

FORESTRY UNDERGRADUATE MAJOR (BS, HBS)

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 core curriculum includes basic courses in the biological, physical, social sciences, and six months of work experience as well as professional courses designed to prepare students to manage forest resources.

Students are required to select one of the following required options:

- Forest Restoration and Fire
- Forest Management
- Forest Operations Management

The Bachelor of Science degree in Forestry is accredited by the Society of American Foresters (SAF).

Major Code: 820

Pre-Forestry Major Code: 810

- Demonstrate knowledge of forest ecology and silviculture principles to understand how forests and forested watersheds respond to natural disturbances or management activities.
- Develop skills in geospatial analysis, basic surveying, mapping and GIS.
- Demonstrate ability to measure and inventory forest vegetation with precision and accuracy.
- Develop an understanding of forestry investment analysis and be able to evaluate typical financial investments in forestry.
- 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.
- 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.

In addition to the listed courses, all students are required to complete a total of six months of satisfactory employment in an area related to their major. This is usually accomplished by two or more summers of work, but it may include work during the academic year. Work performance and personal conduct are thoroughly appraised by the College of Forestry.

Six months of forestry or related natural resource work experience and completion of an option is required in the forestry degree program. The option courses complement the forestry core and serve to fulfill the 180 credits for graduation.

Pre-Professional Forestry Program

Admission to the pre-professional program requires that a student be admitted as a degree-seeking undergraduate or post-baccalaureate level student at Oregon State University. Courses included in the first and sophomore years comprise a pre-professional program of study that produces a solid foundation for professional program studies at the junior and senior levels. The pre-professional program may be taken at Oregon State University or at any accredited college or university that offers equivalent courses transferable to OSU.

Professional Forestry Program

Successful completion of the pre-professional program will result in acceptance into the professional program. This requires selection of an option and:

1. a grade of 'C' or better in all pre-professional courses required for entry into the professional program (marked with 2 on the course list). Grade repeat (replacement) policy will follow OSU Academic Regulation 20.
2. a minimum GPA of 2.25 based on the pre-professional courses (or transfer equivalents) satisfactorily completed.

Admission to the professional program will be granted for students meeting the admission requirements prior to fall term of the junior year. Application for the professional program will be made as of the end of winter term for the following fall term.

Enrollment in professional program courses is restricted to those students who have clearly demonstrated an ability to achieve the standards required for professional studies. 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.

Students who have completed their pre-professional studies at a college or university other than Oregon State University must apply both to the OSU Office of Admissions for admission to OSU as a degree-seeking undergraduate or post-baccalaureate student and to the College of Forestry for admission to the professional program. Application forms and information on policies and programs are available on the College of Forestry website.

Students who have not satisfactorily completed all of the pre-professional courses when they apply may be provisionally accepted to the professional program. Final acceptance is contingent on completion of any remaining pre-professional course work with grade of 'C' or better by the end of the summer term prior to entrance into the professional program. Students who receive provisional acceptance and then fail to attain 'C' or better grades in any remaining pre-professional course work prior to the beginning of fall term will be re-directed to the pre-professional forestry program.

All courses required for admission to the professional program must be completed before entering the professional program. Students may only enter the professional program for fall term each academic year.

The professional program begins with Forestry Field School during the two weeks prior to the first fall term of the professional program.

Pre-Forestry

Grade standards for the pre-professional program (as listed in the program description) apply.

First Year		Credits
AEC 250 or ECON 201	*INTRODUCTION TO ENVIRONMENTAL ECONOMICS AND POLICY ^{1,2} or *INTRODUCTION TO MICROECONOMICS	3-4
CH 231	GENERAL CHEMISTRY	4
CH 261	*LABORATORY FOR CHEMISTRY 231 ^{1,2}	1
COMM 111 or COMM 114	*PUBLIC SPEAKING ^{1,2} or *ARGUMENT AND CRITICAL DISCOURSE	3
FES 240	*FOREST BIOLOGY ^{1,2}	4
FOR 111 or NR 201	INTRODUCTION TO FORESTRY ² or MANAGING NATURAL RESOURCES FOR THE FUTURE	3

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FOR 112 or FE 102	COMPUTING APPLICATIONS IN FORESTRY ² or FOREST ENGINEERING PROBLEM SOLVING AND TECHNOLOGY	3
HHS 231	*LIFETIME FITNESS FOR HEALTH ¹	2
HHS 241	*LIFETIME FITNESS (or any PAC course) ¹	1-2
MTH 111	*COLLEGE ALGEBRA ^{1,2}	4
MTH 112	*ELEMENTARY FUNCTIONS ^{1,2}	4
MTH 241	*CALCULUS FOR MANAGEMENT AND SOCIAL SCIENCE ^{1,2}	4
WR 121	*ENGLISH COMPOSITION ^{1,2}	3
Bacc Core Course		3
Credits		42-44
Second Year		
BI 204 or BI 212 or BI 221	*INTRODUCTORY BIOLOGY I ^{1,2} or *PRINCIPLES OF BIOLOGY or *PRINCIPLES OF BIOLOGY: CELLS	4
FE 208	FOREST SURVEYING ²	4
FE 257	GIS AND FOREST ENGINEERING APPLICATIONS ²	3
FES 241	DENDROLOGY ²	3
PH 201	*GENERAL PHYSICS ^{1,2}	5
SOIL 205	SOIL SCIENCE	3
FOR 206	*FOREST SOILS LABORATORY FOR SOIL 205 ^{1,2}	1
ST 201	PRINCIPLES OF STATISTICS ²	4
WR 327 or WR 362	*TECHNICAL WRITING ^{1,2} or *SCIENCE WRITING	3
Option Courses and/or Bacc Core Courses		13-15
Elective, if needed		0-3
Credits		43-48
Total Credits		85-92

Professional Forestry

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. minimum credits required for graduation is 180.

Third Year		Credits
FE 312/FOR 312	FORESTRY FIELD SCHOOL	2
FE 370	HARVESTING OPERATIONS	4
FE 434	FOREST WATERSHED MANAGEMENT	4
FOR 321	FOREST MENSURATION	5
FOR 329	FOREST RESOURCE ECONOMICS I	4
FOR 442	SILVICULTURE REFORESTATION	4
FOR 443	SILVICULTURAL PRACTICES	4
Option Courses and/or Bacc Core Courses		15-18
Electives, if needed		1-4
Credits		43-49
Fourth Year		
FE 444	FOREST REMOTE SENSING AND PHOTOGRAMMETRY	4
FE 457/FOR 457	TECHNIQUES FOR FOREST RESOURCE ANALYSIS	4
FE 459/FOR 459	FOREST MANAGEMENT PLANNING AND DESIGN I	4
FOR 330	FOREST RESOURCE ECONOMICS II	4
FOR 460 or FE 460	*FOREST POLICY or *FOREST OPERATIONS REGULATIONS AND POLICY ISSUES	3-4
FE 469/FOR 469	FOREST MANAGEMENT PLANNING AND DESIGN II	4
Option Courses and/or Bacc Core Courses		16-21
Electives, if needed		0-4
Credits		39-49
Total Credits		82-98

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Baccalaureate Core Course (BCC)

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Writing Intensive Course (WIC)

1

Must be selected to satisfy baccalaureate core requirements

2

Required for entry into the professional program

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Forest Management Option

First Year

Fall		Credits
FOR 111 or NR 201	INTRODUCTION TO FORESTRY or MANAGING NATURAL RESOURCES FOR THE FUTURE	3
Bacc Core Course		3
MTH 111	*COLLEGE ALGEBRA	4
WR 121	*ENGLISH COMPOSITION	3
Credits		13

Winter

CH 231	GENERAL CHEMISTRY	4
CH 261	*LABORATORY FOR CHEMISTRY 231	1
FOR 112	COMPUTING APPLICATIONS IN FORESTRY	3
HHS 231	*LIFETIME FITNESS FOR HEALTH	2
HHS 241	*LIFETIME FITNESS (or any PAC course)	1-2
MTH 112	*ELEMENTARY FUNCTIONS	4
Credits		15-16

Spring

COMM 111 or COMM 114	*PUBLIC SPEAKING or *ARGUMENT AND CRITICAL DISCOURSE	3
AEC 250 or ECON 201	*INTRODUCTION TO ENVIRONMENTAL ECONOMICS AND POLICY or *INTRODUCTION TO MICROECONOMICS	3-4
FES 240	*FOREST BIOLOGY	4
MTH 241	*CALCULUS FOR MANAGEMENT AND SOCIAL SCIENCE	4
Elective, if needed		1
Credits		15-16

Second Year

Fall

BI 221	*PRINCIPLES OF BIOLOGY: CELLS	4
FE 208	FOREST SURVEYING	4
PH 201	*GENERAL PHYSICS	5
TRAL 251	RECREATION RESOURCE MANAGEMENT	4
Credits		17

Winter

FE 257	GIS AND FOREST ENGINEERING APPLICATIONS	3
WR 327 or WR 362	*TECHNICAL WRITING or *SCIENCE WRITING	3
Bacc Core Courses		6
Elective, if needed		3
Credits		15

Spring

FES 241	DENDROLOGY	3
FOR 206	*FOREST SOILS LABORATORY FOR SOIL 205	1
SOIL 205	SOIL SCIENCE	3
ST 201	PRINCIPLES OF STATISTICS	4

Bacc Core course		3
	Credits	14
Third Year		
Fall		
FE 312/FOR 312	FORESTRY FIELD SCHOOL	2
FE 370	HARVESTING OPERATIONS	4
FE 434	FOREST WATERSHED MANAGEMENT	4
FES 341	FOREST ECOLOGY	3
FOR 321	FOREST MENSURATION	5
	Credits	18
Winter		
Select one of the following:		
FES 477/NR 477 or GEOG 300	*AGROFORESTRY or *SUSTAINABILITY FOR THE COMMON GOOD	3
FOR 322	FOREST MODELS	3
FOR 329	FOREST RESOURCE ECONOMICS I	4
Bacc Core course		3
Elective, if needed		1
	Credits	14
Spring		
FES 452 or FW 452	BIODIVERSITY CONSERVATION IN MANAGED FORESTS or BIODIVERSITY CONSERVATION IN MANAGED FORESTS	3
FOR 442	SILVICULTURE REFORESTATION	4
FOR 443	SILVICULTURAL PRACTICES	4
Restricted Elective		3
	Credits	14
Fourth Year		
Fall		
FOR 413/BOT 413	FOREST PATHOLOGY	3
FE 444	FOREST REMOTE SENSING AND PHOTOGRAMMETRY (Pending approval)	4
FE 457/FOR 457	TECHNIQUES FOR FOREST RESOURCE ANALYSIS	4
FOR 330	FOREST RESOURCE ECONOMICS II	4
	Credits	15
Winter		
FE 459/FOR 459	FOREST MANAGEMENT PLANNING AND DESIGN I	4
FOR 460 or FE 460	*FOREST POLICY or *FOREST OPERATIONS REGULATIONS AND POLICY ISSUES	3-4
Restricted Electives		6
	Credits	14
Spring		
FE 469/FOR 469	FOREST MANAGEMENT PLANNING AND DESIGN II	4
FES 412	FOREST ENTOMOLOGY	3
Restricted Electives		6
Bacc Core course		3
	Credits	16
	Total Credits	180-182

Forest Operations Management

First Year		
Fall		
FOR 111 or NR 201	INTRODUCTION TO FORESTRY or MANAGING NATURAL RESOURCES FOR THE FUTURE	3
MTH 111	*COLLEGE ALGEBRA	4
WR 121	*ENGLISH COMPOSITION	3
Bacc Core Course		3
Elective, if needed		2
	Credits	15

Winter		
CH 231	GENERAL CHEMISTRY	4
CH 261	*LABORATORY FOR CHEMISTRY 231	1
FE 102	FOREST ENGINEERING PROBLEM SOLVING AND TECHNOLOGY	3
HHS 231	*LIFETIME FITNESS FOR HEALTH	2
HHS 241	*LIFETIME FITNESS (or any PAC course)	1-2
MTH 112	*ELEMENTARY FUNCTIONS	4
	Credits	15-16
Spring		
COMM 111 or COMM 114	*PUBLIC SPEAKING or *ARGUMENT AND CRITICAL DISCOURSE	3
ECON 201	*INTRODUCTION TO MICROECONOMICS	4
FES 240	*FOREST BIOLOGY	4
MTH 241	*CALCULUS FOR MANAGEMENT AND SOCIAL SCIENCE	4
	Credits	15
Second Year		
Fall		
BI 221	*PRINCIPLES OF BIOLOGY: CELLS	4
BA 260	INTRODUCTION TO ENTREPRENEURSHIP	4
FE 208	FOREST SURVEYING	4
PH 201	*GENERAL PHYSICS	5
	Credits	17
Winter		
BA 215 or BA 315	or ACCOUNTING FOR DECISION MAKING	4
FE 257	GIS AND FOREST ENGINEERING APPLICATIONS	3
WR 327	*TECHNICAL WRITING	3
Bacc Core Course		3
	Credits	13
Spring		
BA 230 or BA 330	BUSINESS LAW I or LEGAL ENVIRONMENT OF BUSINESS	4
FES 241	DENDROLOGY	3
SOIL 205	SOIL SCIENCE	3
FOR 206	*FOREST SOILS LABORATORY FOR SOIL 205	1
ST 201	PRINCIPLES OF STATISTICS	4
	Credits	15
Third Year		
Fall		
FE 312/FOR 312	FORESTRY FIELD SCHOOL	2
FE 370	HARVESTING OPERATIONS	4
FE 434	FOREST WATERSHED MANAGEMENT	4
FOR 321	FOREST MENSURATION	5
	Credits	15
Winter		
BA 390	PRINCIPLES OF MARKETING	4
FE 440	FOREST OPERATIONS ANALYSIS	4
FOR 329	FOREST RESOURCE ECONOMICS I	4
Bacc Core course		3
	Credits	15
Spring		
BA 351	MANAGING ORGANIZATIONS	4
FOR 442	SILVICULTURE REFORESTATION	4
FOR 443	SILVICULTURAL PRACTICES	4
Elective, if needed		4
	Credits	16
Fourth Year		
Fall		
FE 444	FOREST REMOTE SENSING AND PHOTOGRAMMETRY (Pending Approval)	4

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FE 457 or FOR 457	TECHNIQUES FOR FOREST RESOURCE ANALYSIS or TECHNIQUES FOR FOREST RESOURCE ANALYSIS	4
FOR 330	FOREST RESOURCE ECONOMICS II	4
Elective, if needed		4
Credits		16
Winter		
BA 460 or BA 314	VENTURE MANAGEMENT or SUSTAINABLE BUSINESS OPERATIONS	4
FE 459 or FOR 459	FOREST MANAGEMENT PLANNING AND DESIGN I or FOREST MANAGEMENT PLANNING AND DESIGN I	4
FOR 460 or FE 460	*FOREST POLICY or *FOREST OPERATIONS REGULATIONS AND POLICY ISSUES	4
Bacc Core Course		3-4
Credits		15-16
Spring		
FE 469 or FOR 469	FOREST MANAGEMENT PLANNING AND DESIGN II or FOREST MANAGEMENT PLANNING AND DESIGN II	4
FE 471	HARVESTING MANAGEMENT	3
Bacc Core courses		6
Credits		13
Total Credits		180-182

Forest Restoration and Fire

First Year		
Fall		
FOR 111 or NR 201	INTRODUCTION TO FORESTRY or MANAGING NATURAL RESOURCES FOR THE FUTURE	3
MTH 111	*COLLEGE ALGEBRA	4
WR 121	*ENGLISH COMPOSITION	3
Bacc Core Course		3
Credits		13
Winter		
CH 231	GENERAL CHEMISTRY	4
CH 261	*LABORATORY FOR CHEMISTRY 231	1
FOR 112	COMPUTING APPLICATIONS IN FORESTRY	3
HHS 231	*LIFETIME FITNESS FOR HEALTH	2
HHS 241	*LIFETIME FITNESS (or any PAC course)	1-2
MTH 112	*ELEMENTARY FUNCTIONS	4
Credits		15-16
Spring		
COMM 111 or COMM 114	*PUBLIC SPEAKING or *ARGUMENT AND CRITICAL DISCOURSE	3
AEC 250 or ECON 201	*INTRODUCTION TO ENVIRONMENTAL ECONOMICS AND POLICY or *INTRODUCTION TO MICROECONOMICS	3-4
FES 240	*FOREST BIOLOGY	4
MTH 241	*CALCULUS FOR MANAGEMENT AND SOCIAL SCIENCE	4
Elective, if needed		1
Credits		15-16
Second Year		
Fall		
ATS 201 or ATS 310	*CLIMATE SCIENCE or METEOROLOGY	4
BI 221	*PRINCIPLES OF BIOLOGY: CELLS	4
FE 208	FOREST SURVEYING	4
PH 201	*GENERAL PHYSICS	5
Credits		17
Winter		
FE 257	GIS AND FOREST ENGINEERING APPLICATIONS	3
WR 327 or WR 362	*TECHNICAL WRITING or *SCIENCE WRITING	3

Bacc Core Courses		6
Credits		12
Spring		
FES 241	DENDROLOGY	3
FOR 206	*FOREST SOILS LABORATORY FOR SOIL 205	1
FOR 346	TOPICS IN WILDLAND FIRE	3
SOIL 205	SOIL SCIENCE	3
ST 201	PRINCIPLES OF STATISTICS	4
Credits		14
Third Year		
Fall		
FE 312 or FOR 312	FORESTRY FIELD SCHOOL or FORESTRY FIELD SCHOOL	2
FE 370	HARVESTING OPERATIONS	4
FE 434	FOREST WATERSHED MANAGEMENT	4
FES 341	FOREST ECOLOGY	3
FOR 321	FOREST MENSURATION	5
Credits		18
Winter		
FES 485	*CONSENSUS AND NATURAL RESOURCES	3
FOR 322	FOREST MODELS	3
FOR 329	FOREST RESOURCE ECONOMICS I	4
Bacc Core course		3
Credits		13
Spring		
FES 445/FW 445	ECOLOGICAL RESTORATION	4
FOR 442	SILVICULTURE REFORESTATION	4
FOR 443	SILVICULTURAL PRACTICES	4
Electives, if needed		3
Credits		15
Fourth Year		
Fall		
FE 444	FOREST REMOTE SENSING AND PHOTOGRAMMETRY	4
FE 457/FOR 457	TECHNIQUES FOR FOREST RESOURCE ANALYSIS	4
FOR 330	FOREST RESOURCE ECONOMICS II	4
FOR 413/BOT 413	FOREST PATHOLOGY	3
FOR 436	WILDLAND FIRE SCIENCE AND MANAGEMENT	4
Credits		19
Winter		
FE 459/FOR 459	FOREST MANAGEMENT PLANNING AND DESIGN I	4
FES 440	WILDLAND FIRE ECOLOGY	3
FOR 460 or FE 460	*FOREST POLICY or *FOREST OPERATIONS REGULATIONS AND POLICY ISSUES	3-4
Bacc Core Course		3
Elective, if needed		1-2
Credits		16
Spring		
FE 436	FOREST DISTURBANCE HYDROLOGY	3
FE 469/FOR 469	FOREST MANAGEMENT PLANNING AND DESIGN II	4
FES 412	FOREST ENTOMOLOGY	3
FOR 431	ECONOMICS AND POLICY OF FOREST WILDLAND FIRE	3
Credits		13
Total Credits		180-182