

FOREST OPERATIONS

In addition to special degree requirements listed previously, students selecting the BS Forestry degree must complete the following required courses or their equivalent, if transferred from another college or university. Transference and equivalency will be determined by the University, W.A Franke College of Forestry and Conservation, and Forestry program. Electives may be taken at any time, keeping in mind these requirements as well as the University's General Education requirements for graduation.

Bachelor of Science - Forestry; Forest Operations Concentration

W.A Franke College of Forestry & Conservation

Degree Specific Credits: 82

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umn.edu/academics/general-education-requirements>) of the catalog.

Summary

Major Required Courses	22
Outside Major Courses Required	24-27
Major Required Courses	30
Forest Management Elective	2-3
Resource Protection Electives	3
Ethics and Social Science Elective	3
Writing within Major	15
Math within Major	4-6
Exception to the Modern/Classical Languages Requirement	3-4
Expressive Arts within Major	3
Social Science within Major	3
Ethical & Human Values Elective within Major	3
Natural Science within Major	6
Total Hours	121-128

Major Required Courses

Rule: Must take all courses

FORS 130	Intro Forestry Field Skills	2
FORS 201	Forest Biometrics	3
FORS 202	Forest Mensuration	3
FORS 240	Tree Biology	2
FORS 241N	Dendrology	3
FORS 250	Intro to GIS for Forest Mgt	3
NRSM 200	Nat.Resource Professional Wrtg	3

NRSM 210N	Soils, Water and Climate	3
Total Hours		22

Minimum Required Grade: C-

Outside Major Courses Required

Rule: Must take all courses

BIOB 160N	Principles of Living Systems	3
BIOB 161N	Prncpls of Living Systems Lab	1
CHMY 121N	Introduction to General Chemistry	3
COMX 111A	Intro to Public Speaking	3
or THTR 120A	Introduction to Acting I	
ECNS 201S	Principles of Microeconomics	3
Select one of the following:		4-6
M 151	Precalculus	
M 121	College Algebra	
& M 122	and College Trigonometry	
Select one of the following:		4-5
M 162	Applied Calculus	
PHSX 205N	College Physics I	4
WRIT 101	College Writing I	3
Total Hours		28-31

Minimum Required Grade: C-

Major Required Courses

Rule: Must take all courses

FORS 320	Forest Environmental Economics	3
FORS 330	Forest Ecology	3
FORS 340	Forest Product Manufacturing	2
FORS 341	Timber Harvesting & Roads	3
FORS 349	Practice of Silviculture	3
FORS 434	Advanced Forest Roads	3
FORS 435	Advaced Timber Harvesting	3
FORS 436	Project Appraisal	3
FORS 440	Forest Stand Management	3
NRSM 385	Watershed Hydrology	3
NRSM 422	Nat Res Policy/Administration	3
Total Hours		32

Minimum Required Grade: C-

Forest Management Elective

Select at least one of the following: 2-3

FORS 230	Fire Management & Environmental Change	
FORS 232	Forest Insects & Diseases	
NRSM 265	Elements of Ecological Restora	
PTRM 217S	Parks & Outdoor Rec. Mgmt.	
WILD 275	Wildlife Conservation	

Total Hours 2-3

Minimum Required Grade: C-

Resource Protection Electives

Select one of the following: 3

FORS 331	Wildland Fuel Management	
NRSM 360	Rangeland Mgt (equiv 260)	
NRSM 415	Environmental Soil Science	
NRSM 455	Riparian Ecology & Management	

Total Hours 3

Minimum Required Grade: C-

Ethics and Social Science Elective

Select one of the following: 3

NASX 303E	Ecol Persp in Nat Amer Trad	
NRSM 379	Collab in Nat Res Decisions	
NRSM 424	Community Forestry & Conservtn	
NRSM 425	Nat Res & Envir Economics	
NRSM 389E	Ethics Forestry & Conservation	

Total Hours 3

Minimum Required Grade: C-

Writing Within Major**Rule:** Must complete the following subcategories

15 Total Credits Required

Lower Division Writing**Rule:** Need to take all listed

NRSM 200	Nat.Resource Professional Wrtg	3
WRIT 101	College Writing I	3

Total Hours 6

Minimum Required Grade: C-

Upper Division Writing

Select at least three of the following: 9

FORS 330	Forest Ecology	
FORS 341	Timber Harvesting & Roads	
FORS 349	Practice of Silviculture	
FORS 440	Forest Stand Management	

Total Hours 9

Minimum Required Grade: C-

Math within Major**Rule:** All are required

Select one of the following: 4-6

M 151	Precalculus	
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M 121 & M 122	College Algebra and College Trigonometry	
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Total Hours 4-6

Minimum Required Grade: C-

Exception to the Modern/Classical Languages Requirement**Rule:** The Forestry major has been granted an exception to the Modern/Classical Language Requirement. Must take one of the following courses to will satisfy this requirement.

FORS 201 or STAT 216	Forest Biometrics Introduction to Statistics	3-4
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Total Hours 3-4

Minimum Required Grade: C-

Expressive Arts within Major**Rule:** Must take one of the following courses

COMX 111A or THTR 120A	Intro to Public Speaking Introduction to Acting I	3
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Total Hours 3

Minimum Required Grade: C-

Social Science within Major**Rule:** Must take the following course

ECNS 201S	Principles of Microeconomics	3
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Total Hours 3

Minimum Required Grade: C-

Ethical & Human Values Elective within Major**Rule:** Can take the following elective course

NRSM 389E	Ethics Forestry & Conservation	3
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Total Hours 3

Minimum Required Grade: C-

Natural Science within Major**Rule:** Must take all courses

CHMY 121N	Introduction to General Chemistry	3
NRSM 210N	Soils, Water and Climate	3

Total Hours 6

Minimum Required Grade: C-