

BS in Natural Resource Science and Management

Degree Program Description

The Natural Resource Science and Management degree addresses the science, art, and craft of creating, managing, using, conserving, and repairing natural and human-dominated ecosystems, in a sustainable manner, to meet desired societal goals. The degree has elements that belong to the biological, physical, social, political, and managerial sciences that are applied to conserving plant and animal species in forests, grasslands, rivers and streams, and urban areas. The degree also develops students' skills in working with diverse groups of people. Students with degrees in Natural Resource Science and Management work as fisheries biologists, foresters, interpreters, naturalists, and wildlife biologists for state and federal agencies, nature centers and museums, and consulting firms.

Students pursuing a Natural Resource Science and Management degree must individualize their degree by choosing one of four emphasis areas. The Forest Resources emphasis prepares students to manage forests to protect wildlife habitats and the environment while meeting the ever-growing demand for wood products. The Human Dimensions emphasis trains students to apply social sciences to address questions about how people's attitudes, knowledge, values, and behaviors impact the management of our natural resources. The Fisheries and Wildlife Science emphasis focuses upon the development of skills in the conservation of wildlife habitat, the protection of endangered species, and the management of wild animal populations. The Terrestrial Ecosystem emphasis allows students to combine interests in wildlife management and forestry to conserve biodiversity and satisfy the needs of society for renewable natural resources using the practice of ecosystem management.

Major Program Requirements

Students earning a Bachelor of Science in Natural Resource Science and Management are required to complete all University general education (<https://catalog.missouri.edu/academicdegreerequirements/generaleducationrequirements/>), University graduation, (<https://catalog.missouri.edu/academicdegreerequirements/universityrequirements/>) and degree requirements, including selected foundational courses, which may fulfill University general education requirements.

Students majoring in Natural Resource Science and Management may select one of the following emphasis areas:

- Forest Resources (<https://catalog.missouri.edu/collegeofagriculturefoodandnaturalresources/naturalresourcesciencemanagement/bs-natural-resource-science-management-emphasis-forest-resources/>)
- Fisheries and Wildlife Science (<https://catalog.missouri.edu/collegeofagriculturefoodandnaturalresources/naturalresourcesciencemanagement/bs-natural-resource-science-management-emphasis-fisheries-wildlife-sciences/>)
- Human Dimensions (<https://catalog.missouri.edu/collegeofagriculturefoodandnaturalresources/naturalresourcesciencemanagement/bs-natural-resource-science-management-emphasis-human-dimensions/>)

- Terrestrial Ecosystems (<https://catalog.missouri.edu/collegeofagriculturefoodandnaturalresources/naturalresourcesciencemanagement/bs-natural-resource-science-management-emphasis-terrestrial-ecosystems/>)

Foundational Courses		21-22
MATH 1100	College Algebra	3
MATH 1400	Calculus for Social and Life Sciences I	3
ATM_SC 1050 or PHYSCS 1210	Introductory Meteorology College Physics I	3-4
SOIL 2100	Introduction to Soils ^{FR and TE emphasis} areas MUST take Soil 2100 and Soil 2106	3
or GEOL 1100	Introduction to the Earth with Laboratory	
SOIL 2106	Soil Science Laboratory ^{FR and TE emphasis} areas MUST take Soil 2100 and Soil 2106	2
or GEOL 1100	Introduction to the Earth with Laboratory	
CHEM 1400 & CHEM 1401	College Chemistry I and College Chemistry I Laboratory	4
ABM 1041 or ABM 1042 or ABM 2070	Applied Microeconomics Applied Macroeconomics Environmental Economics and Policy	3
Degree Program Requirements		41-43
ABM 2225 or STAT 2500	Statistical Analysis Introduction to Probability and Statistics I	3
NAT_R 1070	Ecology and Conservation of Natural Resources	3
PRST 3231 or ENV_SC 4024	Interpretation of Natural and Cultural Resources ^{HD emphasis area MUST take PRST 3231} Foundations of Environmental Education	3
BIO_SC 1200 or PLNT_SCI 2110	General Botany with Laboratory Who Runs the World? Plants.	3-5
FOREST 2151	Dendrology	4
NAT_R 4110	Natural Resource Biometrics	4
F_W 4600W	Ecosystem Management - Writing Intensive	3
NAT_R 2325 or GEOG 3040	Introduction to Geographic Information Systems Introduction to Geographic Information Systems GIS	3
NAT_R 4353 or ENV_SC 4400W or PRST 3230	Natural Resource Policy/Administration ^{HD emphasis area MUST choose between NAT_R 4353 or ENV_SC 4400W} Environmental Law, Policy, and Justice - Writing Intensive Outdoor Recreation Policy	3
FOREST 4320 or BIO_SC 3650	Forest Ecology General Ecology	5
NAT_R 4940 or F_W 4950 or FOREST 4950	Natural Resources Science and Management Internship Undergraduate Research in Fisheries and Wildlife Forestry Undergraduate Research	3
F_W 4650	Natural Resource Planning and Management (Capstone)	4
Emphasis Area Requirements		40-44

Semester Plan

Below is a sample semester plan for the B.S. in Natural Resource Science and Management. A student's actual plan may vary due to

emphasis area, course choices, course availability, and transfer courses. Please consult with your advisor prior to registering for courses.

First Year			
Fall	CR	Spring	CR
BIO_SC 1200	5	Emphasis Area Course	3-5
MATH 1100	3	ENGLSH 1000	3
NAT_R 1070	3	NAT_R 2325	3
ATM_SC 1050	3	CHEM 1400 & CHEM 1401	4
14		13-15	

Second Year					
Fall	CR	Spring	CR	Summer	CR
FOREST 2151	4	SOIL 2100	3	NAT_R 4950 or 4940	3
FOREST 4320	5	Emphasis Area Course	3		
Missouri State Law Gen Ed Requirement	3	Humanities & Fine Arts	3		
NAT_R 4110	4	Humanities & Fine Arts PRST 3231	3		
16		15		3	

Third Year			
Fall	CR	Spring	CR
SOIL 2106	2	Emphasis Area Course	3
MATH 1400	3	Emphasis Area Course	3-5
Emphasis Area Course	3	Emphasis Area Course	3
STAT 2500	3	Emphasis Area Course	4
Approved Econ Course	3	Humanities Gen Ed	3
14		16-18	

Fourth Year			
Fall	CR	Spring	CR
F_W 4600W	3	NAT_R 4353	3
Emphasis Area Course	3	F_W 4650	4
Emphasis Area Course	3	Emphasis Area Course	3-5
Emphasis Area Course	3	Emphasis Area Course	4
Behavioral or Social Science	3		
15		14-16	

Total Credits: 120-126