NATURAL RESOURCES & ENVIRONMENTAL SCIENCES: ECOSYSTEM STEWARDSHIP & RESTORATION ECOLOGY, BS

for the degree of Bachelor of Science Major in Natural Resources & Environmental Sciences, Ecosystem Stewardship & Restoration Ecology Concentration

department website: https://nres.illinois.edu/
department faculty: https://nres.illinois.edu/directory/faculty (https://nres.illinois.edu/directory/faculty/)
overview of college admissions & requirements: Agricultural, Consumer & Environmental Sciences (http://catalog.illinois.edu/schools/aces/academic-units/#text)
college website: https://aces.illinois.edu/

Ecosystem Stewardship and Restoration Ecology emphasizes the ecology, structure, and function of ecosystems, with a particular focus on plant communities and their interactions with the living and non-living parts of ecosystems. It is designed for students interested in the fundamental properties and practices underlying the restoration and management of soil, watershed, wetland, forest, and grassland ecosystems. The concentration includes coursework in the areas of restoration, landscape, and plant ecology, as well as courses focused on specific ecosystems (e.g. streams, wetlands, agroecosystems), invasive species, community ecology, and ecosystem science.

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Prescribed Courses including Campus General Education

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<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<td>Hours</td>
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</table>
| Composition I and Speech
Select one of the following: 6-7
  RHET 105  Writing and Research
  & CMN 101  and Public Speaking (or equivalent) (see College Composition I requirement)
  CMN 111  Oral & Written Comm I
  & CMN 112 and Oral & Written Comm II
| Advanced Composition
Select from campus approved list 3-4
| Cultural Studies
Select one course from Western culture, one from non-Western culture, and one from U.S. minority culture from campus approved lists. 9
| Foreign Language
Coursework at or above the third level is required for graduation.  
Quantitative Reasoning I
Select one of the following: 4-5
  MATH 220  Calculus
  MATH 221  Calculus I
| Quantitative Reasoning II
Select one of the following: 3-4
  ACE 261  Applied Statistical Methods
  CPSC 241  Intro to Applied Statistics
  ECON 202  Economic Statistics I
  PSYC 235  Intro to Statistics
  SOC 280  Intro to Social Statistics
  STAT 100  Statistics
| Natural Sciences and Technology
CHEM 102  General Chemistry I
  & CHEM 103  and General Chemistry Lab I
  CHEM 104  General Chemistry II
  & CHEM 105  and General Chemistry Lab II
  IB 103  Introduction to Plant Biology 4
Select one of the following: 4-5
  IB 104  Animal Biology
  or IB 150  Organismal & Evolutionary Biol
  & IB 151  and Organismal & Evol Biol Lab
| Humanities and the Arts
Select from campus approved list. 6
| Social and Behavioral Sciences
ACE 100  Introduction to Applied Microeconomics
  or ECON 102  Microeconomic Principles 3-4
Select one additional course from campus approved list. 3-4
| Natural Resources and Environmental Sciences Required (Core)
NRES 102  Introduction to NRES 3
NRES 201  Introductory Soils 4
NRES 219  Applied Ecology 3
NRES 287  Environment and Society 3
NRES 325  Natural Resource Policy Mgmt 3
NRES 348  Fish and Wildlife Ecology 3
NRES 421  Quantitative Methods in NRES 3
NRES 454  GIS in Natural Resource Mgmt 4
NRES 456  Integrative Ecosystem Management 3
NRES 285  Field Experience 1,2
One additional Field Experience course 1-2
  NRES 285  Field Experience (repeatable)
  NRES 293  Professional Internship
  NRES 294  Resident Internship
  NRES 295  Undergrad Research or Thesis
  NRES 396  UG Honors Research or Thesis
| ACES Required
ACES 101  Contemporary Issues in ACES 2

Information listed in this catalog is current as of 12/2020
Concentration prescribed courses. See specific requirements for each concentration listed below.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
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<tbody>
<tr>
<td>NRES 419</td>
<td>Env and Plant Ecosystems</td>
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<tr>
<td>NRES 420</td>
<td>Restoration Ecology</td>
<td>4</td>
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<tr>
<td>NRES 465</td>
<td>Landscape Ecology</td>
<td>3</td>
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</tbody>
</table>

**Concentration Core Requirements**

Two Ecology Courses

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<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>NRES 302</td>
<td>Dendrology</td>
<td></td>
</tr>
<tr>
<td>NRES 362</td>
<td>Ecology of Invasive Species</td>
<td></td>
</tr>
<tr>
<td>NRES 415</td>
<td>Native Plant ID and Floristics</td>
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<tr>
<td>CPSC 431</td>
<td>Plants and Global Change</td>
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<tr>
<td>IB 452</td>
<td>Ecosystem Ecology</td>
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<tr>
<td>IB 453</td>
<td>Community Ecology</td>
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<tr>
<td>IB 439</td>
<td>Biogeography</td>
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One Ecosystem or Management Course

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<th>Code</th>
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<tbody>
<tr>
<td>NRES 401</td>
<td>Watershed Hydrology</td>
<td></td>
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<tr>
<td>NRES 402</td>
<td>Ecohydrology and Water Management</td>
<td></td>
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<tr>
<td>NRES 418</td>
<td>Wetland Ecology &amp; Management</td>
<td></td>
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<tr>
<td>NRES 427</td>
<td>Modeling Natural Resources</td>
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<tr>
<td>NRES 429</td>
<td>Aquatic Ecosystem Conservation</td>
<td></td>
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<tr>
<td>NRES 485</td>
<td>Stream Ecosystem Management</td>
<td></td>
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<tr>
<td>CPSC 437</td>
<td>Principles of Agroecology</td>
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<tr>
<td>CEE 432</td>
<td>Stream Ecology</td>
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<tr>
<td>IB 361</td>
<td>Ecology and Human Health</td>
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<tr>
<td>IB 451</td>
<td>Conservation Biology</td>
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<tr>
<td>UP 405</td>
<td>Watershed Ecology and Planning</td>
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<td>UP 406</td>
<td>Urban Ecology</td>
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**Total Concentration-Required Hours:** 19-21

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