

# FORESTRY B.S.

The B.S. in Forestry prepares students to be leaders in the stewardship of forest resources, from water to wildlife to wood products. Through field and classroom experiences, students gain expertise in the core biophysical and ecological processes that shape forested landscapes, and synthesize this knowledge with socio-economic principles to effectively manage, conserve, and restore natural resources.

The program uses the unique natural settings offered in Montana to give students classroom and field learning experiences with skills-based courses, independent studies, internships and research projects that lead to diverse employment opportunities.

With a degree in Forestry students can work as forest ecologists, silviculturalists, timber managers, forest planners, wildland fire specialists, inventory managers, forest rangers, or as range or soil conservationists. The Forestry degree is accredited by the Society of American Foresters and meets the requirements for qualification as Forester for the U.S. Civil Service Commission (440 series). This means student can work as a forester for federal agencies such as the U.S. Forest Service, Bureau of Land Management, Bureau of Indian Affairs as well as for many state agencies and with private industry.

## Bachelor of Science - Forestry 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

Code	Title	Hours
Lower-Division Major Required Courses		20
Lower-Division Outside Major Required Courses		23-26
Upper-Division Major Required Courses		28
Professional Electives		15
<b>Total Hours</b>		<b>86-89</b>

Degree Specific Credits: 86-89

Required Cumulative GPA: 2.0

### Lower-Division Major Required Courses

Code	Title	Hours
<b>Complete all of the following courses:</b>		
FORS 130	Introduction to Forestry Field Skills	2
FORS 202	Forest Mensuration	3
FORS 230	Fire Management & Environmental Change	3
FORS 232	Forest Insects & Diseases	3
FORS 241N	Dendrology	3
FORS 250	Intro to GIS for Forest Mgt	3
NRSM 211N	Soils and Water	2
NRSM 212N	Ecology, Physics and Taxonomy of Soils	1
<b>Total Hours</b>		<b>20</b>

Minimum Required Grade: C-

### Lower-Division Outside Major Required Courses

Code	Title	Hours
<b>Complete all of the following courses:</b>		
BIOO 105N	Introduction to Botany	3
BIOB 160N	Principles of Living Systems	3
CHMY 121N	Introduction to General Chemistry	4
COMX 111A	Introduction to Public Speaking	3
or THTR 120A	Introduction to Acting I	
ECNS 201S	Principles of Microeconomics	3
<b>Complete one of the following two options:</b>		<b>4-6</b>
M 151	Precalculus	
M 121	College Algebra	
& M 122	and College Trigonometry	
<b>Complete one of the following courses:</b>		<b>3-4</b>
FORS 201	Forest Biometrics	
STAT 216	Introduction to Statistics	
<b>Total Hours</b>		<b>23-26</b>

Minimum Required Grade: C-

### Upper-Division Major Required Courses

Code	Title	Hours
<b>Complete all of the following courses:</b>		
FORS 320	Forest Environmental Economics	3
FORS 330	Forest Ecology	3
FORS 335	Forest Ecology Field Laboratory	1
FORS 340	Forest Product Manufacturing	3
FORS 341	Timber Harvesting & Roads	3
FORS 349	Practice of Silviculture	3
FORS 440	Forest Stand Management	3
FORS 481	Forest Planning	3
NRSM 385	Watershed Hydrology	3
NRSM 422	Natural Resource Policy and Administration	3
<b>Total Hours</b>		<b>28</b>

Minimum Required Grade: C-

### Professional Electives

**Rule:** Complete 15 total credits from the combined subcategories, including at least 3 credits from each subcategory.

#### Biophysical Sciences

Code	Title	Hours
<b>Complete at least one of the following courses:</b>		
BIOE 370	General Ecology	
BIOO 335	Rocky Mountain Flora	
BIOO 433	Plant Physiology	

FORS 333	Fire Ecology
FORS 342	Wood Anatomy, Properties, & ID
NRSM 418	Ecosystem Climatology
WILD 370	Wildlife Habitat Conservation & Management
<b>Total Hours</b>	<b>3</b>

Minimum Required Grade: C-

### Management Application

Code	Title	Hours
<b>Complete at least one of the following courses:</b>		<b>3</b>
FORS 331	Wildland Fuel Management	
FORS 434	Advanced Forest Roads	
FORS 435	Advanced Timber Harvesting	
NRSM 265	Elements of Ecological Restoration	
NRSM 360	Rangeland Management	
<b>Total Hours</b>		<b>3</b>

Minimum Required Grade: C-

### Policy and Social Science

Code	Title	Hours
<b>Complete at least one of the following courses:</b>		<b>3</b>
ENST 225S	Sustainable Communities	
ENST 230H	Nature and Society	
NASX 303E	Ecological Perspectives in Native American Traditions	
NRSM 326	Climate and Society	
NRSM 370S	Wildland Conservation Policy/Governance	
NRSM 379	Collaborations in Natural Resource Decisions	
NRSM 389E	Ethics and Sustainability	
NRSM 424	Community Forestry & Conservation	
NRSM 427	Water Policy	
NRSM 428	Climate Policy	
NRSM 475	Environment & Development	
PTRM 300	Recreation Behavior	
PTRM 310	Natural Resource Interpretation and Communication	
PTRM 380	Recreation Administration & Leadership	
PTRM 451	Tourism & Sustainability	
PTRM 482	Wilderness & Protected Area Management	
<b>Total Hours</b>		<b>3</b>

Minimum Required Grade: C-

### Measurement and Analysis

Code	Title	Hours
<b>Complete at least one of the following courses:</b>		<b>3-5</b>
FORS 350	Forestry Apps of GIS	
FORS 351	Env Remote Sensing	
FORS 505	Sampling Methods	
GEO 421	Hydrology	

PHSX 205N & PHSX 206N	College Physics I and College Physics I Laboratory	
<b>Total Hours</b>		<b>3-5</b>

Minimum Required Grade: C-

### Upper-Division Writing Requirement

Code	Title	Hours
<b>Complete three of the following courses:</b>		<b>9</b>
BIOE 447	Ecosystem Ecology	
FORS 330	Forest Ecology	
FORS 341	Timber Harvesting & Roads	
FORS 349	Practice of Silviculture	
FORS 440	Forest Stand Management	
<b>Total Hours</b>		<b>9</b>

Minimum Required Grade: C-