

BACHELOR OF SCIENCE IN FOREST ECOSYSTEM SCIENCE

The [Forest Ecosystem Science](#) degree is based on a vision that combines professional competency in forest management skills with an enhanced understanding of ecological sciences. Students interested in this program typically are drawn to natural settings and environments, enjoy nature, and want to understand how forested ecosystems work. ESF provides a wide variety of opportunities to meet student needs utilizing 25,000 acres of forest lands as teaching laboratories. Internships with natural resource-based organizations in the business, public and nonprofit sectors provide additional hands-on experiences. Experiential field learning is combined with learning concepts and skills in the classroom and laboratory on ESF's Syracuse campus.

The undergraduate curriculum in forest ecosystem science consists of two broad categories of courses. The first category, general education, provides students with knowledge and skills that are useful and important for all educated persons regardless of their profession as well as preparation for advanced courses leading to a specific profession. The second category, professional courses, provides students with direct preparation for a career. The first two years of college usually focus on general education and the second two on the professional studies.

The FES program allows students to obtain the professional skills that employers look for in new employees and a deeper understanding of the scientific basis of those skills. These skills are developed through a combination of core courses focusing on biology, ecology, ecosystems, and management. The forest ecosystem science degree offers a wide variety of employment opportunities. Graduates work throughout the United States in public agencies, private industry, and for nonprofit organizations. They also are well prepared to enter graduate programs in management of forest and natural resources, ecological research, or other areas of applied forest biology.

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The educational program, leading to the professional Bachelor of Science degree in Forest Ecosystem Science, is accredited by the Society of American Foresters (SAF) under Forestry.

Lower Division Required Courses

APM 105	Survey Of Calc & Appl I	4
APM 210	Intro/Probability&Stats	3
EFB 101	Gen Bio I:Organismal Bio&Ecol	3
EFB 102	General Biology I Laboratory	1
EFB 103	Gen Bio II:Cell Bio & Genetics	3
EFB 104	General Biology II Laboratory	1

ESF 200	Information Literacy	1
EWP 190	Writing And The Envrnment	3
EWP 290	Research Writing & Humanities	3
FCH 150	General Chemistry I	3
FCH 151	General Chemistry I Lab	1
FCH 152	General Chemistry II	3
FCH 153	General Chemistry II Lab	1
FOR 132	Orientation Seminar: SRM	1
FOR 207	Introduction To Economics	3
FOR 232	Natural Resources Ecology	3
FOR 332	Forest Ecology	4
FOR 360	Principles of Mgmt/Envrn Prof	3
EPH 101	Fundamentals of Physics I	3
AND EPH 102	Fundamentals of Physics I Lab	1
<i>Upper Division Required Courses</i>		
EFB 336	Dendrology I	3
ESF 300	Intro/Geospatial Info Tech	3
FOR 304	Adirondack Field Studies	4
FOR 313	Tree Structure and Function	3
FOR 322	Nat Res Measuremnts & Sampling	3
FOR 323	Forest Biometrics	3
FOR 334	Silviculture	4
FOR 345	Introduction to Soils	3
FOR 465	Natural Resources Policy	3
FOR 492	Capstone Rsrch in Frst Eco Sci	3

Elective Courses

Course	Codes*	Credits
Directed Electives: Biophysical Science	Professional Elective	12
Directed Electives: Management and Human Dimensions	Professional Elective	9
Free Electives		14
General Education Course in one of the following categories: US History & Civic Engagement, The Arts, World History and Global Awareness, World Languages	G	3
General Education Course in Diversity, Equity, Inclusion and Social Justice	G	3

Students should consult with their advisors and read the Sustainable Resources Management Handbook for lists of courses that can be elected to meet degree requirements.

Total Minimum Credits For Degree: 124

