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### **Forestry Careers**

Congratulations on selecting the Forestry program at Oregon State University! The Bachelor of Science (B.S.) in Forestry is intended to broadly educate and train forest land managers in the biological, physical, and socioeconomic factors that influence forest policies and management actions. Our graduates will be prepared to work for the forest industry, non-industrial landowners, federal and state agencies, non-profits and non-governmental organizations.

The successful forester must understand the biological and physical processes of forest ecosystems, as well as the social, economic, and operational forces that influence forest policies and management actions. The forestry curriculum includes courses in the biological, physical, and social sciences, and six months of work experience as well as professional courses designed to prepare students to manage forest resources.

One of the first decisions that you must make as you begin the program is which option to pursue.

The **Forest Management** option is a classical forestry program aimed at active land management from an industrial forest land management perspective.

The **Forest Operations Management** option provides a strong foundation in classical forestry, and includes coursework from the engineering program that is specific to managing forest operations. It also meets additional College of Business requirements for a Business minor that fits with ownership and management of a forestry service business.

The **Forest Restoration and Fire** option includes the same foundation as the Forest Management option, but goes on to provide a stronger scientific focus on basic physical and biological processes that operate in the forest regardless of management objectives.

Graduates from all three options play key roles in helping meet the world's appetite for wood products and the benefits of the broad array of resources from forest such as soils, water, fish and wildlife habitat, and recreation.

Oregon State's Forestry program has a long tradition of excellence in undergraduate education. The Bachelor of Science in Forestry curriculum is accredited by the Society of American Foresters (SAF).

### **B.S. Forestry Learning Outcomes**

The expected learning outcomes of the program include: emphasis on verbal, written and interpersonal communication skills, and development of critical thinking and problem-solving skills. Students will be expected to gain an awareness and understanding of differing viewpoints, and to demonstrate knowledge of international forestry, sustainable forest management, certification processes, and broad ecosystems services.

Learning outcomes for the B.S. in Forestry program:

- 1. Demonstrate knowledge of forest ecology and silviculture principles to understand how forests and forested watersheds respond to natural disturbances or management activities.
- 2. Develop skills in geospatial analysis, basic surveying, mapping, and GIS.
- 3. Demonstrate ability to measure and inventory forest vegetation with precision and accuracy.
- 4. Develop an understanding of forestry investment analysis and be able to evaluate typical financial investments in forestry.
- 5. Demonstrate an understanding of the development and execution of strategic, tactical and operational forest plans that support achievement of desired future stand conditions and strategic goals.
- 6. Demonstrate an understanding of the social and political context of forestry and be able to describe current policies, laws, and regulations governing the management of forest lands.

### **Forest Management Option**

Forest Managers must understand natural resource systems and how to organize the management of forest resources for multiple uses and multiple values. Successful Forest Managers must be able to communicate with the full spectrum of forest users and those who value forest resources. They must be able to propose management solutions that are compatible with the biological and ecological processes of the forest yet are sensitive to the cultural, social and economic forces that shape forest policies.

### **Forest Management Option Learning Outcomes**

As a graduate of the Forestry – Forestry Management Option, you will:

- 1. Demonstrate knowledge of forest vegetation modeling and the ability to forecast its development over time using models of forest growth.
- 2. Demonstrate an understanding of the importance of communication in both planning and practice settings, and be able to communicate effectively with coworkers and stakeholders on forest resource issues and practices.
- 3. Demonstrate understanding of interaction of vegetation, wildlife, insects, and disease on forested landscapes.
- 4. Demonstrate ability to identify major forest ecosystems of the PNW and describe their changes over time, with and without human influence/management.
- 5. Demonstrate knowledge of inter-temporal management and planning at the forest and landscape levels, and the ability to develop alternative management scenarios for forest lands for an array of objectives including forest products, environmental services, social amenities cultural and other resource values.

The curriculum in the Forest Management Option is broad-based, including courses in mathematics, statistics, biology and ecology, the physical and social sciences, professional courses in forest biology and ecology and forest management, and at least 6 months of work experience.

Entry-level positions for graduates can include duties that span the full range of forest resource uses and management activities, including: fire control and prevention, watershed protection, wildlife habitat management, forest roads and trails, timber management and regeneration, forest health assessment and insect/disease control measures, community-based forestry, ecosystem services markets and carbon offset sales, and management consulting. Graduates are employed by private and public organizations. Private sector employers include the forest timber and wood products industries, forestry consulting firms, Non-Government Organizations (NGOs) and environmental organizations, and self-employment. Public employers include federal, state, and local government agencies such as the U.S. Forest Service, Bureau of Land Management, National Park Service, Peace Corps, and state departments of forestry and natural resources.

### **Forest Management Option**

**Degree requirements:** To earn the B.S. in Forestry with the Forestry Management Option, students must complete:

- All Pre-Forestry and Pro-School courses with grades of C or higher
- All courses for the Forest Management option with grades of C or higher
- All courses for OSU's Core Education
- Any additional electives necessary to achieve 180 total credits
- At least 6 months of relevant work experience

**Pre-Forestry Courses:** these courses must be completed with grades of C or higher before students enter the professional program. Courses in regular font are required for the Forestry major and *courses in italics are required for the Forest Management option.* + indicates courses that also fulfill Core Education.

Course Number	Title	C	Corvallis Campus	Distance Campus	Prerequisites / Notes
	First Year Cours		campus	Cumpus	Hotes
+AEC 250 or	Intro to Environmental Economics and Policy	4	SP	F,W,SP,SU	MTH 111Z Rec.
+ECON 201Z	Intro to Microeconomics	4	F,W,SP	F,W,SP,SU	MTH 111Z Rec.
+CH 121 or	General Chemistry with lab	5	F,W	F,W,SP,SU	MTH 111Z
+CH 221Z & 227Z	General Chemistry with lab (for sci majors)	5	F,W	SU	Was CH 231/261
+COMM 111Z or	Public Speaking	4	F,W,SP,SU	F,W,SP,SU	
+COMM 114 or	Argument and Critical Discourse	3	F,W,SP,SU	F,W,SP,SU	
+COMM 218Z	Interpersonal Communication	4	F,W,SP,SU	F,W,SP,SU	
+CORE 100 or	Transitions	2	F,W,SP,SU	F,W,SP,SU	First-Year students
+CORE 300	Transitions	2	F,W,SP,SU	F,W,SP,SU	Transfer students
+FES 240	Forest Biology	4	F,SP	F,SP,SU	
+FOR 111 or	Intro to Forestry	3	F,SP	W,SU	
+NR 201	Managing Natural Resources for the Future	3	F	F,W,SP,SU	
+MTH 111Z	College Algebra	4	F,W,SP,SU	F,W,SP,SU	ALEKS 46+
+MTH 112Z	Elementary Functions	4	F,W,SP,SU	F,W,SP,SU	MTH 111Z
+MTH 241	Calculus for Management and Social Science	4	F,W, SP,SU	F,W,SP,SU	MTH 111Z
+WR 121Z	English Composition	4	F,W,SP,SU	F,W,SP,SU	Alpha-sectioned
FOR 112	Computing Applications in Forestry	3	W,SP	SP	
	Second Year Cou	rses			
FE 208	Forest Surveying	4	F	SP	MTH 112Z
FE 257	GIS and Forest Engineering Applications	3	W	F	
FES 241	Dendrology	3	F, SP	F,SP,SU	
+PH 201	General Physics I	5	F,SU	F	MTH 112Z
+SOIL 205 or	Soil Science	3	F,W,SP		Need 206 Lab
+CSS 205	Soil Science	4		F,W,SP,SU	Includes Lab
+FOR 206 or	Forest Soils Lab	1	SP		Take with SOIL 205
+SOIL 206	Soil Science Lab	1	F,W,SP		Take with SOIL 205
+ST 243Z	Principles of Statistics	4	F,W,SP	F,W,SP,SU	
+WR 227Z or	Technical Writing or	4	F,W,SP	F,W,SP,SU	WR 121Z
+WR 362	Science Writing	3	F	F,W,SP,SU	WR 121Z
TRAL 251	Recreation Resource Management	4	F	SP	

Note: At the end of the sophomore year students must apply to be admitted to the Forestry Professional Program ("Pro-School"). The courses above must all be completed with grades of C or better and a GPA of 2.25 or higher in order to be admissible to Pro-School for fall of the junior year.

Field School: Pro-School begins with the Forestry Field School prior to fall term of the junior year. It typically takes place in September – two weeks before the junior year begins.

**Pro-School Courses:** these courses must be completed with grades of C or higher. Courses in regular font are required for the Forestry major and *courses in italics are required for the Forest Management option.* + indicates courses that also fulfill Core Ed.

Course	Title	Cr	Corvallis	Distance	Prereqs /
Number		<u> </u>	Campus	Campus	Notes
	Third Year Courses		1	1	T
+AG 311 or	Native American Agriculture	3	F,SP	F,W,SP	
+GEOG 333 or	Environmental Justice	3	F,SP	W,SU	or ENSC 333
+SUS 331	Sustainability, Justice & Engagement	3	SP	F,W	
FE/FOR 312	Forestry Field School	2	F		Mid-
					September
FE 370	Harvesting Operations	4	F		PH 201
FE 434	Forest Watershed Management	4	F		CH, Soil, Calc
FOR 321	Forest Mensuration	5	F		FES 241, FE
					208, Calc,
					Stats
FOR 329	Forest Resource Economics I	4	W		Stats
FOR 332	Forest Resource Economics II	2	SP		FOR 329
FOR 442	Silviculture Reforestation	4	SP		Take with
					FOR 443
FOR 443	Silvicultural Practices	4	SP		Take with
					FOR 442
FES 341	Forest Ecology	3	F, W	F,W,SP	FES 240
FES 452	Biodiversity Conservation in Managed Forests	3	W	F,SP	
FOR 322	Forest Models	3	W		FOR 321,
					Calc, Stats
	Fourth Year Courses				
FE 444	Forestry Remote Sensing & Photogrammetry	4	F		FE 257, MTH
	, , , , , , , , , , , , , , , , , , , ,				112Z, PH
					201
FE/FOR 457	Techniques for Forest Resource Analysis	4	F		FOR 329,
					FOR 443
FE/FOR 459	Forest Management Planning & Design I	4	W		FOR 457
FE/FOR 463^	Forest Policy & Regulation	3	F, W		
FE/FOR 469	Forest Management Planning & Design I	4	SP		FOR 459
+FOR 008	Beyond OSU II: Engage	0	W		
FES 412	Forest Entomology	3	SP		
FOR 413	Forest Pathology	3	W		FES 240
	redits from the following list of Restricted Electives:				. 20 2 . 0
CROP 440. Weed			F	F,W	
FE 310. Forest Ro	• • • • • • • • • • • • • • • • • • • •		SP	',	FE 208
	d Aircraft System Remote Sensing (3)		F		GEOG 380
	turbance Hydrology (3)		W		FE 434
FE 471. Harvestin			SP		
	pes of the Northwest (3)			W	
FES 350. Urban Fo				F,W	
FES 440. Wildland			W	W,SP	
FES 445. Ecologica			F,SP	F,W,SP,SU	
	us and Natural Resources (3)		F, W	F,W,SP,SU	
FOR 210. Terrestr	ial Vertebrate Identification and Natural History (3)		SP	F,SP	
FOR 346. Topics in			SP	W,SP	
	r: Sem/Fire Field Trip (1)		SP		
FOR 431. Econom	ics and Policy of Disturbance Management (3)		SP	SP	

FOR 436. Wildland Fire Science and Management (4)	F	F,W	
FOR 499. Special Topics (0 – 6) with pre-approval	Varies	Varies	
GEOG 201. Geospatial Science & GIS (4)	F,W,SP	F,SP,SU	
GEOG 370. Geovisualization: Cartography (4)	W	F,SU	GEOG 201
GEOG 380. Remote Sensing I: Principles & Applications (4)	F	W,SU	GEOG 201
TRAL 351. Outdoor Recreation Management on Public Lands (3)	W	F,SP	
TRAL 357. Parks and Protected Areas Management (3)	F	W, SP	
WSE 453. ^Forest Products Business (3)	W		
WSE 457. Wood Product Sales (3)		SP	Odd years
WSE 470. Forest, Wood, and Civilization (3)		W	
Pre-approved Study Abroad courses			

**Core Education:** Students must complete one course in each Core Ed category. Some categories can be fulfilled by courses from the Forestry major. The chart below shows the overlap between Forestry requirements and Core Ed. A full listing of Core Ed requirements can be found in the OSU Catalog.

Title	Course	Cr.
Writing Foundations	Fulfilled by WR 121Z	4
Arts & Humanities: General		3-4
Arts & Humanities: Global		3-4
Arts & Humanities courses must be from		
two different departments.		
Quantitative Literacy & Analysis	Fulfilled by MTH 111Z, 112Z, 241, or ST 243Z	4
Communication, Media & Society	Fulfilled by COMM 111Z, 114, or 218Z	3-4
Social Science	Fulfilled by ECON 201Z or AEC 250	4
Scientific Inquiry & Analysis	Fulfilled by PH 201, CH 121, or CH 221Z & 227Z	5
Scientific Inquiry & Analysis	Fulfilled by FES 240, SOIL 205 & FOR 206, or SOIL 205 & SOIL 206	4
Scientific Inquiry & Analysis classes must		
be from two different departments.		
Difference, Power, Oppression		3-4
Foundations		
Transitions	CORE 100 or 300	2
Beyond OSU I: Prepare	Fulfilled by FOR 111 or NR 201	3
Beyond OSU II: Engaged	Fulfilled by Work Experience and FOR 008	0
Difference, Power, Oppression	Fulfilled by AG 311, ENSC/GEOG 333, or SUS 331	3
Advanced		
Seeking Solutions	Cannot be fulfilled by a course from the major	3-4
Writing Elevation	Fulfilled by WR 227Z or WR 362	4
Writing Intensive Course	Fulfilled by FOR 463	3

## Sample Course Plan - Forest Management Option

This is a sample schedule. Actual schedules will vary from student to student based upon factors such as math placement and course availability. Students are strongly encouraged to create a personalized plan with their academic advisor. *Courses in italics also fulfill Core Education requirements*.

# **B.S.** in Forestry

## Forest Management Option | 2025-2026

	Fall		Winter		Spring	
First Year	CORE 100: Transitions FOR 111: Intro to Forestry MTH 111Z: College Algebra WR 121Z: English Composition I	2 3 4 4	CH 121: General Chemistry FOR 112: Computing Applications MTH 112Z: Elementary Functions Core: Arts & Humanities General	5 3 4 3-4	COMM 111Z/114/218Z: Comm ECON 201Z/AEC 250: Economics MTH 241: Calc for Mgmt. & Social Sci. Core: Diff/Power/Opp. Foundations	3-4 4 4 3-4
	Total Credits	13	Total Credits	15- 16	Total Credits	14- 16
Second Year	FE 208: Forest Surveying PH 201: General Physics with lab TRAL 251: Rec Resource Mgmt Free elective	4 5 4 3-4	FE 257: GIS  WR 227Z: Technical Writing  Core: Arts & Humanities Global  Free Elective	3 4 3-4 4	FES 240: Forest Biology FES 241: Dendrology SOIL 205: Soil Science FOR/SOIL 206: Soil Science Lab ST 243Z: Principles of Statistics	4 3 3 1 4
	Total Credits	16- 17	Total Credits	14- 15	Total Credits	15
Third Year	FE 370: Harvesting Operations FE 434: Forest Watershed Mgmt. FOR 312: Forestry Field School FOR 321: Forest Mensuration	4 4 2 5	FES 341: Forest Ecology FES 452: Biodiversity Conservation FOR 322: Forest Models FOR 329: Forest Resource Economics I Core: Seeking Solutions	3 3 4 3-4	FOR 332: Forest Res Economics II FOR 442: Silviculture Reforestation FOR 443: Silvicultural Practices Core: Diff/Power/Opp. Advanced Free elective, if needed	2 4 4 3 2
	Total Credits	15	Total Credits	16- 17	Total Credits	15
Fourth Year	FE 444: For Remote Sensing & Photo FOR 457: Tech. for. Res. Analysis FOR 463: Forest Policy & Regulation Restricted Elective	4 4 3 3 3	FOR 008: Beyond OSU - Engage FOR 413: Forest Pathology FOR 459: Forest Mgmt. Plan & Design I Restricted Elective Restricted Elective	0 3 4 3 3	FES 412: Forest Entomology FOR 469: Forest Mgmt. Plan & Design II Restricted Elective Restricted Elective	3 4 3 3
	Total Credits	14	Total Credits	13	Total Credits	13

### **Forest Operations Management Option**

The Bachelor of Science in Forestry - Forest Operations Management Option is designed as a professional forestry degree that blends elements of forest engineering and forest management with business management and entrepreneurship. This unique option will prepare graduates to support the needs of an evolving forest sector in Oregon and globally. As they gain experience, graduates will have options to serve as project managers for logging or silvicultural contracting service firms, as consultants, or as company or agency contract administrators that supervise a growing contracting work force. Graduates will also be prepared to continue on to graduate school in a variety of disciplines that range from natural resources to business.

The educational objectives of the Forest Operations Management Option are developing science, engineering and technical solutions that promote sustainable management of forest, land and water resources to meet society's economic, environmental and social needs. This option is intended for students who have strong interest in the operational aspects of industrial forest management. More specifically, students who wish to own or manage a contracting business that provides silviculture, harvesting, or transportation system services to larger companies or agencies, or be employed by companies or agencies to administer contracts and manage operations, much like project managers do in the construction business.

This option meets the requirements for the Business minor from the College of Business. Students in the Forest Operations Management Option must apply to the College of Business to be admitted to the Business Minor.

- **Forestry Principles** The Forest Operations Management Option will incorporate an adequate presentation of fundamental forestry principles so that graduates will be able to implement and manage forest operations to achieve silvicultural objectives.
- **Soil and Water Resources** The Forest Operations Management Option will incorporate an adequate presentation of the physical and biological aspects of soil and water resources so that graduates will be able to implement and manage forest operations that appropriately protect these resources.
- Surveying and Measurement The Forest Operations Management Option will incorporate adequate surveying and measurement of land and forest resources to implement and manage the tasks associated with forest land management.
- Harvesting Operations The Forest Operations Management Option will incorporate adequate
  principles of harvesting operations so that graduates can manage safe, economic, and environmentally
  sound forest operations.
- Planning, Economics, and Business The Forest Operations Management Option will incorporate
  adequate principles and techniques for forest land management, operational planning, and business in
  an environmental and economic context so that graduates can effectively manage operations and the
  forestry supply chain.

### Forest Operations Management Option Learning Outcomes

In addition to the learning outcomes defined for the OSU Core Education, the specific learning outcomes for the Bachelor of Science in Forestry - Forest Operations Management Option are:

- 1. Demonstrate the knowledge of the potential effects of forest operations on soils, wildlife and water resources by being able to show the tradeoffs of various harvesting systems on soils, wildlife and water resources.
- 2. Demonstrate knowledge of business laws by being able to apply them to common business practices conducted in a contracting relationship.
- 3. Demonstrate the ability to apply appropriate knowledge of surveying and mapping tools to implement forest operations by being able to survey and map roads, critical habitat and other common forest features.
- **4.** Demonstrate the ability to collect forest and financial data to analyze the profitability of various forest operations.
- **5.** Develop expertise with technology, equipment, and systems by selecting the systems to be used in conducting forest operations to plan and conduct activities that achieve silvicultural objectives.
- **6.** Demonstrate the ability to plan and administer safe working practices in a variety of forest operations.

### Forest Operations Management Option - Curriculum

**Degree requirements:** To earn the B.S. in Forestry with the Forestry Operations Management Option, students must complete:

- All Pre-Forestry and Pro-School courses with grades of C or higher
- All courses for the Forest Operations Management option with grades of C or higher
- All courses for OSU's Core Education
- Any additional electives necessary to achieve 180 total credits
- At least six months of relevant work experience

**Pre-Forestry Courses:** these courses must be completed with grades of C or higher before students enter the professional program. Courses in regular font are required for the Forestry major and *courses in italics are* required for the Forest Operations Management option. + indicates courses that also fulfill Core Education.

Course Number	Title	Cr	Corvallis Campus	Distance Campus	Prerequisites / Notes
	First Year Cour	ses	•	•	1
+ECON 201Z	Intro to Microeconomics	4	F,W,SP	F,W,SP,SU	MTH 111Z Rec.
+CH 121 or	General Chemistry	5	F,W	F,W,SP,SU	MTH 111Z
+CH 221Z&227Z	General Chemistry & Lab	5	F,W	SU	Was CH 231/261
+COMM 111Z or	Public Speaking	4	F,W,SP,SU	F,W,SP,SU	
+COMM 114 or	Argument and Critical Discourse	3	F,W,SP,SU	F,W,SP,SU	
+COMM 218Z	Interpersonal Communication	4	F,W,SP,SU	F,W,SP,SU	
+CORE 100 or	Transitions	2	F,W,SP,SU	F,W,SP,SU	First-Year students
+CORE 300	Transitions	2	F,W,SP,SU	F,W,SP,SU	Transfer students
+FES 240	Forest Biology	4	F,SP	F,SP,SU	
+FOR 111 or	Intro to Forestry	3	F,SP	W,SU	
+NR 201	Managing Natural Resources for the Future	3	F	F,W,SP,SU	
+MTH 111Z	College Algebra	4	F,W,SP,SU	F,W,SP,SU	ALEKS 46+
+MTH 112Z	Elementary Functions	4	F,W,SP,SU	F,W,SP,SU	MTH 111Z
+MTH 241	Calculus for Management and Social Science	4	F,W, SP,SU	F,W,SP,SU	MTH 111Z
+WR 121Z	English Composition	4	F,W,SP,SU	F,W,SP,SU	Alpha-sectioned
FE 102	Forest Engineering Problem-Solving and Technology	3	W, SP		
	Second Year Cou	ırses			
FE 208	Forest Surveying	4	F	SP	MTH 112Z
FE 257	GIS and Forest Engineering Applications	3	W	F	
FES 241	Dendrology	3	F, SP	F,SP,SU	
+PH 201	General Physics I	5	F,SU	F	MTH 112Z
+SOIL 205 or	Soil Science	3	F,W,SP		Need 206 Lab
+CSS 205	Soil Science	4		F,W,SP,SU	Includes Lab
+FOR 206 or	Forest Soils Lab	1	SP		Take with SOIL 205
+SOIL 206	Soil Science Lab	1	F,W,SP		Take with SOIL 205
+ST 243Z	Principles of Statistics	4	F,W,SP	F,W,SP,SU	
+WR 227Z or	Technical Writing or	4	F,W,SP	F,W,SP,SU	WR 121Z
+WR 362	Science Writing	3	F	F,W,SP,SU	WR 121Z
BA 260	Foundations of the Entrepreneurial Mindset	4	F,W,SP	F,W,SP,SU	Soph Standing
BA 315	Accounting for Decision-Making	4	W,SP	F,W,SP,SU	Soph Standing
BA 330 or	Legal Environment of Business	4	W	W,SP	Soph Standing
BA 226Z	Introduction to Business Law	4	F	F,SU	

Note: At the end of the sophomore year students must apply to be admitted to the Forestry Professional Program ("Pro-School"). The courses above must all be completed with grades of C or better and a GPA of 2.25 or higher in order to be admissible to Pro-School for fall of the junior year.

Field School: Pro-School begins with the Forestry Field School prior to fall term of the junior year. It typically takes place in September – two weeks before the junior year begins.

**Pro-School Courses:** these courses must be completed with grades of C or higher. Courses in regular font are required for the Forestry major and *courses in italics are required for the Forest Operations Management option.* + indicates courses that also fulfill Core Ed.

Course Number	Title	Cr	Corvallis Campus	Distance Campus	Prerequisites / Notes
	Third Year Co	ırses			
+AG 311 or	Native American Agriculture	3	F,SP	F,W,SP	
+GEOG 333 +SUS 331	Environmental Justice	3	F,SP SP	W,SU	or ENSC 333
FE/FOR 312	Sustainability, Justice & Engagement Forestry Field School	2	F	F,W	Mid-September
					·
FE 370	Harvesting Operations	4	F		C in PH 201
FE 434	Forest Watershed Management	4	F		Chem, Soil, Calc
FOR 321	Forest Mensuration	5	F		C in FES 241, FE 208, Calc, Stats
FOR 329	Forest Resource Economics I	4	W		ST 243Z, 314, or 351
FOR 332	Forest Resource Economics II	2	SP		FOR 329
FOR 442	Silviculture Reforestation	4	SP		Take with FOR 443
FOR 443	Silvicultural Practices	4	SP		Take with FOR 442
FE 440	Forest Operations Analysis	4	W		FE 102 and FE 370
BA 251	Managing Organizations	4	SP	F,W,SP,SU	
BA 390	Principles of Marketing	4	W	F,W,SP,SU	Econ recommended
	Fourth Year Co	urses			
FE 444	Forestry Remote Sensing & Photogrammetry	4	F		FE 257, MTH 112Z, PH 201
FE/FOR 457	Techniques for Forest Resource Analysis	4	F		FOR 329, FOR 443
FE/FOR 459	Forest Management Planning & Design I	4	W		C in FOR 457
FE/FOR 463^	Forest Policy & Regulation	3	F, W		
FE/FOR 469	Forest Management Planning & Design I	4	SP		FOR 459
+FOR 008	Beyond OSU II: Engage	0	W		
BA 460 or	Venture Management	4		W	BA 260
BA 314	Sustainable Business Management	4	W	F,W,SP	
FE 471	Harvesting Management	3	SP		

**Core Education:** Students must complete one course in each Core Ed category. Some categories can be fulfilled by courses from the Forestry major. The chart below shows the overlap between Forestry requirements and Core Ed. A full listing of Core Ed requirements can be found in the OSU Catalog.

Title	Course	Cr.
Writing Foundations	Fulfilled by WR 121Z	4
Arts & Humanities: General		3-4
Arts & Humanities: Global		3-4
Arts & Humanities classes must come		
from two different departments.		
Quantitative Literacy & Analysis	Fulfilled by MTH 111Z, 112Z, 241, or ST 243Z	4
Communication, Media & Society	Fulfilled by COMM 111Z, 114, or 218Z	3-4
Social Science	Fulfilled by ECON 201Z	4
Scientific Inquiry & Analysis	Fulfilled by PH 201, CH 121, or CH 221Z & 227Z	5
Scientific Inquiry & Analysis	Fulfilled by FES 240, SOIL 205 & FOR 206, or SOIL 205 & SOIL 206	4
Scientific Inquiry & Analysis classes must		
come from two different departments.		
Difference, Power, Oppression		3-4
Foundations		
Transitions	CORE 100 or 300	2
Beyond OSU I: Prepare	Fulfilled by FOR 111 or NR 201	3
Beyond OSU II: Engaged	Fulfilled by Work Experience and FOR 008	0
Difference, Power, Oppression	Fulfilled by AG 311, ENSC/GEOG 333, or SUS 331	3
Advanced		
Seeking Solutions	Cannot be fulfilled by a course from the major	3-4
Writing Elevation	Fulfilled by WR 227Z or WR 362	4
Writing Intensive Course	Fulfilled by FOR 463	3

## Sample Course Plan - Forest Operations Management Option

This is a sample schedule. Actual schedules will vary from student to student based upon factors such as math placement and course availability. Students are strongly encouraged to create a personalized plan with their academic advisor. Courses in italics also fulfill Core Education requirements.

# **B.S.** in Forestry

## Forest Operations Management Option | 2025-2026

	Fall		Winter		Spring	
First Year	CORE 100: Transitions FOR 111: Intro to Forestry MTH 111Z: College Algebra WR 121Z: English Composition I Free Elective	2 3 4 4 1	CH 121: General Chemistry FE 102: Forest Engr Problem Solving MTH 112Z: Elementary Functions Core: Arts & Humanities General	5 3 4 3-4	COMM 111Z/114/218Z: Comm MTH 241: Calc for Mgmt. & Social Sci. ECON 201Z: Intro to Microeconomics Core-Diff/Power/Opp Foundations	3-4 4 4 3-4
	Total Credits	14	Total Credits	15- 16	Total Credits	14- 16
Second Year	FE 208: Forest Surveying FES 240: Forest Biology PH 201: General Physics with lab Core: Arts & Humanities Global	4 4 5 3-4	BA 260: Intro to Entrepreneurship BA 315: Accounting for Decision Making FE 257: GIS WR 227Z: Technical Writing	4 4 3 4	BA 226Z: Intro to Business Law FES 241: Dendrology SOIL 205: Soil Science FOR/SOIL 206: Soil Science Lab ST 243Z: Principles of Statistics	4 3 3 1 4
	Total Credits	16- 17	Total Credits	15	Total Credits	15
Third Year	FE 370: Harvesting Operations FE 434: Forest Watershed Mgmt. FOR 312: Forestry Field School FOR 321: Forest Mensuration	4 4 2 5	BA 390: Principles of Marketing FE 440: Forest Operations Analysis FOR 329: Forest Resource Economics I Core: Seeking Solutions	4 4 4 3-4	BA 251: Managing Organizations FOR 332: Forest Res Economics II FOR 442: Silviculture Reforestation FOR 443: Silvicultural Practices	4 2 4 4
	Total Credits	15	Total Credits	15- 16	Total Credits	14
Fourth Year	FE 444: For Remote Sens & Photo FOR 457: Tech. for For. Res. Analysis FOR 463: Forest Policy & Regulation Free elective	4 4 3 3 3	BA 460: Venture Management or BA 314: Sustainable Business Ops FOR 008: Beyond OSU - Engage FOR 459: Forest Mgmt. Plan & Design I Free elective Free elective	4 0 4 3 3	FOR 469: Forest Mgmt. Plan & Design II FE 471: Harvesting Management Core: Diff/Power/Opp Advanced Free elective Free elective to reach 180 total credits	4 3 3 3 1
	Total Credits	14	Total Credits	14	Total Credits	14

### Forest Restoration and Fire Option

The Forest Restoration and Fire Option emphasizes active management to accommodate, prevent, mitigate and/or use forest disturbance processes as part of a forest management plan. Disturbance processes, such as wildfire, insect or disease outbreak, landslides, and windthrow, are important considerations in any actively managed forest, regardless of the specific management objective. In forests managed primarily for wood production, where the predominant disturbance is harvest, "natural" disturbance may pose risk of damage to timber values and disturbance management is primarily preventative. Where management objectives include recreation, biodiversity, restoration to historical conditions, or other ecosystem services, these disturbances may have beneficial outcomes; hence, management may include use of disturbance as a management tool or simply as part of a renewal process in a resilient and diverse forested landscape.

The Forest Restoration and Fire option is intended to provide students with the knowledge and skillset to incorporate natural processes, including disturbance, explicitly into forest management planning (whether it be to prevent or mitigate damage resulting from disturbance or to use disturbance processes purposefully to achieve management objectives). This knowledge/skillset is particularly important for managing forests at the landscape scale and in the face of uncertainty and rapid change (e.g. in climate or in land use patterns).

### Forest Restoration and Fire Option Learning Outcomes

Specific learning outcomes for the Forest Restoration and Fire option are:

- 1. Demonstrate ability to develop management responses to natural disturbance on forested landscapes such as wildland fire, insect infestation, windstorm, and disease and to use disturbance as an active management tool in an era of rapid change (e.g. climate change, land use change).
- 2. Demonstrate knowledge of natural processes in forests, including vegetation growth, wildfire, windthrow, insects and disease, and the ability to use these models of these processes correctly to forecast impacts of disturbance on forests and outcomes of management activities.
- 3. Demonstrate an understanding of the role of active adaptive management on forested landscapes when outcomes are uncertain.
- 4. Demonstrate ability to account for risk and uncertainty in forest management decision processes.
- 5. Demonstrate an understanding of the management of ecosystems in an era of rapid change including change in climate patterns, land use patterns, and political and social institutions.
- 6. Demonstrate an understanding of the institutional and economic context in which policy for managing forest disturbance has evolved in the U.S. and elsewhere.
- 7. Develop skills to facilitate negotiation among stakeholders for collaborative cooperation and management of natural disturbance on forested landscapes, particularly across institutions and property boundaries.

### Forest Restoration and Fire Option - Curriculum

**Degree requirements:** To earn the B.S. in Forestry with the Forestry Restoration & Fire Option, students must complete:

- All Pre-Forestry and Pro-School courses with grades of C or higher
- All courses for the Forest Restoration & Fire option with grades of C or higher
- All courses for OSU's Core Education
- Any additional electives necessary to achieve 180 total credits
- At least 6 months of relevant work experience

**Pre-Forestry Courses:** these courses must be completed with grades of C or higher before students enter the professional program. Courses in regular font are required for the Forestry major and *courses in italics are required for the Forest Restoration & Fire option.* + indicates courses that also fulfill Core Ed.

Course Number	Title	Cr	Corvallis Campus	Distance Campus	Prerequisites / Notes
	First Year Courses	;			1.00000
+AEC 250 or	Intro to Environmental Economics and Policy	4	SP	F,W,SP,SU	MTH 111Z Rec.
+ECON 201Z	Intro to Microeconomics	4	F,W,SP	F,W,SP,SU	MTH 111Z Rec.
+CH 121 or	General Chemistry	5	F,W	F,W,SP,SU	MTH 111Z
+CH 221Z&227Z	General Chemistry & Lab	5	F,W	SU	
+COMM 111Z or	Public Speaking	4	F,W,SP,SU	F,W,SP,SU	
+COMM 114 or	Argument and Critical Discourse	3	F,W,SP,SU	F,W,SP,SU	
+COMM 218Z	Interpersonal Communication	4	F,W,SP,SU	F,W,SP,SU	
+CORE 100 or	Transitions	2	F,W,SP,SU	F,W,SP,SU	First-year students
+CORE 300	Transitions	2	F,W,SP,SU	F,W,SP,SU	Transfer students
+FES 240	Forest Biology	4	F,SP	F,SP,SU	
+FOR 111 or	Intro to Forestry	3	F,SP	W,SU	
+NR 201	Managing Natural Resources for the Future	3	F	F,W,SP,SU	
+MTH 111Z	College Algebra	4	F,W,SP,SU	F,W,SP,SU	ALEKS 46+
+MTH 112Z	Elementary Functions	4	F,W,SP,SU	F,W,SP,SU	MTH 111Z
+MTH 241	Calculus for Management and Social Science	4	F,W,	F,W,SP,SU	MTH 111Z
	_		SP,SU		
+WR 121Z	English Composition	4	F,W,SP,SU	F,W,SP,SU	Alpha-sectioned
FOR 112	Computing Applications in Forestry	3	W,SP	SP	
	Second Year Course	es			
FE 208	Forest Surveying	4	F	SP	MTH 112Z
FE 257	GIS and Forest Engineering Applications	3	W	F	
FES 241	Dendrology	3	F, SP	F,SP,SU	
+PH 201	General Physics I	5	F,SU	F	MTH 112Z
+SOIL 205 or	Soil Science	3	F,W,SP		Need 206 Lab
+CSS 205	Soil Science	4		F,W,SP,SU	Includes Lab
+FOR 206 or	Forest Soils Lab	1	SP		Take with SOIL 205
+SOIL 206	Soil Science Lab	1	F,W,SP		Take with SOIL 205
+ST 243Z	Principles of Statistics	4	F,W,SP	F,W,SP,SU	
+WR 227Z or	Technical Writing or	4	F,W,SP	F,W,SP,SU	WR 121Z
+WR 362	Science Writing	3	F	F,W,SP,SU	WR 121Z
+ ATS 201	Climate Science	4	F,W,SP	F,W,SP,SU	
FOR 346	Topics in Wildland Fire	3	SP	W,SP	

Note: At the end of the sophomore year students must apply to be admitted to the Forestry Professional Program ("Pro-School"). The courses above must all be completed with grades of C or better and a GPA of 2.25 or higher in order to be admissible to Pro-School for fall of the junior year.

Field School: Pro-School begins with the Forestry Field School prior to fall term of the junior year. It typically takes place in September – two weeks before the junior year begins.

**Pro-School Courses:** these courses must be completed with grades of C or higher. Courses in regular font are required for the Forestry major and *courses in italics are required for the Forest Restoration & Fire option*. + indicates courses that also fulfill Core Ed.

Course Number	Title	Cr	Corvallis Campus	Distance Campus	Prerequisites / Notes
	Third Year Cou	ırses			
+AG 311 or +GEOG 333or +SUS 331	Native American Agriculture Environmental Justice Sustainability, Justice & Engagement	3 3 3	F,SP F,SP SP	F,W,SP W,SU F,W	or ENSC 333
FE/FOR 312	Forestry Field School	2	F		Mid-September
FE 370	Harvesting Operations	4	F		PH 201
FE 434	Forest Watershed Management	4	F		Chem, Soil, Calc
FOR 321	Forest Mensuration	5	F		FES 241, FE 208, Calc, Stats
FOR 329	Forest Resource Economics I	4	W		ST 243Z
FOR 332	Forest Resource Economics II	2	SP		FOR 329
FOR 442	Silviculture Reforestation	4	SP		Take with FOR 443
FOR 443	Silvicultural Practices	4	SP		Take with FOR 442
FES 341	Forest Ecology	3	F, W	F,W,SP	FES 240
FES 485	Consensus & Natural Resources	3	F, W	F,W,SP,SU	
FES 445	Ecological Restoration	4	F,SP	F,W,SP,SU	
FOR 322	Forest Models	3	W		FOR 321, MTH241, ST 243Z
	Fourth Year Co	urses	•		
FE 444	Forestry Remote Sensing & Photogrammetry	4	F		FE 257, MTH 112Z, PH 201
FE/FOR 457	Techniques for Forest Resource Analysis	4	F		FOR 329, FOR 443
FE/FOR 459	Forest Management Planning & Design I	4	W		FOR 457
FE/FOR 463^	Forest Policy & Regulation	3	F, W		
FOR 469	Forest Management Planning & Design I	4	SP		FOR 459
+FOR 008	Beyond OSU II: Engage	0	W		
FE 436	Forest Disturbance Hydrology	3	W		FE 434
FES 412	Forest Entomology	3	SP		
FES 440	Wildland Fire Ecology	3	W	W,SP	
FOR 413	Forest Pathology	3	W		BI 221 or FES 240
FOR 431	Economics & Policy of Forest Wildland Fires	3	SP	SP	AEC 250 or ECON 201
FOR 436	Wildland Fire Science @ Management	4	F	F,W	

**Core Education:** Students must complete one course in each Core Ed category. Some categories can be fulfilled by courses from the Forestry major. The chart below shows the overlap between Forestry requirements and Core Ed. A full listing of Core Ed requirements can be found in the OSU Catalog.

Title	Course	Cr.
Writing Foundations	Fulfilled by WR 121Z	4
Arts & Humanities: General		3-4
Arts & Humanities: Global		3-4
Arts & Humanities classes must come		
from two different departments.		
Quantitative Literacy & Analysis	Fulfilled by MTH 111Z, 112Z, 241, or ST 243Z	4
Communication, Media & Society	Fulfilled by COMM 111Z, 114, or 218Z	3-4
Social Science	Fulfilled by ECON 201Z or AEC 250	4
Scientific Inquiry & Analysis	Fulfilled by ATS 201, PH 201, CH 121, or CH 221Z & 227Z	5
Scientific Inquiry & Analysis	Fulfilled by FES 240, SOIL 205 & 206, or SOIL 205 & FOR 206	4
Scientific Inquiry & Analysis classes must		
come from two different departments.		
Difference, Power, Oppression		3-4
Foundations		
Transitions	CORE 100 or 300	2
Beyond OSU I: Prepare	Fulfilled by FOR 111 or NR 201	3
Beyond OSU II: Engaged	Fulfilled by Work Experience and FOR 008	0
Difference, Power, Oppression	Fulfilled by AG 311, ENSC/GEOG 333, or SUS 331	3
Advanced		
Seeking Solutions	Cannot be fulfilled by a course from the major	3-4
Writing Elevation	Fulfilled by WR 227Z or WR 362	3-4
Writing Intensive Course	Fulfilled by FOR 463	3

## Sample Course Plan - Forest Restoration & Fire Option

This is a sample schedule. Actual schedules will vary from student to student based upon factors such as math placement and course availability. Students are strongly encouraged to create a personalized plan with their academic advisor. *Courses in italics also fulfill Core Education requirements*.

## **B.S.** in Forestry

## Forest Restoration & Fire Option | 2025-2026

ı	Fall		Winter		Spring	
First Year	CORE 100: Transitions  FOR 111: Intro to Forestry  MTH 111Z: College Algebra  WR 121Z: English Composition I  Free elective	2 3 4 4 2	CH 121: General Chemistry  FOR 112: Computing Applications  MTH 112Z: Elementary Functions  Core: Arts & Humanities - General	5 3 4 3-4	COMM 111Z/114/218Z: Comm ECON 201Z/AEC 250: Economics MTH 241: Calc for Mgmt. & Social Sci. Core: Arts & Humanities - Global	3-4 4 4 3-4
	Total Credits	15	Total Credits	15- 16	Total Credits	14- 16
Second Year	FE 208: Forest Surveying FES 240: Forest Biology PH 201: General Physics with lab Free Elective	4 4 5 3	ATS 201: Climate Science FE 257: GIS WR 227Z: Technical Writing Core: Diff/Power/Opp Foundations	4 3 4 3-4	FES 241: Dendrology FOR 346: Topics in Wildland Fire SOIL 205: Soil Science FOR/SOIL 206: Soil Science Lab ST 243Z: Principles of Statistics	3 3 3 1 4
	Total Credits	16	Total Credits	14- 15	Total Credits	14
Third Year	FE 370: Harvesting Operations FE 434: Forest Watershed Mgmt. FOR 321: Forest Mensuration FOR 312: Forestry Field School	4 4 5 2	FES 341: Forest Ecology FES 485: Consensus & Nat Resources FOR 322: Forest Models FOR 329: Forest Resource Economics I	3 3 4	FOR 332: Forest Res. Economics II FOR 442: Silviculture Reforestation FOR 443: Silvicultural Practices Core: Diff/Power/Opp Advanced	2 4 4 3
	Total Credits	15	Total Credits	13	Total Credits	14
Fourth Year	FE 444: For Remote Sense & Photo FOR 436: Wildland Fire Sci & Mgmt FOR 457: Tech. for For. Res. Analysis FOR 463: Forest Policy & Regulation	4 4 4 3	FE 436: Forest Disturbance Hydrology FES 440: Wildland Fire Ecology FOR 008: Beyond OSU II - Engage FOR 413: Forest Pathology FOR 459: Forest Mgmt. Plan & Design I Core: Seeking Solutions	3 3 0 3 4 3-4	FES 412: Forest Entomology FES 445: Ecological Restoration FOR 431: Econ & Pol of Disturb Mgmt FOR 469: For Mgmt. Plan & Design II Free elective to reach 180 total credits	3 4 3 4 1
	Total Credits	15	Total Credits	16- 17	Total Credits	15

### Advising

The College of Forestry is committed to helping students succeed. Your Academic Advisor can be your first point of contact when you have questions. COF students are required to meet with their academic advisor at least once per quarter, and are welcome to meet more often. It's always okay to call, email, or drop in with questions.

You will have an assigned advisor. The easiest way to schedule your advising appointment is in your BeaverHub Success Team. Advisor contact info: forestry.oregonstate.edu/studentservices/advising

Advisors for New Students (in your first year at OSU)



**Morgan Shahan** Academic Advisor **New Students** Peavy 116 -E 541-737-9135 morgan.shahan@oregonstate.edu



**Beth Thompson** Academic Advisor **New Students** Peavy 116 -G 541-737-1179 beth.thompson@oregonstate.edu



Kirk Robinson Academic Advisor **New Students** Peavy 116 - K 541-737-6458 kirk.robinson@oregonstate.edu

Advisors for Forestry Majors (after your first year) **Ruth Sterner** 



Academic Advisor Forestry Peavy 116 -J 541-737-6548 ruth.sterner@oregonstate.edu



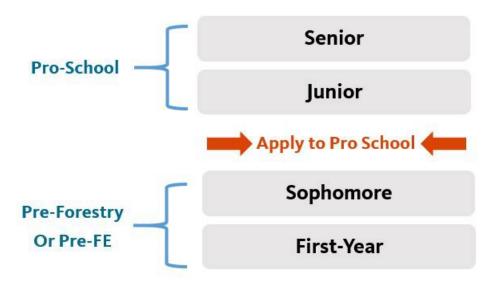
**Gina Cavanaugh** Academic Advisor Forestry Peavy 116 - H 541-737-4670 gina.cavanaugh@oregonstate.edu

#### What:

You can expect your advising appointments to be 30 minutes of one-on-one time with your academic advisor. You and your advisor will both prepare in advance—reviewing your MyDegrees, preparing questions, and looking ahead. During your appointment you will review your progress to date, make course plans for the upcoming term(s), discuss opportunities and resources pertinent to your goals, and track your progress toward graduation. While your advisor is here to assist and guide you, your educational choices are yours to make. We advise and you decide.

### **Forestry Program Structure**

The Bachelor of Science in Forestry is offered through a two-phase curriculum that begins with two years of pre-professional coursework, followed by two years of professional coursework ("Pro-School"). Admission to pro-school is based on successful completion of all the pre-forestry coursework prior to fall term of the junior year. Enrollment in Forestry pro-school courses is restricted to those students who have been admitted to the professional program.



To be eligible for admission to Forestry Pro-School, students must earn:

- 1. a grade of C or better in all courses for the major required for entry into the professional program. Grade repeat (replacement) policy will follow OSU Academic Regulation #20.
- 2. a minimum GPA of 2.25 in the required courses (or transfer equivalents).

Application for pro-school will be available on the College of Forestry website in March. Applications will be due in early April, and applicants will be notified of their status by early May. The number of students admitted to the program is determined based on available resources. Students meeting the minimum pre-Forestry GPA of 2.25 may or may not be admitted depending on available resources.

### **Requirements for Graduation**

In addition to the University and degree program requirements, students in the forestry major must also meet specific requirements to graduate.

All students pursuing the BS in Forestry:

- 1. must earn grades of C or better in all required professional forestry major courses and;
- 2. must maintain a 2.0 GPA in all major course work.
- 3. must complete the minimum 180 credits required for graduation.

**S/U Grading** — Students majoring in Forestry may not take for S/U (Satisfactory/Unsatisfactory) grading any course listed as a requirement for the major or option. This includes approved substitutions. Core Education courses may be taken S/U if they are not also being used to fulfill a program requirement.

**Grades of C or better must be earned** in all required courses (or approved substitutions) for the forestry major and option

**Approved Work Experience**. Forestry students must complete six months of forestry-related work experience in order to graduate.

**Credit Hour Requirement** – A minimum of 180 credits are required to complete the Forestry degree. In addition to completing major, option and Core Education requirements, students may need to complete additional elective courses to reach the 180 credit minimum.