

## GRADUATE STUDY: DEGREES AND OPTIONS

Graduate academic programs at ESF share a foundation of rigorous science and dedication to wise use of natural resources. ESF offers advanced degrees in six program areas. Each program provides a unique opportunity for you to further your education with professors who are dedicated to both their teaching and research endeavors.

Ecosystems all over the world benefit from the professionalism and expertise of ESF graduates and the faculty members at the College of Environmental Science and Forestry. You will study with professors whose work improves and sustains the environment from the Yucatan Peninsula to Alaska and whose expertise is sought by government and corporations. That same faculty will be personally concerned with your progress. The professors' cutting-edge research will become part of your classes, and your classes will merge with the world beyond the College.

### Degree Programs

ESF is authorized by the New York State Department of Education to offer undergraduate and graduate degree programs as described in this catalog. The Higher Education General Information Survey (HEGIS) code is the number assigned to programs registered by the commissioner of the New York State Department of Education. The Classification of Instructional Programs (CIP) Code allows the U.S. Department of Education to track educational programs for financial aid eligibility. Enrollment in programs that are not registered or otherwise approved may jeopardize a student's eligibility for certain financial aid programs.

### Areas of Study

The general area of study for each master's or doctoral student is implied by the title of the program in which the degree is awarded. Areas of study may be established within degree programs by individual departments that further define the student's area of specialization. The student's area of study is listed on the student's transcript if identified on the study plan.

Additionally, each department may offer minors identifying ancillary areas of study that may be appropriate for the degree program. A minor is equivalent to 12 or more graduate credits earned in the minor area. Courses in a minor area must be taken outside of the student's area of study. A minor is identified on the student's transcript. A minor professor must be appointed to the student's steering committee for each minor elected, in addition to the minimum complement of steering committee members. Each minor professor can replace an additional examiner.

### Graduate Degrees

#### **Ph.D., M.S., M.P.S., M.L.A. & M.F.**

Four master's degrees are offered at ESF—master of science, master of forestry, master of landscape architecture, and master of professional studies—as well as the doctor of philosophy degree. The following section describes the requirements for graduate degree programs offered by the College.

## **Master of Forestry (M.F.)**

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. 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 degree requires 37 graduate credits of coursework, of which at least 24 must be taken in residence at ESF. The degree accredited as a professional forestry program by the Society of American Foresters under Forestry.

The program is open to both students with some prior background in forestry and natural resources, and for those without such background. More than four (4) semesters may be required for students from non-science backgrounds who need additional basic undergraduate coursework as part of their degree program. The MF program is designed for May admission to accommodate a 4-week summer field course.

## **Master of Landscape Architecture (M.L.A.)**

Graduate studies in landscape architecture attract a broad range of people. Those with undergraduate degrees in landscape architecture may seek specialization within the profession, advanced exploration or an academic career. Others, with degrees in related fields such as architecture, city and regional planning, and environmental design, enter the program to broaden or redirect their design and planning skills. Some students with degrees in fields less closely related (such as humanities or arts and sciences) seek new career options or to focus prior interests through a licensed design and planning profession.

**The degree is accredited by the Landscape Architectural Accreditation Board (LAAB).**

A three-year program for applicants who have no design or planning background leads to the fully accredited professional degree of master of landscape architecture (M.L.A.). This program is for students who intend to complete coursework full time. Applicants with a related design or planning degree may enter the three-year program with advanced standing.

The M.L.A. program, for the student seeking a first professional degree in landscape architecture, is a more tightly structured curriculum because it leads to the prerequisite work experience that qualifies the graduate for the Landscape Architecture Registration Examination (L.A.R.E.).

## **Master of Professional Studies (M.P.S.)**

[www.esf.edu/graduate/programs/mps.php](http://www.esf.edu/graduate/programs/mps.php)

The Master of Professional Studies (M.P.S.) degree is intended to be a terminal degree. The M.P.S. is offered in the following degree programs: chemistry, environmental and forest biology, forest resources management, environmental resources engineering, environmental science, and environmental studies.

This degree requires the successful completion of a minimum of 30 credits at the graduate level, of which at least 24 must be in course work. The student's program of study must be approved by the major professor, steering committee and Department Chairperson.

In addition, individual programs may require an integrative experience such as an internship, team project and/or comprehensive examination. If an examination is required, it is developed and managed by the department responsible for the program.

### **Master of Science (M.S.)**

The master of science (M.S.) degree is an academic degree offered in the following programs: environmental and forest chemistry, environmental and forest biology, environmental studies, forest resources management, environmental resources engineering, environmental science, and landscape architecture.

To complete this degree, in addition to completion of necessary coursework, students must investigate a problem that initiates, expands, or clarifies knowledge in the field and prepare a thesis based on this study. Students are required to define an appropriate problem for investigation; review relevant information; develop a study plan incorporating investigative techniques appropriate to the problem; implement the plan; and relate the results to theory or a body of knowledge in the field.

The minimum credit-hour requirement is the successful completion of 30 graduate credits distributed between coursework and thesis. The applicable distributions will be determined by individual departments to suit program objectives, with the understanding that a minimum of 18 credits is awarded for graduate-level coursework and a minimum of six credits is awarded for the thesis. All steering committee members should sign the student's study plan (Form 3B) before the end of the last year of the student's program. The student must successfully defend the thesis for degree completion. The thesis is prepared and bound according to college standards and submitted to Digital Commons.

### **Doctor of Philosophy (Ph.D.)**

The doctor of philosophy (Ph.D.) degree is an academic degree offered in the following degree programs: environmental and forest chemistry, environmental and forest biology, forest resources management, environmental resources engineering, and environmental science. The doctor of philosophy degree requires a minimum of 60 graduate credits, of which 30 to 48 credits are for coursework and 12 to 30 credits are awarded for dissertation. Individual departments will determine the applicable credit hour requirements within these ranges to reflect individual program requirements and emphases. The graduate credits earned for a master's degree that are applicable to a student's doctoral study plan (Form 3B) are determined on an individual basis by the steering committee. All steering committee members should sign the 3B form before the end of the last year of the student's program. Students may not use master's thesis credits to fulfill doctoral program coursework requirements.

Students must pass the doctoral candidacy examination covering selected fields of study at least one year prior to dissertation defense and successfully defend the dissertation. The dissertation must be prepared according to college standards and submitted to Digital Commons.

## Advanced (Graduate) Certificates

In addition to degree programs for matriculated students, ESF offers study towards the earning of advanced certificates for professionals in:

- Bioprocessing
- Environmental Decision Making
- Environmental Leadership (online)

## Concurrent and Cooperative Programs

### Concurrent Graduate Degrees with Upstate Medical University

Beginning in the 2015-2016 Academic Year, ESF students may participate in concurrent degree programs with Upstate Medical University, beginning with the Central New York Master of Public Health (CNYMPH) degree program

### Concurrent Programs for Syracuse University Students

The joint Juris Doctor (J.D.) and Forest and Natural Resources Management (FNRM) Master of Professional Studies (M.P.S.) degree is designed for Syracuse University students who are interested in legal careers involved with forest, natural, and environmental resources. As human demands on the environment increase, society needs attorneys who understand the economic, demographic, social, and political issues that drive resource use allocation. Students learn the complexities of managing both resources and people recognizing that resource and environmental decisions involve value-driven conflicts. The degree provides a comprehensive foundation in forest, natural, and environmental resources issues and an understanding of both biophysical and social science.

Students enrolled in the joint J.D./FNRM degree program must earn a minimum of ninety-six (96) credits at both the College of Law and ESF. The J.D. normally requires eighty-seven (87) credits, but joint-degree students must take at least seventy-two (72) Law School credits. Students can transfer fifteen (15) credits from ESF to the College of Law. The M.P.S. degree requires thirty (30) credits, a minimum of twenty-four (24) of which must be ESF courses and six (6) of which may be applied by transfer from coursework at the College of Law.

Students can apply to the joint J.D./FNRM degree program at two points: 1) simultaneously, before entering the College of Law, or 2) after completing the fall semester of study at the College of Law. Applicants applying simultaneously must complete a College of Law application and an ESF graduate application. Applicants applying after enrolling at the College of Law must complete an "internal" College of Law application and ESF graduate application.

Graduate students at Syracuse University may also consider the certificate of graduate studies in environmental decision-making offered through the Department of Environmental Studies.

### Cooperative Programs at Cornell University & SUNY Upstate Medical University

ESF and the New York State College of Agriculture and Life Sciences at Cornell University provide exchange opportunities so that graduate students can take advantage of special courses, faculty, and research facilities found at the two institutions. Cornell University is in Ithaca, N.Y., about 50 miles southwest of Syracuse.

ESF and the SUNY Upstate Medical University provide opportunities for graduate students at each institution to enroll in graduate coursework or pursue coordinated M.D./Ph.D. degrees in environmental medicine. SUNY Upstate Medical University is located within walking distance of ESF.

Graduate students interested in these opportunities should contact the ESF Office of Instruction and Graduate Studies.

### **Intra-ESF Concurrent Degree Programs**

ESF graduate students may pursue formal concurrent graduate degrees in two different departments or academic units within the College.

Concurrent degrees magnify the strengths of academic program offerings within ESF. Pairing an academic degree (Ph.D. or M.S.) with a professional degree (M.L.A., M.P.S., M.F.), or pairing two professional degrees (M.L.A., M.P.S., M.F.) are attractive choices for ESF students. Please consult with individual departments for details regarding specific degree or program combinations. Concurrent degrees require a minimum of 80 percent of the credit hour requirements of each of the paired degrees. Students may apply for admission to both degrees at matriculation, or they may apply to add the second degree following completion of at least 12 credit hours of coursework with a minimum GPA of 3.5. Graduate students interested in these opportunities should contact the ESF Office of Instruction and Graduate Studies.

