

**FORESTRY/SOIL, ENVIRONMENTAL & ATMOSPHERIC SCIENCES WITH
EMPHASIS IN ENVIRONMENTAL SCIENCE DUAL B.S. DEGREE
(136 credit hours)**

Description

The Department of Forestry and the Department of Soil, Environmental and Atmospheric Sciences offer a dual BS degree in Forestry and Soil, Environmental and Atmospheric Sciences with an Environmental Science emphasis. For more information, contact an adviser in the Department of Forestry and or the Department of Soil, Environmental and Atmospheric Sciences.

University Requirements (35 credits)

ENGLISH 1000 - Exposition and Argumentation (3 credits) FSpS
Course to fulfill State Law Requirement (3 credits)
(History 1100, 1200, or Political Science 1100 or 1700)
AG EC 1041 - Applied Microeconomics (3 credits) FSp **or**
AG EC 2070 - Environmental Economics & Policy (WI) (3 credits) Sp
RU SOC 1000 - Rural Sociology (3 credits) FSp **or**
RU SOC 1120 - Population and Ecology (3 credits) FSp
RU SOC 2010 - Leadership in Today's World (3 credits) FSp **or**
RU SOC 2225 – Science, Technology, & Society (3 credits) Sp
AG ED 2220 - Verbal Communication in Agriculture, Food & Natural Res. (3 credits) FSp **or**
COMMUN 1200 – Public Speaking (3 credits) FSpS **and**
Humanistic Studies and Fine Arts electives (6 credits)
MATH 1100 - College Algebra for Calculus Bound Students (3 credits) FSpS
STAT 2530 - Statistical Methods in Natural Resources (3 credits) Sp
CHEM 1310 - General Chemistry I (2 credits) FSpS
CHEM 1320 - General Chemistry II w/Lab (3 credits) FSpS

Departmental Quantitative Skills (3-5 credits)

MATH 1400 - Calculus for Social and Natural Sciences I (3 credits) FSpS **or**
MATH 1500 – Analytical Geometry and Calculus I (5 credits) FSpS

Departmental Sciences (24-25 credits)

Biological and Plant Science (10 credits)
BIO SC 1200 - General Botany w/Lab (5 credits) F **and**
BIO SC 1500 – Introduction to Biological Systems w/Lab (5 credits) FSp
Chemistry (3 credits)
CHEM 1330 - General Chemistry III w/Lab (3 credits) FSpS
Geology (4 credits)
GEOL 1100 - Principles of Geology w/Lab (4 credits) FSpS **or**
GEOL 1200 - Environmental Geology w/Lab (4 credits) FSp
Physics (4 or 5 credits)
ENV SC 4305 – Environmental Soil Physics (3 credits) F **and**
ENV SC 4306 – Environmental Soil Physics Laboratory (2 credits) F **or**
PHYSCS 1210 - College Physics I (4 credits) FSpS
Policy (3 credits)
NAT R 4353 - Natural Resource Policy/Administration (3 credits) Sp

Departmental Requirements (67 - 70 credits)

Atmospheric Science/Soil Science (8 credits)

ATM SC 1050 - Introduction to Meteorology (3 credits) FSp

SOIL 2100 - Introduction to Soils (3 credits) FSp

SOIL 2106 - Soil Science Laboratory (2 credits) FSp

Environmental Science Emphasis Area Requirements (24 - 25 credits)

ENV SC 1100 - Introduction to Environmental Science (3 credits) F

ENV SC 3290 - Soils and the Environment (WI) (3 credits) F

ENV SC 3300 – Land Use Management (3 credits) Sp

ENV SC 3500 – Pollutant Fate and Transport (3 credits) Sp

ENV SC 4320 - Hydrologic and Water Quality Modeling (3 credits) F (capstone)

Select three additional courses from the following list

ATM SC 3600 - Climates of the World (3 credits) Sp

ATM SC 4520 – Environmental Biophysics (3 credits) F

ENV SC 4305 - Environmental Soil Physics (3 credits) F

ENV SC 4312 - Environmental Soil Microbiology (3 credits) Sp

ENV SC 4318 – Environmental Soil Chemistry (3 credits) Sp

SOIL 4308 - Soil Conservation (3 credits) Sp

SOIL 4313 - Soil Fertility and Plant Nutrition (3 credits) Sp

SOIL 4320 - Genesis of Soil Landscapes (4 credits) F

Forestry Requirements (23 - 25 credits)

FOREST 2151 – Dendrology (4 credits) F

FOREST 4320 – Forest Ecology (WI) (5 credits) F

FOREST 4330 – Practice of Silviculture (3 credits) Sp

FOREST 4390 - Watershed Management & Water Quality (3 credits) F

Select three additional courses from the following list

FOREST 3207 – Forest Fire Control and Use (2 credits) F

FOREST 3212 – Forest Health and Protection (4 credits) Sp

FOREST 3240 – Wood Technology (3 credits) F

FOREST 4350 – Forest Economics (3 credits) Sp (prerequisite for FOR 4380)

FOREST 4360 – Forest Information Systems (3 credits) F

FOREST 4375 – Forest Stand Dynamics (3 credits) Sp

FOREST 4380 – Forest Resource Management (3 credits) F

Forestry Summer Field Studies (5 credits) (Courses must be taken concurrently)

For 2541 – Forest Utilization (1 credit) S

For 2542 – Forest Measurements and Inventory (1 credit) S

For 2543 – Forest Ecology Field Studies (1 credit) S

For 2544 – Intro to Silviculture and Management (1 credit) S

For 2545 – Forest Management Planning (1 credit) S

Natural Resources (7 credits)

NAT R 3110 – Natural Resource Biometrics (3 credits) Sp

NAT R 3290 – Hydrologic Measurements Techniques (1 credit) F

NAT R 4325 –Introduction to GIS (3 credits) Sp

Electives (1-7 credits)

Remaining hours from university, quantitative, science, and department to complete 136 credit hours.