## ENSP Core

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Offered</th>
<th>Grade</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ENSP101 (NS)</td>
<td>Intro to Env Science</td>
<td>Fa</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENSP102 (HS)</td>
<td>Intro to Env Policy</td>
<td>Sp</td>
<td></td>
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</tr>
<tr>
<td>ENSP400 (SP)</td>
<td>Capstone</td>
<td>Fa,Sp</td>
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</tbody>
</table>

**Calculus (one)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Offered</th>
<th>Grade</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH220 (MA)</td>
<td>Elem Calculus I</td>
<td>Fa,Sp,Su</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH130 (MA)</td>
<td>Calc for Life Sciences I</td>
<td>Fa,Sp,Su</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH140 (MA)</td>
<td>Calculus I (recommended)</td>
<td>Fa,Sp,Su</td>
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</table>

**Statistics (one)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Offered</th>
<th>Grade</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOM301 (AR)</td>
<td>Intro to Biometrics</td>
<td>Fa,W,Sp</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOG306 (AR)</td>
<td>Intro to Quant Methods</td>
<td>Fa,Sp</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSYC200 (AR)</td>
<td>Stat. Meth in Psych</td>
<td>Fa,Sp,Su</td>
<td></td>
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</table>

## UM General Education

### Fundamental Studies (15 credits)

<table>
<thead>
<tr>
<th>Requirements</th>
<th>Course</th>
<th>Cr/AP/IB/D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Writing (AW)</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Professional Writing (PW)</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Oral Communication (OC)</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Math (MA)</td>
<td>Calculus</td>
<td>3-4</td>
</tr>
<tr>
<td>Analytical Reasoning (AR)</td>
<td>ENSP Stat</td>
<td>3-4</td>
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</tbody>
</table>

### Distributive Studies (25 credits)

<table>
<thead>
<tr>
<th>Requirements</th>
<th>Course</th>
<th>Cr/AP/IB/D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Sciences w/Lab (NL)</td>
<td>ENSP Lab Sc</td>
<td>4</td>
</tr>
<tr>
<td>Natural Science (NS)</td>
<td>ENSP 101</td>
<td>3</td>
</tr>
<tr>
<td>History and/or Social Sci (HS1)</td>
<td>ENSP 102</td>
<td>3</td>
</tr>
<tr>
<td>History and/or Social Sci (HS2)</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Humanities (HU1)</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Humanities (HU2)</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Scholarship in Practice (SP, major)</td>
<td>ENSP 400</td>
<td>3</td>
</tr>
<tr>
<td>Scholarship in Practice (SP, non-major)</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

### I-Series (6 credits)*

* May double-count with Distributive Studies

### Diversity (4-6 credits)*

* May double-count with Distributive Studies

### Experiential Learning (0-3 credits)*

* May overlap with major requirements

### UM Graduation Requirements

- Up to 6 AP courses may be used for Gen Ed
- There are at least 40 non-overlapping Gen Ed credits
- No more than 60 credits earned from Community College
- Last 30 credits must be earned at Maryland
- 120+ cumulative credits and 2.0+ cum GPA
### REQUIREMENTS:

#### LOWER LEVEL requirements (18-19 credits):

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Cr</th>
<th>Offered</th>
<th>Prerequisites</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOL 100</td>
<td>Introduction to Geology</td>
<td>3</td>
<td>F, Sp, Su</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 141 or MATH 221</td>
<td>Calculus II [strongly recommended] or Elementary Calculus II</td>
<td>4</td>
<td>F, Sp, Su</td>
<td>MATH 140 or MATH 220</td>
<td></td>
</tr>
<tr>
<td>PHYS 141 or PHYS 121</td>
<td>Fund of Physics [strongly recomm]</td>
<td>4</td>
<td>F, Sp</td>
<td>No longer offered</td>
<td></td>
</tr>
<tr>
<td>CHEM 231/232</td>
<td>Organic Chemistry I</td>
<td>4</td>
<td>F, Sp, Su</td>
<td>CHEM 131/132</td>
<td></td>
</tr>
<tr>
<td>ENST 200 or GEOL 102</td>
<td>Introduction to Soil Science or Historical Geology</td>
<td>4</td>
<td>Fa</td>
<td>CHEM 131/132</td>
<td></td>
</tr>
</tbody>
</table>

#### UPPER LEVEL requirements (18-19 credits): Special care needs to be taken in planning your junior and senior years, as many courses and their pre-requisites are offered only once annually. Please see Dr. Whittemore for help with this as early as possible!

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Cr</th>
<th>Offered</th>
<th>Prerequisites</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 342 or BSCI 361</td>
<td>Intro to Biogeography or Principles of Ecology</td>
<td>3</td>
<td>Sp</td>
<td>GEOG 201</td>
<td></td>
</tr>
<tr>
<td>GEOL 331</td>
<td>Intro to Hum Dimen of Global Chng</td>
<td>3</td>
<td>F</td>
<td>GEOG 201 or GEOG 202</td>
<td></td>
</tr>
<tr>
<td>GEOG 345 or GEOG 398B</td>
<td>Intro to Climatology or Adv Geographical Environmental Systems</td>
<td>3</td>
<td>F</td>
<td>GEOG 201</td>
<td></td>
</tr>
<tr>
<td>GVPT 306</td>
<td>Global Ecopolitics or</td>
<td>3</td>
<td>F</td>
<td>GVPT 200</td>
<td></td>
</tr>
<tr>
<td>AREC 332 or ENSP340</td>
<td>Intro to Natural Resource Policy or Science, Ethics, and Policy of Water</td>
<td>3</td>
<td>F</td>
<td>No longer offered</td>
<td></td>
</tr>
<tr>
<td>ENSP342 or ENSP350</td>
<td>Env Threats to Oceans and Coasts: Integrated Policy Response or Energy Resources: Science and Policy</td>
<td>3</td>
<td>F, Sp</td>
<td>ENSP101 and 102</td>
<td></td>
</tr>
<tr>
<td>GEOG 442 or GEOG 445</td>
<td>Biogeography or Climatology or</td>
<td>3</td>
<td>F</td>
<td>GEOG 342 or BSCI361</td>
<td></td>
</tr>
<tr>
<td>AOSC 400 or GEOL 437</td>
<td>The Atmosphere or Global Climatic Chng: Past and Pres</td>
<td>3</td>
<td>Sp</td>
<td>CHEM 131/132, MATH 140, GEOL 100</td>
<td></td>
</tr>
<tr>
<td>ENSP 386</td>
<td>Internship</td>
<td>3-6</td>
<td>F, Sp, Su</td>
<td>Perm.</td>
<td></td>
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</tbody>
</table>

#### TECHNIQUES & METHODS (9 credits): Select at least 3 courses and 9 credits in consultation with your advisor. Selections must be approved in advance.

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Cr</th>
<th>Offered</th>
<th>Prerequisites</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 372</td>
<td>Remote Sensing</td>
<td>3</td>
<td>Sp, Su, W</td>
<td>GEOG 372</td>
<td></td>
</tr>
<tr>
<td>GEOG 373 or ENST 415</td>
<td>Geographical Information Systems or GIS Applications in Soil Science</td>
<td>3</td>
<td>F, W, Su</td>
<td>The field component is taught in Sum Session; check Sched of Classes</td>
<td></td>
</tr>
<tr>
<td>GEOG 418</td>
<td>Field &amp; Lab Techniques in Env Science</td>
<td>3</td>
<td>F</td>
<td>GEOG 372</td>
<td></td>
</tr>
<tr>
<td>GEOG 472</td>
<td>Advanced Remote Sensing</td>
<td>3</td>
<td>F</td>
<td>GEOG 372</td>
<td></td>
</tr>
<tr>
<td>GEOG 473</td>
<td>GIS &amp; Spatial Analysis</td>
<td>3</td>
<td>Sp</td>
<td>GEOG 373</td>
<td></td>
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<tr>
<td>GEOG 498C or MATH 246</td>
<td>Climate Modeling and Analysis or Differential Equations</td>
<td>3</td>
<td>F</td>
<td>GEOG 445 or MATH 141 and 240 or PHYS 161</td>
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</tr>
<tr>
<td>MATH 240</td>
<td>Introduction to Linear Algebra</td>
<td>4</td>
<td>F, Sp, Su</td>
<td>GEOG 445</td>
<td></td>
</tr>
<tr>
<td>MATH 241</td>
<td>Calculus III</td>
<td>4</td>
<td>F, Sp, Su</td>
<td>PHYS 141 or Physics AP score 3+</td>
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<tr>
<td>PHYS 165</td>
<td>Intro to Programming in the Phys Sci</td>
<td>3</td>
<td>F</td>
<td>PHYS 141 or Physics AP score 3+</td>
<td></td>
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</table>

Cont’d (over) →
RESTRICTED ELECTIVES (9 credits): Select at least 6 credits from one area and 3 credits from the other. Also, course selections may not “count” twice, e.g., once in “Upper Level Requirements” and again in “Restricted Electives.”

>>> Area 1 - Physical and Biological Components

<table>
<thead>
<tr>
<th>Course</th>
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<th>Cr</th>
<th>Offered</th>
<th>Prerequisites</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>AOSC 400</td>
<td>The Atmosphere</td>
<td>3</td>
<td>F</td>
<td>MATH 141, PHYS 161 or 171, or perm.</td>
<td></td>
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<tr>
<td>AOSC 401</td>
<td>Global Environment</td>
<td>3</td>
<td>Sp</td>
<td>AOSC 400</td>
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</tr>
<tr>
<td>AOSC 434</td>
<td>Air Pollution</td>
<td>3</td>
<td>Sp</td>
<td>CHEM 113 and MATH 241 or perm.</td>
<td></td>
</tr>
<tr>
<td>BSCI 460 or BSCI 462</td>
<td>Plant Ecology or Population Ecology</td>
<td>3</td>
<td>F</td>
<td>BSCI 106</td>
<td>BSCI 106 and MATH 220</td>
</tr>
<tr>
<td>ENST 450</td>
<td>Wetland Ecology</td>
<td>3</td>
<td>F</td>
<td>BIOM 301.</td>
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<tr>
<td>GEOG 340 or GEOG 341</td>
<td>Geomorphology or Geomorphology</td>
<td>3</td>
<td>TBA</td>
<td>GEOG 201</td>
<td>GEOG 100 or GEOL 120</td>
</tr>
<tr>
<td>GEOG398B</td>
<td>Adv Geographical Environmental Systems</td>
<td>3</td>
<td>Sp</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOG 441</td>
<td>The Coastal Ocean</td>
<td>3</td>
<td>Sp</td>
<td>GEOG 201.</td>
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<tr>
<td>GEOG 442</td>
<td>Biogeography</td>
<td>3</td>
<td>F</td>
<td>GEOG 342 or 398B</td>
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<tr>
<td>GEOG 445</td>
<td>Climatology</td>
<td>3</td>
<td>Sp</td>
<td>GEOG 345</td>
<td></td>
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<tr>
<td>GEOG 437</td>
<td>Global Climatic Chng: Past and Present</td>
<td>3</td>
<td>Sp</td>
<td>CHEM 103, MATH 140, GEOL 100</td>
<td></td>
</tr>
<tr>
<td>GEOL 444</td>
<td>Low Temperature Geochemistry</td>
<td>3</td>
<td>F</td>
<td>GEOL 100/110, GEOL 322, CHEM 131/132, MATH115 or perm.</td>
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</tr>
<tr>
<td>GEOL 452</td>
<td>Watershed and Wetland Hydrology</td>
<td>3</td>
<td>Fa</td>
<td>MATH 140, GEOL 100, CHEM 131/132, or perm</td>
<td></td>
</tr>
<tr>
<td>GEOL 453</td>
<td>Restoration Ecology</td>
<td>3</td>
<td>F</td>
<td>BSCI 106.</td>
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<tr>
<td>ENST 479</td>
<td>Tropical Ecology and Resource Mgt</td>
<td>3</td>
<td>Sp</td>
<td>BSCI 106. Course has required travel-study component.</td>
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<tr>
<td>PLSC 471</td>
<td>Forest Ecology</td>
<td>3</td>
<td>Sp</td>
<td>BSCI 106.</td>
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>>> Area 2 - Human Dimensions

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Cr</th>
<th>Offered</th>
<th>Prerequisites</th>
<th>Grade</th>
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<tbody>
<tr>
<td>ANTH 450</td>
<td>Environmental Anthropology</td>
<td>3</td>
<td>F</td>
<td>Jr. standing</td>
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<tr>
<td>AREC 453</td>
<td>Natural Resources and Public Policy</td>
<td>3</td>
<td>F</td>
<td>ECON200, 201, and 326</td>
<td></td>
</tr>
<tr>
<td>AREC 454</td>
<td>Economics of Global Change</td>
<td>3</td>
<td>Sp</td>
<td>ECON200, 201, and 326</td>
<td></td>
</tr>
<tr>
<td>AREC 455</td>
<td>Economics of Land Use</td>
<td>3</td>
<td>F</td>
<td>ECON200, 201, and 326</td>
<td></td>
</tr>
<tr>
<td>GEOG 330</td>
<td>Society and Sustainability (Gen Ed UP, IS)</td>
<td>3</td>
<td>Sp</td>
<td>ECON200, 201, and 326</td>
<td></td>
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<tr>
<td>GEOG 431</td>
<td>Culture &amp; Natural Resource Mgt</td>
<td>3</td>
<td>F</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOG 435 or GEOG398C</td>
<td>Population Geography or Population Geography</td>
<td>3</td>
<td>Sp</td>
<td>GEOG 200</td>
<td>GEOG 100 or GEOL 120</td>
</tr>
<tr>
<td>GVPT 306</td>
<td>Global Ecopolitics</td>
<td>3</td>
<td>Sp</td>
<td>GVPT 200</td>
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</tr>
<tr>
<td>ENST 440</td>
<td>Crops, Soils and Civilization</td>
<td>3</td>
<td>Sp</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENST 441</td>
<td>Sustainable Agriculture</td>
<td>3</td>
<td>F</td>
<td></td>
<td></td>
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<tr>
<td>SOCY 305</td>
<td>Scarcity and Modern Society</td>
<td>3</td>
<td>F, Sp</td>
<td>3 cr. in SOCY or ENSP 102 or perm.</td>
<td></td>
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</tbody>
</table>

Advisor notes, approved course substitutions, etc: