

**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**  
PHYSICS 1210 - College Physics I (4 credits) FSpS  
Policy (3 credits)  
NAT R 4353 - Natural Resource Policy/Administration (3 credits) Sp

## **Departmental Requirements (70 - 73 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) Sp

### 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 (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

FOREST 4360 – Forest Information Systems (3 credits) F

FOREST 4375 – Forest Stand Dynamics (3 credits) Sp

FOREST 4380 – Forest Resource Management (3 credits) F

FOREST 4385 – Agroforestry (4 credits) F

### Forestry Summer Field Studies (6 credits) (Courses must be taken concurrently)

For 2540 – Forest Hydrology Field Studies (1 credit) S

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 (9 credits)

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

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

NAT R 4970 –Natural Resources Practicum (3 credits) Sp

## **Electives (0-4 credits)**

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