

Program Purpose and Learning Outcomes – Master of Forestry

A. Purpose

As with the B.S. in Forestry, the purpose of the Master of Forestry program for students without a previous degree in forestry is to produce professional foresters with outstanding scientific knowledge, practical field and technical skills, strong communication abilities, and a strong stewardship ethic needed to sustainably manage private and public forestlands for wood products, recreational opportunities, biological diversity, water, and other ecosystem services. For students with a previous degree in forestry, the Master of Forestry program will provide students with additional knowledge and skills that will further their professional goals in forestry. Graduates of the program will be sought by private and public forestland management organizations to monitor and manage diverse forestland. During their education, students will learn the value of diversity in people and perspectives, including indigenous knowledge of forests. This professional degree is accredited by the Society of American Foresters (SAF), and graduates are expected to follow the SAF code of ethics.

The program's purpose reflects:

- Interdisciplinarity of the profession – We expect students to have a range of skills and knowledge (scientific, field and technical, communication, stewardship ethic)
- Sustaining ecosystems for multiple objectives and long-term needs of rights holders, landowners, society, and the ecosphere – We expect graduates to understand private and public goals for forested lands for multiple uses and values, including recreation, biological diversity, water, and ecosystem services.
- The value of diverse people, perspectives, and practices, including contemporary scientific and traditional ecological knowledge systems. - students will learn the value of diversity in people and perspectives, including indigenous knowledge of forests.
- Professional and ethical behaviors. – students will learn about and are expected to follow the SAF code of ethics.

B. Learning Outcomes

Students graduating from the Forestry program will be effective and ethical stewards of forests for all resources, including trees, biological diversity, water, and recreation by being able to:

1. Demonstrates prepared, purposeful written work, presentations or discussions designed to increase knowledge or communicate advanced understanding of current theories, developments, and methodologies (including quantitative and/or qualitative analyses).
2. Can demonstrate the ability to integrate and communicate knowledge from across the curriculum.
3. Can demonstrate scientific skills by using a systematic process of exploring issues, objects or works through the collection and analysis of evidence that results in informed conclusions or judgments. Must demonstrate competencies in the biological and physical sciences.
4. Use the basic approaches and applications of mathematics and statistics for analysis and problem solving in forest resources to develop inventories, spatial analysis, and projections of forest conditions.
5. Use the above knowledge to develop forest resource management plans or forest resources projects with specific multiple objectives and constraints that meet landowner

objectives. Students should become fully competent to prepare and defend a project report as expected at professional meetings.

6. Works to make a difference in the profession and communities through a combination of knowledge (human resources, policy, finance), skills, ethical values and motivation to make that difference.
7. Diversity, Equity, Inclusion: Demonstrate respectful attitudes towards others, achieve a productive working relationship with others, and value diversity and inclusion that will be expressed in the working relationship with others.

The connection between the program's purpose and its learning outcomes is indicated below, with the number indicating the program learning outcome listed above:

As with the B.S. in Forestry, the purpose of the Master of Forestry program for students without a previous degree in forestry is to produce professional foresters with outstanding scientific knowledge (#3), practical field and technical skills (#4), strong communication abilities (#1, #2), and a strong stewardship ethic needed to sustainably manage private and public forestlands for wood products, recreational opportunities, biological diversity, water, and other ecosystem services (#5, #6). For students with a previous degree in forestry, the Master of Forestry program will provide students with additional knowledge and skills that will further their professional goals in forestry. Graduates of the program will be sought by private and public forestland management organizations to monitor and manage diverse forestland. During their education, students will learn the value of diversity in people and perspectives, including indigenous knowledge of forests (#7). This professional degree is accreditation by the Society of American Foresters (SAF), and graduates are expected to follow the SAF code of ethics (#6).