Minimum credit hours required for graduation is 120.

**Degree Core Requirements (21 credits):**
- Forest Science (9 credits)
  - FOR 2214 Introduction to Land and Field Measurements (3 credits)
  - FOR 2314 Forest Biology and Dendrology (2 credits)
  - FOR 2324 Dendrology Laboratory (1 credit)
  - FOR 3314 Forest Ecology and Silvics (3 credits)
- Geospatial Analysis (3 credits)
  - FOR 1004 Digital Planet (3 credits)
- Environmental Economics (3 credits)
  - FOR 4014 Natural Resources Economics (3 credits)
- Policy (3 credits)
  - FOR 4434 Forest Resource Policy (3 credits)
- Oral Communication (3 credits – choose one)
  - COMM 2004 Public Speaking (3 credits) or FOR 3524 Environmental Interpretation (3 credits)

**Option Requirements (37 credits)**
- CHEM 1035 General Chemistry (3 credits)
- CHEM 1045 General Chemistry Lab (1 credit)
- CSES 3134 Soils in the Landscape (3 credits)
- Ecosystem Science (3 credits – choose one)
  - FOR 2004 Forest Ecosystems (3 credits)
  - BIOL 2804 Ecology (3 credits)
- FOR 2414 Field Exp Forest Resources (2 credits)
- FOR 4354 Forest Soil and Watershed Management (3 credits)
- FOR 4374 Forested Wetlands (3 credits)
- FOR 4464 Water Resources Policy and Economics (3 credits)
- GEOS 1024 Resources Geology (3 credits)
- GEOS 1124 Resources Geology Lab (1 credit)
- GEOS 3014 Environmental Geosciences (3 credits)
- Geospatial Analysis Elective (3 credits – choose one)
  - FOR 4114 Information Technologies for Natural Resource Management (3 credits)
  - FOR 4214 Forest Photogrammetry and Spatial Data Processing (3 credits)
  - GEOG 2084 Principles of Geographic Information Systems (3 credits)
  - GEOG 4354 Introduction to Remote Sensing (3 credits)
- STAT 3615 Biological Statistics (3 credits)
- UAP 3354 Introduction to Environmental Policy and Planning (3 credits)
Restricted Electives (12 or 13 credits – see accompanying lists)
  ___ Aquatic Life Restricted Elective (3 or 4 credits)
  ___ Global Environmental Issues Restricted Elective (3 credits)
  ___ Law Restricted Elective (3 credits)
  ___ Public Relations Restricted Elective (3 credits)

CLE Requirements (36 credit hours)

Area 1: Writing and Discourse (6 credit hours required)
  ___ ENGL 1105 First Year Writing (3 credits)
  ___ ENGL 1106 First Year Writing (3 credits)

Area 2: Ideas, Cultural Traditions, and Values (6 credit hours required)
  ___ FOR 2554 Nature and American Values (3 credits)
  ___ CLE Area 2 course: __________________________________________ (3 credits)

Area 3: Society and Human Behavior (6 credit hours required)
  ___ AAEC 1005 Economics of the Food & Fiber System or ECON 2005 Principles of Economics
    (3 credits)
  ___ CLE Area 3 course: __________________________________________ (3 credits)

Area 4: Scientific Reasoning and Discovery (8 credit hours required)
  ___ BIOL 1105 Principles of Biology (3 credits)
  ___ BIOL 1115 Principles of Biology Lab (1 credits)
  ___ BIOL 1106 Principles of Biology (3 credits)
  ___ BIOL 1116 Principles of Biology Lab (1 credits)

Area 5: Quantitative and Symbolic Reasoning (6 credit hours required)
  ___ MATH 1025 Elementary Calculus (3 credits)
  ___ MATH 1026 Elementary Calculus (3 credits)

Area 6: Creativity and Aesthetic Experience (1 credit hour required)
  CLE Area 6 course: __________________________________________ (1 credit)

Area 7: Critical Issues in a Global Context (3 credit hours required)
  ___ FIW 2114 Principles of Fish & Wildlife (3 credits)

Free Electives (13 or 14 credits)

____________________________________________________________________
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Environmental Resource Management Restricted Electives (12 or 13 credits – see lists below)

<table>
<thead>
<tr>
<th>Law Restricted Electives</th>
<th>(Choose 3 credits)</th>
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</thead>
<tbody>
<tr>
<td>AAEC 3314 Environmental law</td>
<td>3</td>
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<tr>
<td>AAEC 3604 Agricultural Law</td>
<td>3</td>
</tr>
<tr>
<td>FIN 3055 Legal Environment of Business</td>
<td>3</td>
</tr>
<tr>
<td>UAP 4754 Legal Foundations of Planning</td>
<td>3</td>
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<tr>
<td>UAP 4344 Law of Critical Environmental Areas</td>
<td>3</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Global Environmental Issues Restricted Electives</th>
<th>(Choose 3 credits)</th>
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<tbody>
<tr>
<td>AAEC 3204 International Agricultural Development and Trade</td>
<td>3</td>
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<tr>
<td>FOR 2124 Forests, Society &amp; Climate</td>
<td>3</td>
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<tr>
<td>FOR 2784 Global Forest Sustainability</td>
<td>3</td>
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<tr>
<td>GEOG 3104 Environmental Problems, Population and Development</td>
<td>3</td>
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<tr>
<td>GEOG 4204 Geography of Resources</td>
<td>3</td>
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<tr>
<td>GEOG 4764 International Development</td>
<td>3</td>
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<tr>
<td>UAP 3344 Global Environmental Issues: Interdisciplinary Perspectives</td>
<td>3</td>
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<tr>
<td>UAP 4214 Women, Environment and Development in Global Perspective</td>
<td>3</td>
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<thead>
<tr>
<th>Public Relations Restricted Electives</th>
<th>(Choose 3 credits)</th>
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</thead>
<tbody>
<tr>
<td>COMM 2044 Principles of Public Relations (pre-req.: COMM 1014)</td>
<td>3</td>
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<tr>
<td>COMM 3204 Multicultural Communication</td>
<td>3</td>
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<tr>
<td>COMM 3244 Political Communication (pre-req.: PSCI 1014 or 1024)</td>
<td>3</td>
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<tr>
<td>FOR 3524 Environmental Interpretation</td>
<td>3</td>
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<tr>
<td>UAP 4184 Community Involvement</td>
<td>3</td>
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<thead>
<tr>
<th>Aquatic Life Restricted Electives</th>
<th>(Choose 3 or 4 credits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 4004 Freshwater Ecology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 4354 Aquatic Entomology</td>
<td>4</td>
</tr>
<tr>
<td>FIW 4614 Fish Ecology</td>
<td>3</td>
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</tbody>
</table>

IMPORTANT NOTES ON THE FOLLOWING PAGE
ENVIRONMENTAL RESOURCE MANAGEMENT NOTES

1. **Satisfactory Progress:** By the end of the semester in which the student has attempted 60 hours (including transfer, advanced placement, advanced standing, and credit by examination), "satisfactory progress" towards a B.S. degree in the College of Natural Resources will include the following minimum criteria:
   - Having an in-major and overall grade point average of at least 2.0
   - Passing at least 24 semester credits that apply to the Curriculum for Liberal Education (CLE)
   - Passing the following courses or their equivalents: BIOL 1105, 1106, 1115, and 1116; CHEM 1035 and MATH 1026.

2. **Foreign Language Requirement:** A sequence of two (2) foreign language courses is required for graduation unless two (2) high school credits of the same foreign language or six (6) transfer credit hours of foreign language have been earned. These credits do not count toward graduation. See catalog section on "Graduation Requirements."

3. **Policy on Student Exchanges:** Studying overseas or at another U.S. university is a wonderful opportunity to enhance your education. However, planning for an exchange should begin at least 9 months prior to leaving. This will allow time to determine what substitutions, if any, will be allowed and time to arrange your schedule at Virginia Tech to ensure that all requirements for graduation are met.

4. **In-major grade point average computation:** Includes all courses designated as FIW, FOR, GEOG, NR, SBIO, and GEOS.

5. An in-major and overall GPA of 2.0 is required for graduation.

6. Some of the listed courses have prerequisites. Be sure to consult with the University Catalog or check with your advisor.

7. Some courses must be taken in sequence to satisfy **prerequisites.** Consult your advisor.