Breadth Req/Free Elective</td>
<td>3</td>
<td>Elective</td>
<td>Breadth Req/Free Elective</td>
</tr>
<tr>
<td><strong>TOTAL CREDITS</strong></td>
<td></td>
<td><strong>15</strong></td>
<td><strong>TOTAL CREDITS</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

### FOURTH YEAR

<table>
<thead>
<tr>
<th>COURSE</th>
<th>FALL SEMESTER</th>
<th>CREDITS</th>
<th>SPRING SEMESTER</th>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENEP 364</td>
<td>Internship*</td>
<td>3</td>
<td>ENEP 485</td>
<td>Senior Seminar</td>
</tr>
<tr>
<td>ENEP 472</td>
<td>Senior Thesis W</td>
<td>3</td>
<td>ENEP 472</td>
<td>Senior Thesis</td>
</tr>
<tr>
<td>ACE</td>
<td>Advanced Course Elective IV</td>
<td>3</td>
<td>CHEG 625</td>
<td>Green Engineering</td>
</tr>
<tr>
<td>Elective</td>
<td>Breadth Req/Free Elective</td>
<td>3</td>
<td>Elective</td>
<td>Breadth Req/Free Elective</td>
</tr>
<tr>
<td>Elective</td>
<td>Breadth Req/Free Elective</td>
<td>3</td>
<td>Elective</td>
<td>Breadth Req/Free Elective</td>
</tr>
<tr>
<td><strong>TOTAL CREDITS</strong></td>
<td></td>
<td><strong>15</strong></td>
<td><strong>TOTAL CREDITS</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

**Total credits for the degree: 125**
**Energy, Economics and Public Policy (EEP)**

**Advanced Course Requirements (ACR) (18 credits)**

- ENEP 402  
  Electricity Policy and Planning
- ENEP 460  
  Financial Analysis of Sustainable Energy

**Choose one of the following (3 credits):**

- ECON 300  
  Intermediate Microeconomic Theory  
  *(Group C Breadth)*
- ECON 301  
  Quantitative Microeconomic Theory  
  *(Group C Breadth)*

**Choose one of the following (3 credits):**

- ECON 303  
  Intermediate Macroeconomic Theory  
  *(Group C Breadth)*
- ECON 311  
  Economics of Developing Countries  
  *(Group C Breadth)*
- ECON 360  
  Government Regulation of Business  
  *(Group C Breadth)*

**Choose one of the following (3 credits):**

- MATH 201  
  Introduction to Statistical Methods I  
  *(Group D Breadth)*
- STAT 200  
  Basic Statistical Practice
- MATH 221  
  Calculus 1  
  *(Group D Breadth)*
- MATH 241  
  Analytic Geometry and Calculus A (4 credits)  
  *(Group D Breadth)*

**Choose one of the following (3 credits):**

- APEC 406  
  Agricultural and Natural Resource Policy
- POSC 350  
  Politics and the Environment  
  *(Group C Breadth)*
- ENWC 413  
  Wildlife Policy and Administration

**Advanced Course Elective (ACE) (12 credits)**

Students are strongly encouraged to complete a minor or concentrate electives in a particular area of study that will complement the ENEP degree. Below is a list of approved courses for the ACE requirement. Additional courses may be approved by an advisor. Courses listed, but not used as ACR above, may be used as ACE.

**Approved Elective Courses for Energy, Economics and Public Policy**

*Note:* Some of the courses listed below may also fulfill a Breadth requirement.

- BUAD 301  
  Introduction to Marketing
- BUAD 472  
  Marketing, Society and the Environment
- CIEG 402  
  Introduction to Sustainability Principles in Civil Engineering
- ECON 103  
  Introduction to Macroeconomics
- ECON 422  
  Econometric Methods and Models I
ECON 426  Mathematical Economic Analysis
ECON 463  The Economics of Regulation
ENEP 420  Water Resources Management
GEOG 271  Introduction to Geographic Data Analysis
GEOG 372  Introduction to GIS
GEOG 412  Physical Climatology (4 credits)
GEOG 434  Plan Sustainable Communities & Regions
GEOL 421  Environmental and Applied Geology
MATH 202  Introduction to Statistical Methods II
MATH 242  Analytic Geometry and Calculus B (4 credits)
POSC 301  State and Local Government
POSC 311  Politics of Developing Nations
POSC 316  International Political Economy
STAT 470  Intro to STAT Analysis I
STAT 471  Intro to STAT Analysis II
UAPP 325  Public Policy Analysis
UAPP 410  Politics & the Delivery of Public Policy
UAPP 419  Policy Leadership and Ethics
UAPP 427  Evaluating Public Policy
UAPP 440  Contemporary Policy Issues
## B.S. Degree in Energy and Environmental Policy

### Energy, Economics and Public Policy Concentration

#### FIRST YEAR

<table>
<thead>
<tr>
<th>COURSE</th>
<th>FALL SEMESTER CREDITS</th>
<th>COURSE</th>
<th>SPRING SEMESTER CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNIV 101</td>
<td>1</td>
<td>ENGL 110</td>
<td>3</td>
</tr>
<tr>
<td>ECON 101</td>
<td>3</td>
<td>ENEP 250</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 143</td>
<td>3</td>
<td>UAPP 225</td>
<td>3</td>
</tr>
<tr>
<td>UAPP 110</td>
<td>3</td>
<td>BR</td>
<td>3</td>
</tr>
<tr>
<td>MATH 114</td>
<td>3</td>
<td>Elective</td>
<td>3</td>
</tr>
<tr>
<td>BR</td>
<td>3</td>
<td>Breadth Req/Free Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL CREDITS</td>
<td>16</td>
<td>TOTAL CREDITS</td>
<td>18</td>
</tr>
</tbody>
</table>

#### SECOND YEAR

<table>
<thead>
<tr>
<th>COURSE</th>
<th>FALL SEMESTER CREDITS</th>
<th>COURSE</th>
<th>SPRING SEMESTER CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 343</td>
<td>3</td>
<td>ACR</td>
<td>3</td>
</tr>
<tr>
<td>UAPP 325</td>
<td>3</td>
<td>ACR</td>
<td>3</td>
</tr>
<tr>
<td>ACR</td>
<td>3</td>
<td>ACE</td>
<td>3</td>
</tr>
<tr>
<td>BR</td>
<td>3</td>
<td>BR</td>
<td>4</td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
<td>Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL CREDITS</td>
<td>15</td>
<td>TOTAL CREDITS</td>
<td>16</td>
</tr>
</tbody>
</table>

#### THIRD YEAR

<table>
<thead>
<tr>
<th>COURSE</th>
<th>FALL SEMESTER CREDITS</th>
<th>COURSE</th>
<th>SPRING SEMESTER CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENEP 410</td>
<td>3</td>
<td>ENEP 427</td>
<td>3</td>
</tr>
<tr>
<td>ENEP 402</td>
<td>3</td>
<td>ENEP 426</td>
<td>3</td>
</tr>
<tr>
<td>ACR</td>
<td>3</td>
<td>ACR</td>
<td>3</td>
</tr>
<tr>
<td>ACE</td>
<td>3</td>
<td>ACE</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
<td>Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL CREDITS</td>
<td>15</td>
<td>TOTAL CREDITS</td>
<td>15</td>
</tr>
</tbody>
</table>

#### FOURTH YEAR

<table>
<thead>
<tr>
<th>COURSE</th>
<th>FALL SEMESTER CREDITS</th>
<th>COURSE</th>
<th>SPRING SEMESTER CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENEP 364</td>
<td>3</td>
<td>ENEP 485</td>
<td>3</td>
</tr>
<tr>
<td>ENEP 472</td>
<td>3</td>
<td>ENEP 472</td>
<td>3</td>
</tr>
<tr>
<td>ENEP 460</td>
<td>3</td>
<td>Elective</td>
<td>3</td>
</tr>
<tr>
<td>ACE</td>
<td>3</td>
<td>Elective</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
<td>Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL CREDITS</td>
<td>15</td>
<td>TOTAL CREDITS</td>
<td>15</td>
</tr>
</tbody>
</table>

**Total credits for the degree:** 125
Preparation of ENEP Majors to Design, Conduct and Write Research Papers

The ENEP major was created from the experience of the faculty at the Center for Energy & Environmental Policy who have administered master’s (MEEP) and PhD (PhD-ENP) degrees for more than 20 years. The major finishes with a 6-credit Senior Research Paper (ENEP 472) defended before two Program Faculty members who must be from different departments. The Senior Thesis is expected to be 35-50 pages in length (double-spaced). All students enrolled in the major must complete and defend their Senior Thesis in order to graduate.

The Senior Thesis requirement grows out of two findings of the Program Faculty:

1. The major prepares graduates to enter private, public and non-profit organizations seeking analytically trained individuals. The demand for individuals trained in the field is mainly to fill policy/regulatory analyst, researcher and program evaluation positions. Often, organizations are looking for individuals who have a basic or better understanding of the underlying science and engineering aspects of energy and environmental challenges and who also have training in economic and policy analysis, with an ability to advise decision makers, through objective analysis, of the appropriate courses of action.

2. Students accepted into the MEEP degree program over the last 20 years who defended theses in order to graduate performed noticeably better than counterparts with similar academic records but who did not have this skill at graduation. The Program Faculty see the major as preparation for graduate study for a sizable percentage of graduates and, therefore, inclusion of this requirement improves the competitiveness of its graduates.

To prepare students for the several skills needed to succeed in the field, the Program Faculty built into the major distinct activities for students to learn how to design and conduct research and to write high-quality policy/economic/technical research papers. The defended Senior Thesis is the outgrowth of these activities. They are as follows:

- Completing ENEP courses designed to fulfill second writing requirements – all 400-level ENEP courses include writing requirements that meet the University second-writing requirement. These include:
- ENEP 410 (3 cr): Environmental Sustainability: Economic and Policy Analysis – requires a 12-15 pp. book review. In consultation with a ENEP graduate student (who provides in-class and out-of-class training on how to prepare the book review) assigned to the course, students select a book from a published list (all are research-based), prepare an outline, submit a draft and then submit a final paper (accounting for 30% of their grade).
- ENEP 425 (3 cr): Energy Policy and Administration – requires a 10-12 pp. final paper on a subject involving at least one thematic section of the course. Preparation of the paper occurs in consultation with the ENEP graduate student assigned to the course for this purpose. At least two out-of-class meetings with the graduate student are required. The final paper accounts for 25% of their grade).
- ENEP 426 (3 cr): Climate Change Policy – requires two research essays of 7-8 pp. each and the completion of a spreadsheet analysis of the UD carbon footprint based on data provided to them. An in-class presentation of each student’s spreadsheet reports on 4 topics – the estimated carbon content of the University’s energy supply, the estimated carbon content of the University’s vehicle fleet and commuters (faculty, staff and students), the carbon impact of the University’s building stock and associated plug loads, and the estimated effects of specified University policy changes. Together, these activities account for 85% of the final course grade.
- ENEP 427 (3 cr): Sustainable Energy: Economics and Policy Analysis – requires a 17-20 pp. research paper and a poster. Students are graded on their research proposal, their research outline, their final paper, their poster, and their in-class presentation of their poster. Together these separately graded activities comprise 50% of the final course grade. Students work with two ENEP graduate students assigned to the course.

Students in each concentration of the major take at least 3 of the second-writing courses listed above. Honors students must write more advanced research papers, and in ENEP 427 (formerly ENEP 424) prepare more than one conference poster.

- Completing a Research Internship (ENEP 364) – all students in the major are required to complete a research internship for 3 credits. In order to register for the course, each student must complete a form and obtain their faculty advisor’s signature. On the form, the student defines the nature of the research activity, the organizational host and the benefits to the student’s program of study. A 12—15 page paper, developed with the student’s faculty advisor, is the main basis for the final course grade. Internships are developed in one of three ways:
  - Option 1: a) Students identify the proposed topic(s) of their undergraduate research to their advisor; b) The advisor indicates whether s/he has industry, government or other contacts in the student’s area of interest and suggests
an application process by the student with the support of the advisor; if the advisor does not have relevant contacts, c) the student's interest is communicated to ENEP director and associate director who identify contacts for the student.

- Option 2: In parallel, the student can explore on the Internet and elsewhere opportunities and then elicit the assistance of their advisor and, if needed, the Center’s director and associate director.
- Option 3: The student reviews the annually published ENEP/CEEP Research Portfolio (which contains 12-17 research projects) and decides if volunteering on any of the projects would meet their needs for a research internship. If yes, they can volunteer, for an ENEP/CEEP project, with the support of their advisor.

- Completing a Readings Tutorial (ENEP 470) – Some students in the major complete a 3-credit tutorial with a faculty expert for the purpose of preparing a draft of the research literature review that can be used in the Senior Thesis. Depending upon the type of research a student has selected, it is possible to select a 3-credit Research Tutorial (ENEP 468) instead of the Readings Tutorial. Both tutorials include a 10-12 pp. paper which accounts for the bulk of the final course grade. Prior permission to enroll in the tutorial is required.

With this preparation, the student then enrolls in ENEP 472, the Senior Thesis course for 6 credits, and, with their committee’s advice, prepares the Senior Thesis. Students enroll for 6 credits in their senior year, typically either in the previous Summer Session or Fall Semester for students who plan to graduate in the Spring. Students normally will receive an ‘S’ grade until defense of the paper occurs during the Semester they are graduating.

As a widely recognized hallmark of undergraduate distinction, a Senior Thesis demonstrates to graduate schools, fellowship committees, and employers a student’s intellectual achievement and sophistication as well as their initiative and self-discipline.

As the capstone of their undergraduate experience, a Senior Thesis provides students with the opportunity to draw upon what they have learned in and beyond their work for the major and to make a significant contribution of their own. Students who complete a Senior Thesis may earn either a Degree with Distinction (DwD) or—if they are pursuing an Honors Degree—they will earn an Honors Degree with Distinction (HDwD). Requirements for earning the DwD or the HDwD include the successful research, writing, and defense of the 6-credit ENEP 472, and meeting certain GPA and course requirements outlined on the URP website. The University Undergraduate Research Program has agreed to accept senior theses written for ENEP 472 in lieu of the UNIV 401-402 sequence.
Students enrolled in ENEP 472 will also have the same opportunities as students enrolled in the University’s senior research thesis courses (UNIV 401 & 402) to participate in additional activities, which include the following:

1. *Attending an orientation session at the beginning of each semester.

2. *Presenting their work to a small group of students twice a year, once in the fall, and again in the spring. Students in ENEP 472 may also have the option of attending another group’s presentations and providing those students with feedback on their work.

3. Attending a session demonstrating how to format a Paper (e.g., incorporating figures, tables, and graphs into a paper). Sessions are held twice in the fall and twice in the spring; students only have to attend one session.

4. Attending and having the option to present their work at the Senior Research Thesis Symposium, held on the first Saturday each May.

5. Receiving a graduation medal for their Senior Thesis. The medal signifies the student has earned a Degree with Distinction, which is an enriched degree indicating a student’s success in researching, writing, and defending their work, and the meeting of specific GPA requirements.

6. Students who complete ENEP 472 have the option of depositing their Senior Thesis into the University’s institutional repository, an online archive that makes the student’s work publicly accessible. (Note: this is not mandatory. Students must opt in by granting the URP permission to deposit their work, and students retain copyright of their work.)
Preparing and Defending Your ENEP 472 Senior Thesis

Preparing the ENEP 472 Paper

The 6-credit ENEP 472 Senior Thesis consists of the following:

3. Background on the Problem (including a literature review) – typically 8--10 pp.
4. Description of the Research Undertaken by the Student (including a description of data, methods and key concepts guiding their research) – typically 10—12 pp.
5. Presentation of the Student’s Analysis (including figures, tables, models, etc.) – typically 10-18 pp.
7. Recommendations (for example to public policy, to organization decision makers, etc.) – typically 4-5 pp.
8. List of References – typically 30 or so references are expected (4-8 pp.)

Ordinarily, an ENEP 472 paper will be prepared in draft form at least one full month before the anticipated defense date and will undergo at least one revision defined by the student’s faculty advisor.

The defense version of the ENEP 472 paper must be provided to the student’s advisor and the second faculty member of the student’s committee. Details on who is eligible to serve on the 2-faculty member committee are given in the file referenced above.

The defense version of the ENEP 472 paper must be furnished to committee members at least five (5) business days in advance of the defense date.

Defense of the ENEP 472 Paper

The student should prepare a 10-15 minute presentation of his or her ENEP 472 paper. It should include:

1. A clear and concise statement of the thesis, approved in advance of the defense by the faculty advisor (who also serves as chair of the defense).
2. Identification of the key concepts and methods used to analyze the thesis.
3. The data used in the analysis. This can include empirical data, documents analyzed, research or other literature examined, survey/interview results, or case study material prepared for the analysis of the thesis.
4. A statement of the key findings of the ENEP 472 paper.
PowerPoint, Prezi and SlideRocket are recommended as methods of delivering the 10-15 minute presentation, but none is required. A PowerPoint presentation should have a maximum of 12 slides.

Students should arrive at least 15 minutes in advance to set up the presentation. Students must bring their own equipment to run the presentation.

Scheduling a room for the defense of the paper is the responsibility of the student. The ENEP program coordinator can assist with scheduling.
Senior Thesis Registration Form (ENEP472)

Student Name: __________________________________________________

Student ID: __________________________________________________

Semester of Research Paper: ____________________________________________

Concentration Advisor: ________________________________________________

Committee Members: _________________________________________________

Research Topic:

Outline of Research Paper (Attach additional pages as necessary.)

ENEPP364 should be completed prior to registering for ENEP472.
Please indicate Semester when ENEP364 was completed: ______________________

Advisor Signature: ___________________________ Date: ______________________
STUDENT LIFE

Meeting with Your Advisor

Your advisor is your assigned faculty member that will help guide you through your time here at ENEP. The frequency with which you meet your advisor depends on many issues. How busy is your advisor, what do you want to discuss, are there any important things coming up (e.g. paper deadline, conference, etc.), but we do suggest to meet with your advisor on a regular basis. Of course, the frequency also differs as to your personal preference, but most students meet with their advisor at least once a month. This will keep your advisor updated on your general progress, and will give you the opportunity to inform your advisor about any new potential plans you might have. Your advisor can help you with a range of different issues such as selecting a specific course that fits your plan of study, advising you of internship possibilities that you are qualified for, and helping you with general advisement.

Registering for Classes

You can register for courses through the University of Delaware website (http://www.udel.edu/). At the menu bar, select Students, and then UDSIS. After you log-in onto the UDSIS, you will get to your personal Student Center. Here, you can get information on a wide range of topics, such as your grades, transcripts, your financial standing with UD, courses taken, and your demographic data. But, importantly for this section, you can also register for the courses you’re planning on taking next semester. When you select Registration & Drop/Add, you get to a new window that allows you to select the courses you want to take. The website shows you how many seats are still available in the course and the schedule of the course.

Not sure about which courses you can choose from? A selection of courses is included in this handbook to provide you with an idea of the courses that fit well with the ENEP requirements. If you want to see which courses are offered outside of the courses mentioned here, you can take a look at the UD course catalog. You can find the catalog on the UD home website (http://www.udel.edu/). Just select Students from the main menu bar, then Academic Resources, followed by UD catalog.

Throughout your study, we recommend that you discuss your selection of courses with your advisor. You are also encouraged to discuss your course selection with fellow students. Also, make sure to select your courses prior to the start of the semester (except for your very first semester as you need to wait for orientation) and on time.

Campus Services

The University of Delaware provides students with assistance in classes, personal development and finding a job after graduation.

Office of Academic Enrichment

The Office of Academic Enrichment provides students with the skills needed to succeed in classes, including tutoring and study skills, much of which is free of charge.
University Writing Center

The University Writing Center helps students to improve their writing skills through one-on-one and small group tutorials. Writing tutors will review written assignments to strengthen organization, documentation and grammar.

016 Memorial Hall
(302) 831-1168
writing-center@udel.edu
http://www.english.udel.edu/wc/

Career Services Center

Career Services Center provides career advice and help finding employment for UD students and alumni.

401 Academy Street
(302) 831-2392
udcareers@udel.edu
http://www.udel.edu/CSC/

Office for International Students and Scholars (OISS)

For international students, the OISS is a very important service. The OISS has a separate orientation in which they will inform you of all the services they provide. Here, we provide you with their contact information for your convenience:

Office for International Students and Scholars
44 Kent Way
(302) 831-2115
oiss@udel.edu
http://www.udel.edu/oiss/

Around UD and Newark

Where to Go on Campus

Here is the UD map: http://primus.nss.udel.edu/buildings/main.action

Student Centers

Perkins Student Center (on Academy Street) contains a food court (nice mix of fresh and made-to-order food), Dunkin Donuts, study space, and a copy center. Downstairs is the Hen Zone (arcade) and Baccus Theater, a location for any number of student plays, concerts,
and other activities. There is an Amazon Locker on the first floor where you can receive secure shipments from the online retailer.

Trabant Student Center (on the corner of South College and Main Street) contains another (though much busier and louder than Perkins) food court, a PNC bank, multi-purpose rooms (job fairs, lectures, campus events, etc.), a copy center, and a travel agency. Downstairs is a movie theater.

**UD Fitness Centers’ Various locations** ([http://www.udel.edu/fitness/](http://www.udel.edu/fitness/))

All full-time students have free gym membership, which includes an Olympic sized pool, cardiovascular exercise equipment, weights, aerobics classes, basketball courts and racquetball courts. Volleyball and Badminton nets are available at no charge upon request. Just bring your student ID (it acts as your membership card).

**UD Parking**

The campus has undergone extensive change during the last several years, thus you should make sure you know the parking rules if you choose to drive to campus. UD Parking home can be found at: [http://www.udel.edu/transportation/](http://www.udel.edu/transportation/) An interactive Parking Map can be found at: [http://www.udel.edu/transportation/parking/parking-intmap.html](http://www.udel.edu/transportation/parking/parking-intmap.html)

Information on the UD Shuttle (by seeing its location online real-time: [http://www.udel.edu/udshuttle/](http://www.udel.edu/udshuttle/))

**Health Care on Campus**

In the event of an emergency, call 911. If you wish to drive to the closest hospital, then visit Christiana ([www.christianacare.org/](http://www.christianacare.org/)) or Union Hospital in Elkton Maryland ([www.uhcc.com/](http://www.uhcc.com/)).

For general primary doctor care, visit the Student Health Services (SHS), which is located in Laurel Hall (on the main campus south green area at the intersection of South College Avenue and East Park Place). Information on their services is located here: [http://www.udel.edu/studenthealth/index.html](http://www.udel.edu/studenthealth/index.html)

For student insurance, the plans that are made available are introduced here: [http://www.udel.edu/studenthealth/insurance/index.html](http://www.udel.edu/studenthealth/insurance/index.html)

**UD Electronic Communications & Administration**

As a student at UD you will need to access forms and view information over the internet, so the links below represent the most important places to find the information you are seeking.

- CEEP’s homepage: [http://ceep.udel.edu/](http://ceep.udel.edu/) *(ENEP Temporary home Page)*
- UDSIS, where to add/drop classes, look at your finances, etc.: [http://www.udel.edu/udsis](http://www.udel.edu/udsis)
- Webviews, where you can look at your paystubs, etc.: [http://www.udel.edu/webviews](http://www.udel.edu/webviews)
- People search: [http://www.udel.edu/peoplesearch/](http://www.udel.edu/peoplesearch/)
- UD Maps: [http://www.udel.edu/maps/](http://www.udel.edu/maps/)
- Sakai: [http://www.udel.edu/sakai](http://www.udel.edu/sakai)
**UD Library**

Recently renovated in the summer of 2014, the Morris Library is an unparalleled resource for research and study – both in the stack and on the web: [www.lib.udel.edu](http://www.lib.udel.edu). You can also reserve private research/study meeting rooms for project meetings.

Online, you will find access to many databases (JSTOR, RefWorks, Academic OneSource, Lexis Nexis, etc.) and hundreds of journals, to which you have subscription access as a UD student.

Aside from books, the basement of the Morris Library offers access to a wide range of resources and services. The Student Multimedia Design Center is stocked with many computers, both PC and Mac, as well as free rental of high-tech audio, video and photographic equipment. They even offer professional quality video and audio recording studios. In addition to basic self-service scanning, printing and copying services, they also offer large-format poster printing.

The adjacent Film and Video Collection houses over 14,000 DVD/Blu-ray discs of movies, TV shows, etc. If you can’t find what you’re looking for, the Inter-Library Loan department located on the first floor can get almost any book or film from an affiliated library.

**Where to buy your books**

**UD bookstore at Barnes & Noble**

**Barnes & Noble UD Bookstore**
83 East Main Street
Newark, DE 19717
Website: [http://udel.bncollege.com/](http://udel.bncollege.com/)

**Other Book Shops**

Lieberman’s Bookstore – ([www.lubonline.com](http://www.lubonline.com))

Used Books Only:
Bookateria
70 E Cleveland Ave.
(302) 737-4933

Manor Used Books
1005 N. Dupont Hwy., New Castle, DE
(302) 322-5584

You can find books, as well as jobs, housing, and other items on UDel Classifieds: [www.udel.edu/classifieds](http://www.udel.edu/classifieds)

**How to reserve a room at UD**

One option is to submit a room request form with the Registrar’s Office: [http://www.udel.edu/registrar/forms/specev.html](http://www.udel.edu/registrar/forms/specev.html). (This option is available to Staff only.)
There is a second option, but it requires collaborating with a Graduate Student Organization (GSO) such as EEPSA or a Registered Student Organization (RSO) such as Students For the Environment (S4E), which have room reservation privileges in the Perkins and Trabant Student Centers. [NOTE: The designation of an RSO is restricted to undergraduate student associations.]

Where to go in Newark

On Main Street:

- Panera Bread (www.panerabread.com)
- Cosi (www.getcosi.com)
- Iron Hill Brewery (www.ironhillbrewery.com)
- Klondike Kates (www.klondikekates.com)
- Homegrown Cafe (www.homegrowncafe.com) - great for local, vegetarian and vegan!
- Ali Baba Mid Eastern Cuisine (www.alibabacuisine.com) - also good for vegetarian cuisine
- Deer Park Tavern (www.deerparktavern.com)
- Caffé Gelato – (www.cafigelato.net)
- Indian Sizzler (www.indiansizzlerus.com)

Off Main Street:

- Border Cafe - 483 Stanton Christiana Rd (www.bordercafe.com) (cajun/creole)
- Mad-macs/Matilda’s – 801 S College Ave., (302) 737-4800
- Claymont Steak Shop – 57 Elkton Rd. (http://www.claymontsteakshop.com/)
- Greene Turtle - 250 S. Main Street, Suite 101 (http://www.thegreeneturtle.com/)
- Jake’s - 250 S. Main Street, Suite 110 (http://waybackburgers.com/)
- Buffalo Wild Wings – 100 S. Main Street (http://www.buffalowildwings.com/)

Groceries: (you can use Google maps or mapquest to find these addresses)

- Newark Co-Op – 280 E Main St, www.newarknaturalfoods.com
- Newark Farmer’s Market, 2515 Kirkwood Hwy, Newark, De 19711 http://naturalhouse.wix.com/shopnewarkfarmersmarket
(4 mi. NE of Graham Hall), this is where you will find the largest selection of food items that you cannot find in the other grocery stores, such as international foods. Acme (2.2 mi SW of Graham Hall) Suburban Plaza Shopping Center, off Rte 2

- Pathmark (1 mi. NE of Graham Hall) in College Square Shopping Center on Library Road (100 College Sq)
- Shop Rite (1.5 mi. SE of Graham Hall), 19 Chestnut Hill Plaza
- Super Fresh (1.4 mi. NW of Graham Hall), 401 New London Rd
- Safeway (approx. 6 miles S of Graham Hall) in Peoples Plaza, off Rte 896
- Apna Bazaar (approx. 1 mi. SW of Graham Hall) 267 S. Main Street in the Park n’ Shop
Coffee Shops: On Main Street:

- Brewed Awakenings - 64 E Main St (best spot for fair trade coffee)
- Brew Ha Ha - 45 E Main St (second floor of Main Street Galleria above Lieberman’s/Grotto’s)
- Starbucks - 141 E Main St (Corner of Main St and Haines St)
- Central Perk - 42 E Main St
- Dunkin Donuts – 51 E Main St. (same building as Brew Ha Ha, first floor)
- Saxby’s Coffee – 57 Elkton Rd. (A little off Main St., in Amstel Court)

Movies:

- Newark Cinema Center 3, Newark Shopping Center – 401 Newark Shopping Center (inexpensive, walking distance, but only three screens) [http://cinemacenter3.com/](http://cinemacenter3.com/)
- UD Theater (In Trabant Student Center, lower level – near Main St). Weekend showings of mainstream films ([http://www.scpab.com/](http://www.scpab.com/));
- Also: rent movies for free at Newark Free Library corner of E. Main St. and Library Ave, as well as from University’s Library ([http://www.lib.udel.edu/](http://www.lib.udel.edu/))

Parks:

- Fair Hill Natural Resource Management Area ([http://dnr2.maryland.gov/publiclands/central/fairhill.asp](http://dnr2.maryland.gov/publiclands/central/fairhill.asp)) - good hiking and mountain biking trails, about 5 minutes from campus
- Longwood Gardens ([www.longwoodgardens.com](http://www.longwoodgardens.com)) - for beautiful planned and wild gardens, forests, fountains, conservatories, and DuPont opulence

Where to go outside of Newark

- Wilmington- 13 miles ([http://www.ci.wilmington.de.us/](http://www.ci.wilmington.de.us/))
- Baltimore- 60 miles ([www.baltimore.org](http://www.baltimore.org))
- Rehoboth Beach, DE- 90 miles ([www.beach-fun.com](http://www.beach-fun.com) [www.rehoboth.com](http://www.rehoboth.com))
- Washington DC- 95 miles ([www.washington.org](http://www.washington.org))
- New York- 130 miles ([www.nycvisit.com](http://www.nycvisit.com))

How to get around

Newark has a very walkable and bike able downtown. For greater distances, you may want to use a car or take public transportation.

Newark

UD Shuttle Bus Service, around campus for free - ([www.udel.edu/bus](http://www.udel.edu/bus)), see also the real-time tracker:
http://www.udel.edu/udshuttle/
Newark UNICITY bus system – (www.udel.edu/transportation/unicity-route/) (Newark service)

Delaware Authority for Regional Transit (DART) - (www.dartfirststate.com)


With Zipcar on campus, it just got easier to live without a car. (http://www.udel.edu/transportation/zipcar.html)

Delaware
DART buses – offer statewide service

Southeastern Pennsylvania Transportation Authority (SEPTA) trains
The R2 line runs through Newark to Wilmington and Philadelphia.

Philadelphia and beyond- SEPTA, Amtrak, private bus companies
www.septa.org
www.amtrak.com
www.megabus.com
www.boltbus.com

Megabus: Baltimore, New York, Philly, DC, Richmond (VA), Hampton (VA)

MARC Train Perryville, MD to Baltimore and Washington DC
http://www.perryvillemd.org/train_station.html

Campus Services

The University of Delaware provides students with assistance in classes, personal development, and finding a job after graduation.

Office of Academic Enrichment

The Office of Academic Enrichment provides students with the skills needed to succeed in classes, including tutoring and study skills, much of which is free of charge.

Office of Academic Enrichment
148-150 S. College Ave
(302) 831-4555
UD-aec@udel.edu
http://ae.udel.edu/

University Writing Center

The University Writing Center helps students to improve their writing skills through one-on-one and small group tutorials. Writing tutors will review written assignments to strengthen organization, documentation and grammar.

University Writing Center
016 Memorial Hall
Career Services Center
Career Services Center provides career advice and help finding employment for UD students and alumni.

Career Services Center
401 Academy Street
(302) 831-2392
udcareers@udel.edu
http://www.udel.edu/students/career-services-center/

Office for International Students and Scholars (OISS)
For international students, the OISS is a very important service. The OISS has a separate orientation in which they will inform you of all the services they provide. Here, we provide you with their contact information for your convenience:

Office for International Students and Scholars
44 Kent Way
(302)831-2115
oiss@udel.edu
http://www1.udel.edu/oiss/

UD Electronic Communications & Administration
As a student at UD you will need to access forms and view information over the internet, so the links below represent the most important places to find the information you are seeking.

ENEP’s homepage http://ENEP.udel.edu/
UDSIS http://www.udel.edu/udsis-student
Webviews (paystubs, etc.) http://www.udel.edu/webviews
People search http://www.udel.edu/peoplesearch/
UD Maps http://www.udel.edu/maps/
Sakai http://www.udel.edu/sakai
Courses Search https://primus.nss.udel.edu/CoursesSearch/
UD Classifieds www.udel.edu/classifieds
USEFUL INFORMATION

Where to Go on Campus

Here is the UD map: http://primus.nss.udel.edu/buildings/main.action

UD Library
Recently renovated in the summer of 2014, the Morris Library is an unparalleled resource for research and study – both in the stack and on the web: www.lib.udel.edu. As a graduate student, you can reserve a carrel in the library to store books and study in a quiet environment. You can also reserve private research/study meeting rooms for project meetings.

Online, you will find access to many databases (JSTOR, RefWorks, Academic OneSource, Lexis Nexis, etc.) and hundreds of journals, to which you have subscription access as a UD student.

Aside from books, the basement of the Morris library offers access to a wide range or resources and services. The Student Multimedia Design Center is stocked with many computers, both PC and Mac, as well as free rental of high-tech audio, video and photographic equipment. They even offer professional quality video and audio recording studios. In addition to basic self-service scanning, printing and copying services, they also offer large-format poster printing.

The adjacent Film and Video Collection houses over 14,000 DVD/Blu-ray discs of movies, TV shows, etc. If you can’t find what you’re looking for, the Inter-Library Loan department located on the first floor can get almost any book or film from an affiliated library.

Beginning the 2014-15 academic year, the library will be home to an all new graduate student lounge located on the north side or the first floor.

Student Centers
Perkins Student Center (on Academy Street, just past the construction to the south of Graham Hall) Perkins contains a food court (nice mix of fresh and made-to-order food), Dunkin Donuts, study space, and a copy center. Downstairs is the Hen Zone (arcade) and Baccus Theater, a location for any number of student plays, concerts, and other activities. There is an Amazon Locker on the first floor where you can receive secure shipments from the online retailer.

Trabant Student Center (on the corner of South College and Main Street) Trabant contains another (though much busier and louder than Perkins) food court, a PNC bank, multi-purpose rooms (job fairs, lectures, campus events, etc.), a copy center, and a travel agency. Downstairs is a movie theater.

UD Fitness Centers Various locations (http://www.udel.edu/fitness/)
All full-time students have free gym membership, which includes an Olympic sized pool, cardiovascular exercise equipment, weights, aerobics classes, basketball courts and racquetball courts. Volleyball and Badminton nets are available at no charge upon request. Just bring your student ID (it acts as your membership card).
 UD Parking
The campus has undergone extensive change during the last several years, thus you should make sure you know the parking rules if you chose to drive to campus. UD Parking home: [http://www.udel.edu/transportation/parking/index.html](http://www.udel.edu/transportation/parking/index.html)
The best way to figure out what sort of pass you need is to follow the technocratic money categorization. [http://www.udel.edu/transportation/parking/permit-prices.html](http://www.udel.edu/transportation/parking/permit-prices.html) and remember to take the UD Shuttle (by seeing its location online real-time: [http://www.udel.edu/udshuttle/](http://www.udel.edu/udshuttle/))

Parking Services
325 Academy Street
147 Perkins Student Center
(302)-831-1184
parking@udel.edu

Health Care on Campus

In the event of an emergency call 911. If you wish to drive to the closest hospital, then visit Christiana ([www.christianacare.org/](http://www.christianacare.org/)) or Union Hospital in Elkton Maryland ([www.uhcc.com/](http://www.uhcc.com/)).

For general primary doctor care, students can visit the Student Health Services (SHS), which is located in Laurel Hall (on the main campus south green area at the intersection of South College Avenue and East Park Place). Information on their services is located here: [http://www.udel.edu/studenthealth/index.html](http://www.udel.edu/studenthealth/index.html)

For student insurance, the plans that are made available are introduced here:
[http://www.udel.edu/studenthealth/insurance/index.html](http://www.udel.edu/studenthealth/insurance/index.html)
[http://www.udel.edu/RM/student-insurance.html](http://www.udel.edu/RM/student-insurance.html)

Where to buy your books
UD bookstore at Barnes & Noble

Barnes & Noble UD Bookstore
83 East Main Street
Newark, DE 19717
Website: [http://udel.bncollege.com/](http://udel.bncollege.com/)

On main street:
Lieberman’s Bookstore – (www.lubonline.com),

Used Books Only:
Bookateria –70 E Cleveland Ave. (302) 737-4933
Manor Books –1005 N. Dupont Hwy., New Castle, DE (302) 322-5584

May find books, as well as jobs, housing, and other items on UDel Classifieds: [www.udel.edu/classifieds](http://www.udel.edu/classifieds)

How to reserve a room at UD
One option is to submit a room request form with the Registrars Office: http://www.udel.edu/registrar/forms/specev.html.

There is a second option, but it requires collaborating with a Graduate Student Organization (GSO) such as EEPSA or a Registered Student Organization (RSO) such as Students For the Environment (S4E), which have room reservation privileges in the Perkins and Trabant Student Centers. [NOTE: The designation of an RSO is restricted to undergraduate student associations.]

Where to go in Newark

Parks:

- White Clay Creek State Park (closest to campus) - 425 Wedgewood Rd (www.destateparks.com/wccsp/). Other State Parks, see www.destateparks.com/
- Fair Hill Natural Resource Management Area (http://www.dnr.state.md.us/publiclands/central/fairhill.asp) - good hiking and mountain biking trails, about 5 minutes from campus
- Longwood Gardens (www.longwoodgardens.com) - for beautiful planned and wild gardens, forests, fountains, conservatories, and DuPont opulence

Where to go outside of Newark

- Wilmington- 13 miles (http://www.ci.wilmington.de.us/)
- Baltimore- 60 miles (www.baltimore.org)
- Rehoboth Beach, DE- 90 miles (www.beach-fun.com www.rehoboth.com)
- Washington DC- 95 miles (www.washington.org)
- New York- 130 miles (www.nycvisit.com)

How to get around

Newark has a very walkable and bike able downtown. For greater distances, you may want to use a car or take public transportation.

Newark

UD Shuttle Bus Service, around campus for free - (www.udel.edu/bus), see also the real-time tracker: http://www.udel.edu/udshuttle/
Newark UNICITY bus system – (http://www.udel.edu/SuppSrvc/bus/Unicity.html) (Newark service)
Delaware Area Rapid Transit (DART) - (www.dartfirststate.com)

Zipcar at the University of Delaware

With Zipcar on campus, it just got easier to live without owning a car. (http://www.udel.edu/transportation/zipcar.html)

Delaware

DART buses – offers statewide service
Southeastern Pennsylvania Transportation Authority (SEPTA) trains – The R2 line runs through Newark to Wilmington and Philadelphia
Philadelphia and beyond: SEPTA, Amtrak, private bus companies
www.septa.org  www.megabus.com
www.amtrak.com  www.boltbus.com

Megabus: Baltimore, New York, Philly, DC, Richmond (VA), Hampton (VA)

MARC Train Perryville, MD to Baltimore and Washington DC –
http://www.perryvillemd.org/trai