

FOREST ECOLOGY AND MANAGEMENT
ANR 443- Forest Ecology Track
Four Year Road Map

1. Should complete at least 31 credits each year.
2. Should complete FOREST 655 (summer camp) before Junior year.

Freshman Year

Course	Credits	Course	Credits
BOTANY 130 General Botany	5	ZOOLOGY 101&102 Intro. Zoology	5
CHEM 108 <u>or</u> 109 Gen. Chemistry	5	ECON 101 Microeconomics <u>or</u>	
MATH 112(3cr) &/or 113 (2cr) or 114(5cr)		AAE 215 Intro. Agriculture Economics	3-4
Algebra & Trigonometry	2-5	International Elective	3-4
FOREST 100 Introduction to Forestry	<u>2</u>	Communication Elective	<u>3</u>
	14-17		14-16

Intersession

^aFOREST 655 Forestry Field Camp 3 cr.

Sophomore Year

BOTANY 402 Tree Identification	2	FOREST 205 Intro. Computers in Nat. Res.	2
MATH 210 (3cr) Finite Math <u>or</u> 211		STATIS 371 Statistics	3
<u>or</u> 221 (5cr) Calculus	3-5	^b Track Electives	6
SOIL SCI 301 General Soil Science	4	Humanities/Social Science Electives	<u>6</u>
Ethnic Studies Elective	3		17
Communications Elect.	<u>2-3</u>		
	14-17		

Intersession

^aFOREST 655 Forestry Field Camp 3 cr.

Junior Year

FOREST 550 Forest Ecology	4	RURAL SOC 248 Env. Nat. Res. & Soc.	3
FOREST 415 Tree Physiology	3	^b Track Electives	9
^b Track Electives	6	Res. Mgmt. & Cons. Elective	<u>3</u>
Humanities/Social Science Elect.	<u>3</u>		15
	16		

Senior Year

FOREST 590 Integrated Resources Mgm't	3	FOREST 652 Decision Methods	4
^c FOREST 699 Profess. Work Exp.	1-2	FOREST 515 Renewable Resources Policy	3
^b Track Electives	9	^b Track Electives	3
Free Elective	<u>3</u>	Free Electives	<u>6</u>
	16-17		16

Unlike other tracks in Forest Science major, this track is NOT accredited by the Society of American Foresters.

^aAlternate year course offering that may be taken at the end of the freshman or sophomore year

^bForest Ecology Track Electives (31 credits required). Choose from electives distributed across four areas. See advisor for details.

^cAll students must complete a departmentally approved professional work experience, which is usually taken during the summer between the junior and senior years

NOTE: Students wishing to work towards an IES Certificate may wish to select their electives to match IES requirements.

Electives and Requirements for the Forest Ecology Track

Both courses are required: (5 credits)
FOREST 402 (Tree Identification),
FOREST 415 (Tree Physiology)

plus 26 credits required from the following subsets, including at least 8 credits from subset (a) and at least 3 credits from each of subsets (b) – (e).

a) Forest Management

FOREST 300 (Forest Measurements),
FOREST 500 (Insects and Diseases),
FOREST 652 (Decision Methods for Natural Resources Managers)

b) Biology

ENTOM 302 (Introduction To Entomology),
ENTOM 342 (Insect Ecology),
GENETICS 466 (Principles of Genetics),
PLPATH 300 (Introduction to Plant Pathology),
SOILSCI 323 (Soil Biology),
ZOO 410 (Organic Evolution)
ZOO 504 (Modeling Animal Landscapes)

c) Microbial Ecology

BACT 425 (Environmental Microbiology),
BIOCHEM 501 (Introduction to Biochemistry),
BOTANY 332 (Fungi),
PLPATH 525 (Comparative Ecology of Micro-organisms),
SOILSCI 523 (Soil Microbiology & Biochemistry)

d) Plant Ecology

BOTANY 422 (Plant Geography),
BOTANY 430 (Tropical Plant Diversity),
BOTANY 455 (Vegetation of Wisconsin),
BOTANY 460 (Principles of Ecology),
ENTOM 473 (Plant-Animal Interactions),
ENVIRST 361 (Wetlands Ecology)
FOREST 565 (Principles of Landscape Ecology),
FOREST 635 (Stand Dynamics)

e) Earth Sciences

AOS 171 (Global Change),
GEOG 120 or 127 (Physical Systems of the Environment),
GEOG 377 (Introduction to Geographic Information Systems),
SOILSCI 132 (Earth's Water),
SOILSCI 230 (Soil: Ecosystem and Resource),
SOILSCI 321 (Soils and Environmental Chemistry),
SOILSCI 324 (Soils and Environmental Quality)