

## THE MASTER OF FORESTRY DEGREE

The Master of Forestry (MF) graduate degree program enables students to integrate knowledge and expertise drawn from both the natural and social sciences, and to apply their knowledge to solve practical forest management problems. The primary focus of the program is to provide an opportunity for graduates coming from diverse academic backgrounds with non-forestry baccalaureates to gain a professional education in forestry. As such, the program is designed to be the first professional degree in forestry attained by a student. It is expected that the program will be accredited by the Society of American Foresters (SAF); the specialized accrediting body for forestry educational programs in the United States. Graduates will successfully function as professional foresters on multi-disciplinary forest management teams and respond to the challenges related to the sustainable management of local, regional and global forest resources.

The program is open to both students with some prior background in forestry and natural resources and for those without such background. Students with a degree in a related discipline (e.g., ecology, biology, wildlife, chemistry, etc.) can complete the MF degree in twelve (12) to eighteen (18) months. Students with a general science background, but little or no forestry experience, will require eighteen (18) to twenty-four (24) months to complete the program. The curriculum is designed for fall admission, but spring semester admission is possible. More than four (4) semesters may be required for students from non-science backgrounds who need additional basic undergraduate coursework as part of their program of study.

The Department of Forest and Natural Resources Management (FNRM) uses a checklist to facilitate detailed program planning and to document of the steps required for graduation (see below). Major professors keep a version of the checklist with student-specific information in their advising files. Each student is encouraged to keep an updated personal copy. Checklists are available in the FNRM Office (320 Bray Hall).

A few graduate students manage to complete their entire degree programs without having to file a single petition. However, because of our students' diverse backgrounds, interests, degree programs, and personal lives, many of our students occasionally find themselves in violation of some College or FNRM policy, or find a need to create proper documentation for their academic file. The correct vehicle to use is a Petition (see Appendix A for more information on petitions). Petition forms may be obtained from the Registrar's Office (111 Bray Hall).

### ***Prerequisites***

Students are accepted into our programs with a variety of backgrounds. Deficiencies in undergraduate-level English, ecology, forestry, soils, or statistics may have been identified in your letter of admission. If not completed prior to matriculation, appropriate classes should be taken during residence. Either undergraduate or graduate courses may be taken to remedy deficiencies, depending on the circumstance. Undergraduate courses are not included in grade point averages, and do not count toward satisfying the minimum number of required graduate credit hours.

## ***Transfer Credit***

Up to six (6) credits of graduate coursework **not used to complete any other graduate degree** may be accepted toward completion of a master's degree as approved by your steering committee. A student may not transfer any graduate coursework earned as part of a conferred master's degree toward an ESF master's degree. Students may transfer up to nine (9) credits of credit-bearing **non-degree ESF** graduate coursework (e.g., credit-bearing graduate coursework taken as a non-matriculated ESF student) toward a master's degree. Credit hours appropriate to the graduate degree in which a minimum grade of B was earned from an accredited institution can be transferred to the college, but grades and grade points cannot be transferred. All transfer credit will remain tentative until official, final transcripts are received. In addition, all transfer credits must be approved by the steering committee and by the Graduate Education Committee via a petition.

## ***Steering Committee***

You will have a steering committee that provides advice about your coursework and other aspects of the program. The steering committee is composed of the major professor, who is assigned to you at admission, and at least one other faculty member or other qualified person. A new major professor, different from the assigned, can be assigned by submitting a new Form 2A (available from the Office of Instruction and Graduate Studies (227 Bray Hall) and at [www.esf.edu/graduate/graddegreq.htm](http://www.esf.edu/graduate/graddegreq.htm)). Two co-major professors count as two committee members. You, in consultation with your major professor, choose who will be on your steering committee during the first semester. MF students must have a minimum of a major professor and one (1) steering committee member.

To have your steering committee assigned, your major professor must submit Form 2A Steering Committee, obtained from the Office of Instruction and Graduate Studies (227 Bray Hall) and at [www.esf.edu/graduate/graddegreq.htm](http://www.esf.edu/graduate/graddegreq.htm)). This form must be signed by the Chair of the Graduate Education Committee and recorded by the FNRM Graduate Education Secretary.

As a graduate student, you are responsible and accountable for your progress. You should meet at least once a year with your steering committee, but frequent informal meetings with your major professor and individual committee members are strongly encouraged.

## ***Coursework Requirements and Guidelines***

The MF degree has been designed to satisfy three (3) requirements. First, the College requires a minimum of thirty (30) graduate credit hours of which twenty-four (24) credit hours in graduate coursework must be taken in residence at ESF (see the College Catalog available at <http://www.esf.edu/catalog>). Second, to satisfy SAF accreditation requirements, MF students must complete a set of core forestry courses designed to provide a foundation in the science of forestry and the management of forests distributed across the four SAF-defined areas of study: 1) Forest Ecology and Biology; 2) Measurement of Forest Resources; 3) Management of Forest Resources; and 4) Forest Resource Policy & Administration. Third, the Department of FNRM has established the following specific requirements:

- A three (3) credit forestry internship (FOR 898) course that is usually taken during the summer prior to their final semester of coursework. This requirement provides applicants

with opportunities to integrate biological and management concepts within a forestry context. Students will find their own internship opportunity, in consultation with their advisory committee. Appendix F contains the FNRM Internship Agreement form.

- A three (3) credit integrated resources management course. Students are required to demonstrate their ability to integrate biological and management concepts to solve forest management problems.
- All MF students must have a broad exposure to the skills and knowledge needed by professional foresters. Students are required to complete at least six (6) graduate credit hours in each of four (4) SAF-defined areas of study given above. This combination of courses satisfies SAF accreditation requirements and reinforces the integration of the natural and social sciences to forestry problem-solving applications.

### ***Required Core Forestry Courses***

<b>Required Core Forestry Courses</b>	<b>Credit Hours</b>
<u>Undergraduate Required Core</u>	
FOR 304 Adirondack Field Studies	4
ESF 300 Introduction to Geospatial Information Technologies	3
EFB 336 Dendrology	3
<u>Graduate Required Core</u>	
FOR 522 Forest Mensuration	3
FOR 524 Forest Biometrics	3
FOR 532 Forest Ecology	3
FOR 533 Managerial Economics for Environmental Professionals	3
FOR 534 Silvicultural Practice	4
FOR 545 Introduction to Soils	3
FOR 570 Forest Management Decision Making and Planning	3
FOR 573 Forest Operations	3
FOR 665 Natural Resources Policy	3
FOR 688 Natural Resources Agencies and Administration	3

The undergraduate core includes an off-campus, 4-week summer field course, Adirondack Field Studies, giving students the required field skills prior to their fall semester. The graduate required core courses satisfy, 1) the graduate level courses required in each of the four SAF-defined areas of study, and 2) count towards the College requirement of a minimum of 30 graduate credits. FOR 532 Forest Ecology, FOR534 Silvicultural Practice and FOR545 Introduction to Soils

satisfy the Forest Ecology and Biology requirement. FOR522 Forest Mensuration and FOR523 Forest Biometrics satisfy the Measurement of Forest Resources requirement. FOR533 Managerial Economics for Environmental Professionals, FOR570 Forest Management Decision Making and Planning and FOR573 Forest Operations satisfy the Management of Forest Resources requirement. FOR665 Natural Resources Policy and FOR688 Natural Resources Agencies and Administration satisfy the Forest Resource Policy and Administration requirement. You may petition to have specific core forestry courses waived based on your academic background. The FNRM Graduate Education Committee reviews petitions on an individual basis.

***Graduate Degree Requirements***

<b>Course</b>	<b>Credit Hours</b>
FOR 898 Professional Experience/Internship	3
FOR 690 Integrated Resources Management	3
Courses in Forest Ecology and Biology	10
Courses in Measurement of Forest Resources	6
Courses in Management of Forest Resources	9
Courses in Forest Resource Policy & Administration	6
<b>Total Credit Hours</b>	<b>37</b>

Other courses may be substituted for the core requirements with an approved petition (see Appendix A for information on petitions). These courses may include:

*Forest Ecology and Biology*

- EFB 530 Plant Physiology
- EFB 552 Forest Entomology
- EFB 645 Plant Ecology
- FOR 521 Forest Ecology and Silviculture
- FOR 523 Tropical Ecology
- FOR 535 Advanced Forest Soils
- FOR 540 Watershed Hydrology
- FOR 620 Silvicultural Concepts and Applications
- FOR 630 Agroforestry

*Measurement of Forest Resources*

- APM 625 Introduction to Sampling Techniques
- APM 620 Analysis of Variance

ERE 565 Principles of Remote Sensing  
FOR 557 Practical Vector GIS

*Management of Forest Resources*

FOR 513 Adirondack Forest Ecology and Management  
FOR 626 Plant Tissue Culture Methods  
FOR 642 Watershed Ecology and Management  
FOR 678 Wilderness and Wildlands Management  
FOR 680 Urban Forestry

*Forest Resource Policy & Administration*

FOR 687 Environmental Law and Policy  
FOR 689 Natural Resources Law and Policy  
FOR 770 Ecological Economics and Policy

**Student Study Plan**

After forming your steering committee, you **must** fill out Form 3B: Graduate Student Program (available from the Office of Instruction and Graduate Studies (227 Bray Hall) and at [www.esf.edu/graduate/graddegreq.htm](http://www.esf.edu/graduate/graddegreq.htm)). This form **must** be signed by your major professor, all of the members of your steering committee, and the Chair of the Graduate Education Committee. This form **must** be completed by the end of the first semester. The FNRM Graduate Secretary (Ms. Tari Pittenger, 320 Bray Hall) records the form and forwards it to the Office of Instruction and Graduate Studies for approval. Once approved, Form 3B serves as an institutional endorsement of your graduate program of study and protects you by officially stating what courses you will complete and when you will complete them. Students that change their program of study must submit an updated Form 3B (signed by your major professor, all of the members of your steering committee, and the Chair of the Graduate Education Committee) to the FNRM Graduate Secretary (Ms. Tari Pittenger, 320 Bray Hall).