

TWO-YEAR MASTER'S DEGREE PROGRAMS

The School of the Environment offers four two-year master's degrees: the professionally oriented Master of Environmental Management (M.E.M.) and the Master of Forestry (M.F.), and the research-oriented Master of Environmental Science (M.E.Sc.) and Master of Forest Science (M.F.S.). The M.F. and M.F.S. programs are administered within the Yale Forest School. All the master's degree programs vary in their level of prescription, but all are sufficiently flexible to accommodate the diverse academic backgrounds, professional experiences, and career aspirations of a large and vibrant student body. The program curricula draw from more than 150 courses taught by more than fifty YSE faculty, as well as from courses taught elsewhere at Yale. Each student's course of study is customized through consultation with a faculty adviser who guides the student's learning experience from the first week at Yale until graduation. The master's degree programs require a minimum of two years in residence, 48 credits of coursework at Yale, a summer internship or research experience, and completion of the Training Modules in Technical Skills prior to the student's first term (see below).

MASTER OF ENVIRONMENTAL MANAGEMENT

The Master of Environmental Management curriculum draws from coursework in the natural and social sciences and focuses on the complex relationships among science, management, and policy. The purpose of the program is to provide students with an in-depth understanding of natural and social systems that can be applied to environmental and natural resource problem-solving in a policy or management context. In addition to coursework, students are expected to hone their capacities as leaders and managers through summer internships, professional skills courses, and other opportunities.

The M.E.M. curriculum requires students to focus on an area of specialization, while still offering the flexibility to tailor their course programming in a way that exposes them to other disciplines and subject areas. This structure assures that students develop both depth and breadth in their course study. All M.E.M. students take the Fall-1 Perspectives course (ENV 553) followed by either the continuation of Perspectives in Fall-2 (ENV 554) or ENV 762, Foundations of Applied Math for the Environment. Students must also demonstrate interdisciplinary conversancy through either taking or satisfying waiver requirements for four 1.5-credit foundational-knowledge courses (ENV 511, ENV 512, ENV 521, and ENV 522), and a 1.5-credit basic statistics course (ENV 728). During their second year of study, students complete a capstone course or project. They round out their experience with general electives and a selection of at least four Professional Skills Modules.

Specializations are designed to ensure that students obtain sufficient depth in their chosen area of study. The specializations are:

1. Business and the Environment
2. Climate Change Science and Solutions
3. Ecosystem Management and Conservation
4. Energy and the Environment

5. Environmental Policy Analysis
6. Industrial Ecology and Green Chemistry
7. People, Equity, and the Environment
8. Urban
9. Water Resource Science and Management

Specialization requirements account for 18 of the 48 total credits required for the M.E.M. degree, made up of two core courses and four electives, and it is possible to add a second specialization. Students will be asked to choose their specialization at the end of their first term of study, and this specialization will be listed on their transcript upon completion. Students may also propose a self-designed specialization path in collaboration with a faculty adviser and the senior associate dean of academic affairs.

MASTER OF FORESTRY

The Master of Forestry program trains professionals for the protection, management, and restoration of native forests and woodlands and associated human-made forest ecosystems (urban trees, agroforests, plantations); and for mediating and resolving the conflicting values of society that concern forests and associated ecosystems. Since 1900, the Master of Forestry program has provided leadership in the education of professional foresters. It is the oldest continuing forestry program in the Western Hemisphere. Almost all the early foresters in North America had their roots at Yale, including Aldo Leopold, M.F. 1909, and nine of the first twelve chiefs of the USDA Forest Service.

Master of Forestry graduates have pursued a variety of professional opportunities in forestry. Most start as general practitioners in management and, with experience, move through management to become policymakers and organizers. Some graduates use the degree as preparation for advanced study in doctoral programs.

The broad objective of the two-year M.F. program is realized by requiring a multidisciplinary suite of formal coursework coupled with a progressive synthesis of knowledge in a significant project. Coursework is supplemented through an array of local, regional, national, and international field trips to witness the practice of forestry in diverse settings. Real-world professional experience is provided through the Yale Forest and summer internships at a wide variety of resource management and policy organizations. Opportunities to engage in discussion with forest leaders are provided through workshops, meetings with visiting speakers of national and international repute, and involvement in the School's programs such as the Yale Forest Forum, the Forests Dialogue, the Tropical Resources Institute, and the Urban Resources Initiative.

The teaching objectives of the M.F. program are (1) to integrate knowledge about forests, natural resources, and society to form a sound basis for making management decisions; (2) to provide electives and other educational opportunities to specialize by focusing on a particular land use or management issue concerning forest ecosystem management; and (3) to provide opportunities for independent problem solving, critical thinking, and self-development. Students take a mixture of natural, social, and quantitative science courses, culminating in the second year with courses in integrated resource management and leadership. Flexibility in the choice of courses within the core curriculum, as well as choice of electives, allows each student to tailor the program to a desired specialization. Sample specializations have included community development

and social forestry; protected areas management; extension and education; consulting forestry; business; watershed health and restoration; tropical forest management; agroforestry; and industrial forest management.

The Master of Forestry degree is accredited by the Society of American Foresters (SAF). A minimum of two full years in residence and sixteen full courses (48 credits) is required for completion of this program.

MASTER OF ENVIRONMENTAL SCIENCE/MASTER OF FOREST SCIENCE

The Master of Environmental Science and the Master of Forest Science degree programs are expressly designed for students wishing to conduct research that contributes to basic and applied knowledge in any of the fields taught at YSE, such as ecology, hydrology, social ecology, economics, industrial ecology, or policy. These degrees are intended to facilitate a deeper disciplinary focus than the Management degrees, while allowing students the flexibility in course election that will allow them to meet diverse educational goals. The Master of Environmental Science is intended for students who wish to work broadly in different fields of environmental science. The Master of Forest Science is intended for students who wish to work in forest-related topics.

The course of study for both degrees includes formalized School-level training in the philosophy and practice of science. Training is provided through key courses in combination with extended project research and disciplinary and nondisciplinary electives. The scientific research required for this degree will be conducted in close collaboration with a YSE faculty adviser. *Therefore students must have a commitment from a faculty adviser before being admitted to these degree programs.* The Master of Environmental Science and Master of Forest Science programs require the student to produce a “scholarly product.” This product may take the form of a traditional master’s thesis or a paper(s) submitted to a refereed journal.

TRAINING MODULES IN TECHNICAL SKILLS (MODS)

All incoming master’s students participate in MODs, shorthand for field modules, which offer students the opportunity to participate in experiential learning. MODs will take place during August, with students rotating among different modules over the course of two weeks. Participating in MODs is a graduation requirement and an important opportunity to engage with classmates and build relationships.