# FORESTRY

## What can I do with this major?

### AREAS

**FIELDWORK**
- Forest Inventory
- Harvest Planning
- Reforestation
- Fire Fighting
- Forest Health Monitoring
- Forest Ecology
- Wildlife Management
- Ranger Services
- Recreational Design/Planning
- Urban and Community Forestry
- Environmental Conservation

### EMPLOYERS

Federal government agencies including:
- Forest Service
- Fish and Wildlife Service
- National Park Service
- Bureau of Land Management
- Natural Resources Conservation Service
- Heritage Conservation and Recreation Service
- Geologic Survey
- Environmental Protection Agency
- Corps of Engineers
- Bureau of Indian Affairs

State government including:
- Municipalities
- Parks and Reserves
- Extension Services
- Divisions of Forestry or Natural Resources
- Departments of Environmental Conservation

Private forestry consultants

Universities

International:
- World Bank
- United Nations Food & Agriculture Organization
- Peace Corps

Non-governmental organizations, e.g. The Nature Conservancy

Private tree care/landscaping companies

Utility companies

Consulting firms

Pulp and paper manufacturers

Timber companies

### STRATEGIES

- Maintain knowledge of current environmental issues including policy, conservation, and industry trends.
- Be prepared to work with minimal supervision, outdoors, in all types of weather conditions.
- Develop physical stamina, be able to tolerate extensive walking, and be willing to relocate to find employment.
- Learn to map and describe parcels of land using Geographic Information Systems (GIS) and Global Positioning Systems (GPS).
- Develop strong communication and interpersonal skills.
- Participate in related clubs and organizations like The Society of American Foresters or The National Urban and Community Forestry Advisory Council to build contacts and cultivate academic related interests.
- Gain knowledge of the social and cultural factors that affect forest management in areas of interest.
- Take courses in communications, horticulture, landscape architecture, entomology, pathology, urban affairs, and planning to increase marketability in urban forestry.
- Seek volunteer or paid experiences in forestry or conservation.
- Obtain Certified Forester credential through the Society of American Foresters.
- Earn forester certification/registration at the state level if applicable.
- Become familiar with the federal job application process for government employment.
- Seek management experience to advance e.g. junior forester to forest manager.
- Learn a foreign language to increase marketability for international employment.
<table>
<thead>
<tr>
<th>AREAS</th>
<th>EMPLOYERS</th>
<th>STRATEGIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>MANAGEMENT</td>
<td>Federal government agencies including:</td>
<td>Obtain paid or volunteer experiences in recreational settings such as a national parks or forests.</td>
</tr>
<tr>
<td>Forest Management, e.g. Forest Thinning, Tree Planting, Restoration, Insect and Disease Management</td>
<td>Forest Service, Fish and Wildlife Service, National Park Service, Bureau of Land Management, Natural Resources Conservation Service, Heritage Conservation and Recreation Service, Bureau of Indian Affairs, Corps of Engineers</td>
<td>Maintain knowledge of current environmental issues including policy, conservation, and industry trends.</td>
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<tr>
<td>Outdoor Recreation</td>
<td>State government including:</td>
<td>Develop strong communication skills including public speaking, group presentation, and mediation.</td>
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<tr>
<td>Range Management</td>
<td>Parks, Reserves, Extension Services, Divisions of Forestry, Botanical/zooological gardens, Historical sites, Land management companies, Land appraisers, Livestock ranches, Private consulting services, Conservation agencies, Private landowners</td>
<td>Gain experience with technology and computer software relevant to the field of forestry, such as GIS and GPS.</td>
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<tr>
<td>Wildlife Habitat</td>
<td>Federal government agencies including:</td>
<td>Take courses in outdoor recreation, park administration, or outdoor interpretation.</td>
</tr>
<tr>
<td>Planning/Control</td>
<td>State government including:</td>
<td>Learn about the sports/leisure, logging/mining activities, and wildlife in regions of interest.</td>
</tr>
<tr>
<td>Program Analysis</td>
<td>Parks, Reserves, Extension Services, Divisions of Forestry, Botanical/zooological gardens, Historical sites, Land management companies, Land appraisers, Livestock ranches, Private consulting services, Conservation agencies, Private landowners</td>
<td>Seek information about fiscal procedures, program design, government regulations, and industry trends.</td>
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<tr>
<td>Silviculture</td>
<td>State government including:</td>
<td>Join student organizations such as Society of American Foresters and Wildlife and Fisheries Society Student Chapter to network and cultivate academic interests.</td>
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<tr>
<td>Agroforestry</td>
<td>State government including:</td>
<td>Be prepared to work with minimal supervision, outdoors, in all types of weather conditions.</td>
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<tr>
<td>Urban Forestry</td>
<td>State government including:</td>
<td>Develop physical stamina and be able to tolerate extensive walking.</td>
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<tr>
<td>Watershed Management</td>
<td>State government including:</td>
<td>Prepare to relocate to find employment.</td>
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</tbody>
</table>
<pre><code>                                                                                                                                                                                                   |
</code></pre>
<p>|                       | Federal government agencies including:                                   | Research the professional certification from The Society for Range Management.                                                                                                                                                  |
|                       | State government including:                                               | Learn about government hiring procedures and seek assistance form campus career centers.                                                                                                                                |</p>
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<tr>
<td><strong>FOREST PRODUCTS (PAPER/WOOD) INDUSTRY</strong></td>
<td><strong>Food, wood products, pulp, and paper manufacturers, e.g. International Paper, Georgia Pacific</strong></td>
<td><strong>Maintain knowledge of current environmental issues including policy, conservation, and industry trends.</strong></td>
</tr>
<tr>
<td>Forest Engineering</td>
<td>Consumer goods producers, e.g. Kimberly-Clark</td>
<td><strong>Participate in related clubs and organizations to build contacts and cultivate academic related interests.</strong></td>
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<tr>
<td>Production/Quality Control</td>
<td>Timber companies</td>
<td><strong>Hone communication and interpersonal skills.</strong></td>
</tr>
<tr>
<td>Wood Science/Utilization</td>
<td>Research groups</td>
<td><strong>Acquire strong background in physical sciences such as physics or chemistry and wood science.</strong></td>
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<tr>
<td>Resource Procurement</td>
<td>Consulting firms</td>
<td><strong>Seek experience through internships or volunteer positions in the paper and wood products industry.</strong></td>
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<tr>
<td>Forest Management</td>
<td>Private landowners</td>
<td><strong>Obtain dual degrees in civil engineering and forestry to enter as a forest engineer.</strong></td>
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<tr>
<td>Research (bio-based products)</td>
<td></td>
<td><strong>Gain experience in sales, marketing, management, or administration to increase marketability in operations.</strong></td>
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<tr>
<td>Sales</td>
<td></td>
<td><strong>Join the Society of Wood Science and Technology or the Forest Products Society to stay abreast of industry trends.</strong></td>
</tr>
<tr>
<td>Marketing</td>
<td></td>
<td><strong>Earn a graduate degree for advanced opportunities in research or management.</strong></td>
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<tr>
<td>Public Relations</td>
<td></td>
<td><strong>Earn a Ph.D. to teach at a university. Maintain a high GPA and secure strong faculty recommendations.</strong></td>
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<tr>
<td>Consulting</td>
<td></td>
<td><strong>Assist a professor with a research project or complete an independent study course.</strong></td>
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**EDUCATION AND OTHER**

<table>
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<tr>
<th><strong>TEACHING</strong></th>
<th><strong>RESEARCH</strong></th>
<th><strong>CONSERVATION EDUCATION</strong></th>
<th><strong>VISITOR EDUCATION</strong></th>
<th><strong>LANDOWNER EDUCATION</strong></th>
<th><strong>PUBLIC RELATIONS</strong></th>
<th><strong>ENVIRONMENTAL POLICY/LAW</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Universities and colleges</td>
<td>Local, state, and federal government agencies including:</td>
<td>Nature centers</td>
<td>Wildlife refuges</td>
<td>Youth camps</td>
<td>Environmental education centers</td>
<td>Law firms</td>
</tr>
<tr>
<td><strong>UNIVERSITIES AND COLLEGES</strong></td>
<td><strong>CITY, STATE, AND NATIONAL PARKS</strong></td>
<td><strong>STATE EXTENSION SERVICES</strong></td>
<td><strong>NATURE CENTERS</strong></td>
<td><strong>WILDLIFE REFUGES</strong></td>
<td><strong>YOUTH CAMPS</strong></td>
<td><strong>ENVIRONMENTAL EDUCATION CENTERS</strong></td>
</tr>
<tr>
<td><strong>EDUCATION</strong></td>
<td><strong>ACADEMIC</strong></td>
<td><strong>CMU, MICHIGAN</strong></td>
<td><strong>DEPARTMENT</strong></td>
<td><strong>ENVIRONMENTAL</strong></td>
<td><strong>SCIENCE</strong></td>
<td><strong>CENTER</strong></td>
</tr>
<tr>
<td><strong>LEADERSHIP</strong></td>
<td><strong>COUNCIL</strong></td>
<td><strong>CMU, MICHIGAN</strong></td>
<td><strong>DEPARTMENT</strong></td>
<td><strong>ENVIRONMENTAL</strong></td>
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</tbody>
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**STRATEGIES**

- **Earn a Ph.D. to teach at a university. Maintain a high GPA and secure strong faculty recommendations.**
- **Assist a professor with a research project or complete an independent study course.**
- **Participate in summer research programs.**
- **Publish research in a national journal, e.g. Forest Products Journal.**
- **Maintain knowledge of current environmental issues including policy and conservation.**
- **Develop strong communication skills, particularly public speaking and group presentation skills.**
- **Join relevant campus organizations and seek leadership positions.**
- **Understand the resources and populace of an area of interest.**
GENERAL INFORMATION

- For entry-level positions, a bachelor’s degree is sufficient. Some federal and private agency work, consulting positions, and many research positions require a graduate degree.
- Obtain volunteer, part-time, summer, or internship experiences in field of interest.
- Develop strong communication and interpersonal skills.
- Maintain up-to-date computer skills and knowledge of specialized tools used in fieldwork.
- Join a student organization or local/state/national forestry association to network and cultivate related academic interests.
- Schedule informational interviews or job shadowing opportunities to make contacts in government and industry and to learn more about specific fields.
- Stay current on news in forestry including policy issues, industry trends, and the job market by reading periodicals such as the *Journal of Forestry* or *Forestry Industries*.
- Develop a knowledge base in academic research related to forestry.
- Plan to relocate to national parks, forests, and cities with demand for foresters.
- Be prepared to work under minimal supervision. Many foresters advance from fieldwork to administrative positions.
- Contact the Society of American Foresters for updates to the national Certified Forester credential and other similar certifications.
- Additional forester certification can be obtained at the state level and varies by state.

EDUCATION AND OTHER CONTINUED

Seek paid or volunteer experiences in a local park, nature camp, or educational center.

Become familiar with the federal job application process for government employment.

Earn a minor in a communications to increase marketability in that field.

Plan to earn a law degree to advance in policy or environmental law.