

An aerial photograph of a dense forest with a winding road. The trees are mostly green, with some yellowing, suggesting autumn. The road is dark and curves through the forest.

COLLEGE OF FORESTRY

2025-2026 UNDERGRADUATE

ADVISING GUIDE

FOREST ENGINEERING/
CIVIL ENGINEERING



Oregon State
University

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Forest-Civil Engineering Careers

Congratulations on selecting our Forest-Civil Engineering (FE/CE) degree program at Oregon State University! Oregon State's College of Forestry has a long tradition of excellence. Our programs are designed to provide a solid engineering background as well as fundamental knowledge in forestry principles and practices. The FE/CE double degree is unique; it is not available at any other university in North America and both programs are accredited by the Engineering Accreditation Commission (EAC) of ABET, Inc.

FE/CE graduates are prepared to play key roles in meeting the world's appetite for wood products from sustainable forests, while also protecting other resources such as soil, water, wildlife habitat, and recreation opportunities. Society's wood demands are enormous and growing, even with aggressive recycling programs. Many Forest Engineering graduates help meet these demands in positions that plan, design, and implement forestry activities — applying the best engineering, science, technology and experience available to conduct safe, cost effective, and environmentally responsible forest operations.

Traditional forest engineering careers typically involve developing and maintaining transportation systems, planning and designing timber harvests, and other forest operations. Forest products or timberland management companies, federal or state agencies, and consulting or contracting firms are the most common employers for new graduates. Some stay in field-oriented positions for much of their career, but many graduates have become successful managers and executives as they gain experience. A substantial number of graduates find opportunity and satisfaction in owning their own consulting or contracting business, especially if they have an interest in entrepreneurship.

Some Forest Engineering graduates - especially those from the FE/CE degree program - pursue careers with less forestry focus. Examples include land development, surveying engineering, transportation engineering and management, environmental consulting, and municipal engineering. The five-year double degree is challenging, but provides very diverse job opportunities and higher starting salaries.

All of these types of positions represent vibrant and timely career opportunities. Forestry continues to be a cornerstone of the economy of many communities, providing jobs and economic vitality. As the population of the world grows and natural resource challenges become more complex, the need for well-rounded highly trained forest engineers increases. Oregon State University is working to fill that need!

The Forest-Civil Engineering curriculum is divided into pre-professional and professional components. The pre-professional coursework (years 1 and 2) provides the foundation on which the professional coursework (years 3, 4, and 5) is built. This gives you an opportunity to demonstrate that you have the aptitude, desire, professionalism, and academic accomplishment required for advancement to the professional level. Acceptance into the Professional Program in Forest Engineering (FE) is based upon performance in the pre-professional courses. Progression in Civil Engineering (CE) is based on progression standards in the College of Engineering undergraduate policy manual. Admission requirements for the FE Professional Program are detailed below. Admission requirements for the Civil Engineering Professional Program can be found at: engineering.oregonstate.edu/current-students/advising/progression.

Student Learning Outcomes

Forest Engineering Program Objectives

The Forest Engineering Undergraduate Program provides fundamental coverage of the following:

- Fundamental engineering and forestry principles
- Physical and biological aspects of soil and water resources
- Surveying and measurement of land and forest resources
- Analysis and design of the forest transportation system
- Analysis and design of harvesting operations
- Economics and operational planning principles

Civil Engineering Program Objectives

The Program Educational Objectives for the undergraduate Civil Engineering degree program are:

- **Identify, formulate, and solve complex engineering problems** by applying principles of engineering, science, and mathematics.
- **Apply engineering design to produce solutions that meet specified needs** with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
- **Communicate effectively** with a range of audiences.
- **Recognize ethical and professional responsibilities in engineering situations** and make informed judgements, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
- **Function effectively on a team** whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
- **Develop and conduct appropriate experimentation**, analyze and interpret data, and use engineering judgement to draw conclusions.
- **Acquire and apply new knowledge as needed**, using appropriate learning strategies.

Forest/Civil Engineering Curriculum

Degree requirements: To earn the B.S. degrees in Forest and Civil Engineering, students must complete:

- All Pre-FE/CE and Pro-School courses with grades of C or higher
- All courses for OSU's Core Education
- Complete at least 6 months of relevant work experience

Pre-FE/CE Courses: these courses must be completed with grades of C or higher (and GPA of 2.25 or higher) before students enter the professional program. + indicates courses that also fulfill Core Education.

Course Number	Title	Cr	Corvallis Campus	Distance Campus	Prerequisites / Notes
First Year Courses					
+CH 201	Chemistry for Engineering Majors	3	F,W	F,W	MTH 111Z
+CH 204	Lab for Chemistry 201	1	F, W		Take with CH 201
+CH 202	Chemistry for Engineering Majors	3	W,SP	SP	CH 201
+COMM 111Z or +COMM 114 or +COMM 218Z	Public Speaking Argument and Critical Discourse Interpersonal Communication	4 3 4	F,W,SP,SU F,W,SP,SU F,W,SP,SU	F,W,SP,SU F,W,SP,SU F,W,SP,SU	
+ECON 201Z or +ECON 202Z	Intro to Microeconomics Intro to Macroeconomics	4 4	F,W,SP F,W,SP	F,W,SP,SU F,W,SP,SU	MTH 111Z Rec.
+ENGR 110 & 115 or +ENGR 310	Transitions & The Oregon State Engineering Student Transitions	3 2	F,W,SP F,W,SP	F,W,SP,SU F,W,SP,SU	First-Year students Transfer students
+ENGR 102	Design Engineering & Problem-Solving	3	F,W,SP	W,SP,SU	
+FE 101	Intro to Forest Engineering	2	F		
FE 102 or ENGR 103	Forest Engineering Problem-Solving and Technology Engineering Computation and Algorithmic Thinking	3 3	W,SP F,W,SP	W,SP,SU	
+FES 240	Forest Biology	4	F,SP	F,SP,SU	
+MTH 251Z	Differential Calculus	4	F,W,SP,SU	F,W,SP,SU	MTH 112Z or ALEKS 75+
MTH 252Z	Integral Calculus	4	F,W,SP,SU	F,W,SP,SU	MTH 251
MTH 254	Vector Calculus	4	F,W,SP,SU	F,W,SP,SU	MTH 252
+PH 211	General Physics with Calculus I	4	F,W,SP	F, SP	MTH 251 MTH 252 co-req.
+WR 121Z	English Composition	4	F,W,SP,SU	F,W,SP,SU	Alpha-sectioned
Second Year Courses					
CCE 201	Civil & Construction Engineering Graphics & Design	3	F,W	F,W	C in MTH 111Z
ENGR 211	Statics	3	F,W,SP	F,W,SP	C in MTH 252
ENGR 212	Dynamics	3	W,SP	W	C in ENGR 211 and PH 211
ENGR 213	Strength of Materials	3	F,W,SP	W,SP,SU	C in ENGR 211
FE 208 or CEM 263	Forest Surveying Plane Surveying	4 3	F F,SP	SP W	C in MTH 112Z C in ENGR 211
FE 257	GIS and Forest Engineering Applications	3	W	F	
FES 241	Dendrology	3	F, SP	F,SP,SU	
MTH 256	Applied Differential Equations	4	F,W,SP,SU	F,W,SP,SU	MTH 254
MTH 264	Intro to Matrix Algebra	2	F,W,SP,SU	F,W,SP,SU	MTH 252
MTH 265	Introduction to Series	2	F,W,SP,SU	F,W,SP,SU	MTH 252
+PH 212	General Physics with Calculus II	4	F,W,SP	W,SU	PH 211
+PH 213	General Physics with Calculus III	4	F,W,SP	SP,SU	
+SOIL 205 or +CSS 205	Soil Science Soil Science	3 4	SP	F,W,SP	Need 206 Lab Includes Lab
+FOR 206 or +SOIL 206	Forest Soils Lab Soil Science Lab	1 1	F,W,SP	F,W,SP,SU	Take with SOIL 205 Take with SOIL 205

ST 314	Introduction to Statistics for Engineers	3	F,W,SP	F,W,SP,SU	MTH 252
+WR 227Z	Technical Writing	4	F,W,SP	F,W,SP,SU	WR 121Z

Note: At the end of the sophomore year (the second year of Pre-FE/CE courses) students must apply to be admitted to the FE 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 FE junior year.

To advance to the CE junior year, all students pursuing the BS in Forest-Civil Engineering:

1. must earn grades of C or better in all required courses, cross-listed course designators, or approved substitutions and
2. must maintain a 2.0 GPA in all major course work and cross-listed course designators, and courses used for substitution of required courses.

College of Engineering specific requirements:

1. must earn grades of C or better in all required civil engineering major courses and
2. must maintain an OSU Cumulative and term GPA of 2.50 and complete at least 65% of your coursework cumulatively and each term.

Pro-School Courses: + indicates courses that also fulfill Core Education.

Course Number	Title	Cr	Corvallis Campus	Distance Campus	Prerequisites / Notes
Third Year Courses (Forest Engineering Junior Year)					
FE 310	Forest Route Surveying	4	SP		FE 208 of CE 361
FE 312	Forestry Field School	2	F		Mid-September
FE 315	Soil Engineering	4	W		C in ENGR 213
FE 316	Soil Mechanics	4	SP		C in FE 315 or CE 372
FE 371	Harvesting Process Engineering	4	F		ENGR 211 & FE 102
FE 434	Forest Watershed Management	4	F		C in CH 201, SOIL 205, & MTH 251
FE 440	Forest Operations Analysis	4	W		C in FE 102 & FE 371
FE 470	Logging Mechanics	4	W		C in ENGR 211, ENGR 213, FE 371
FOR 321	Forest Mensuration	5	F		C in FES 241, FE 208, Calc, Stats
FOR 329	Forest Resource Economics I	4	W		C in ST 314
FOR 332	Forest Resource Economics II	2	SP		C in FOR 329
Fourth Year Courses (Civil Engineering Junior Year)					
CCE 321	Civil and Construction Engineering Materials	4	F,SP	W	C in ENGR 213 & ST 314
CE 311	Fluid Mechanics	4	F,W		C in MTH 256, PH 213, ENGR 212, ENGR 213
CE 313	Hydraulic Engineering	4	W,SP		C in CE 311
CE 362	Reality Capture for Engineering Applications	3	SP		
CE 381	Structural Theory I	4	F, W	SP	C in ENGR 213
CE 382	Structural Theory II	4	W, SP	F	C in CE 381, MTH 264, MTH 265
CE 383 or CE 481	Design of Steel Structures Reinforced Concrete I	4 4	F, W F, SP		C in CE 382
CE 392	Introduction to Highway Engineering	4	W, SP		C in ENGR 212
CE 491	Transportation Engineering	3		F, SP	C in CE 392, ST 314
ENVE 321	Environmental Engineering Fundamentals	4	SP		C in MTH 256
FOR 441	Silviculture	4	F	F	C in FES 240 & FES 241

Fifth Year Courses					
CE 418^	Civil Engineering Professional Practice	3	W		C in CE 313, 382 and FE 315
CE 419^	Civil Infrastructure Design	3	SP		C in CE 418
+ENGR 330	Inclusive and Equitable Engineering	3	SP		
+FE 008	Beyond OSU II: Engage	0		W	
FE 415	Forest Road Engineering	3	W		C in FE 310
FE 416	Forest Road System Management	4	SP		C in ENGR 211, 212, FE 316, FE 415
FE 444	Forestry Remote Sensing & Photogrammetry	4	F		FE 257, MTH 251, PH 211
FE/FOR 457	Techniques for Forest Resource Analysis	4	F		FOR 329 and FOR 441
FE/FOR 459	Forest Management Planning & Design I	4	W		FE 457
FE/FOR 463^	Forest Policy & Regulation	3	F, W		
FE/FOR 469	Forest Management Planning & Design II	4	SP		FE 459

Core Education: Students must complete one course in each Core Ed category. Some categories can be fulfilled by courses from the FE/CE major. The chart below shows the overlap between major 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 <i>Arts @ Humanities courses must come from two different departments.</i>		3-4
Arts & Humanities: Global		3-4
Quantitative Literacy & Analysis	Fulfilled by MTH 251Z	4
Communication, Media & Society	Fulfilled by COMM 111Z, 114, or 218Z	3-4
Social Science	Fulfilled by ECON 201Z or ECON 202Z	4
Scientific Inquiry & Analysis	Fulfilled by PH 211 or CH 201 & CH 204	5
Scientific Inquiry & Analysis	Fulfilled by FES 240 or SOIL 205 & FOR 206	4
Difference, Power, Oppression: Foundations		3-4
Transitions	Fulfilled by ENGR 110 & 115 or ENGR 310	2
Beyond OSU I: Prepare	Fulfilled by FE 101, FOR 111, or ENGR 102	2-3
Beyond OSU II: Engage	Fulfilled by work experience and FE 008	0
Difference, Power, Oppression: Advanced	Fulfilled by ENGR 330	3
Seeking Solutions	Cannot be fulfilled by a course from the major	3-4
Writing Elevation	Fulfilled by WR 227Z	4
Writing Intensive Course	Fulfilled by FE/FOR 463 or CE 418	3-4

Total Credits: 228-233

Sample Course Plan – Forest-Civil Engineering

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 Ed requirements.*

B.S. in Forest-Civil Engineering


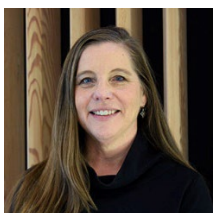

2025-2026						
	Fall		Winter		Spring	
First Year	CH 201 @ 204: Chem for Engr I @ Lab ENGR 110: Transitions ENGR 115: OR State Engr Student FE 101: Intro to Forest Engineering MTH 251Z: Differential Calculus WR 121Z: English Composition	4 2 1 2 4 4	CH 202: Chemistry for Engineers II COMM 111Z/114/218Z: Comm FE 102: FE Problem Solving & Technology ENGR 102: Design Engineering MTH 252Z: Integral Calculus	3 3-4 3 3 4	ECON 201Z or 202Z: Economics FES 240: Forest Biology MTH 254: Vector Calculus PH 211: General Physics with Calc I	4 4 4 4
	Total Credits	17	Total Credits	16-17	Total Credits	16
Second Year	CCE 201: Civil Engr Graphics & Design ENGR 211: Statics FE 208: Forest Surveying MTH 264: Intro to Matrix Algebra MTH 265: Intro to Series PH 212: General Physics with Calc II	3 3 4 2 2 4	ENGR 213: Strength of Materials FE 257: GIS & Forest Engr Applications PH 213: General Physics with Calc III ST 314: Statistics for Engineers WR 227Z: Technical Writing	3 3 4 3 4	ENGR 212: Dynamics FES 241: Dendrology MTH 256: Applied Diff. Equations SOIL 205: Soil Science FOR/SOIL 206: Forest Soils Lab	3 3 4 3 1
	Total Credits	18	Total Credits	17	Total Credits	14
Third Year	FE 312: Forestry Field School FE 434: Forest Watershed Mgmt FE 371: Harvesting Processes Engr FOR 321: Forest Mensuration	2 4 4 5	FE 315: Soil Engineering FE 440: Forest Operations Analysis FE 470: Logging Mechanics FOR 329: Forest Resource Econ I	4 4 4 4	FE 310: Forest Route Surveying FE 316: Soil Mechanics FOR 332: Forest Resource Econ II <i>Core: Arts @ Humanities General</i>	4 4 2 3-4
	Total Credits	15	Total Credits	16	Total Credits	13-14
Fourth Year	CCE 321: Civil & Const Engr Materials CE 311: Fluid Mechanics CE: 381: Structural Theory I FOR 441: Silvicultural Principles	4 4 4 4	CE 313: Hydraulic Engineering CE 382: Structural Theory II CE 383 or CE 481: Steel or Concrete CE 392: Intro to Highway Engr	4 4 4 4	CE 362: Reality Capture for Engr CE 491: Transportation Engineering ENVE 321: Env Engr Fundamentals <i>Core: Diff/Power/Opp. Foundations</i>	3 3 4 3-4
	Total Credits	16	Total Credits	16	Total Credits	13-14
Fifth Year	ENGR 330: Inclusive @ Equitable Engr FE 444: For Remote Sensing & Photo FE 457: Tech for Forest Res Analysis FE 463: Forest Policy @ Regulations	3 4 4 3	CE 418: Civil Engr Professional Practice FE 008: OSU @ Beyond - Engage FE 415: Forest Road Engineering FE 459: Forest Mgmt Planning & Design I <i>Core: Arts @ Humanities Global</i>	3 0 4 4 3-4	CE 419: Civil Infrastructure Design FE 416: Forest Road System Mgmt FE 469: For Mgmt Plan& Design II <i>Core: Seeking Solutions</i>	3 4 4 3-4
	Total Credits	14	Total Credits	14-15	Total Credits	14-15

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/student-services/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 Forest Engineering Majors (after your first year)

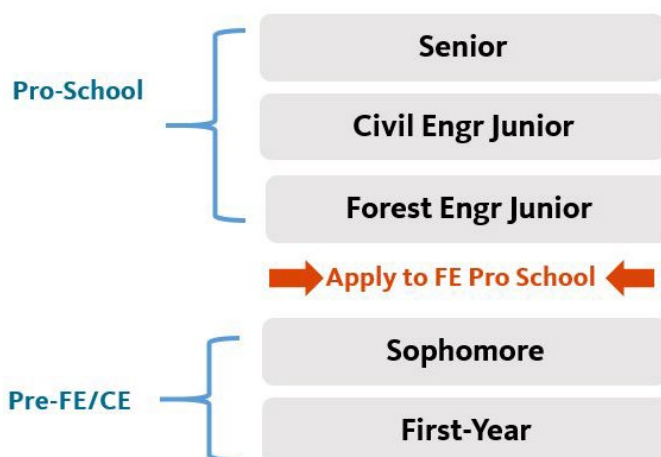
 Ruth Sterner Academic Advisor Forestry Peavy 116 -J 541-737-6548 ruth.sterner@oregonstate.edu

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.

Forest – Civil Engineering Program Structure

FE/CE students earn two Bachelor's degrees – one in Forest Engineering and one in Civil Engineering. Because of the higher number of credits required, it takes five years to complete the program.



Years 1 & 2: Pre-FE/CE

The Pre-Professional years lay a strong foundation and prepare students for advanced coursework in Forest and Civil Engineering. Some students may require additional time to complete the program due to preparation in math, chemistry, or physics.

Year 3: Pro-School and Forest Engr Junior Year

Admission to the Forest Engineering pro-school is based on successful and timely completion of courses in years 1 & 2. Students need to start Pro-School in fall term to stay on-track with the degree program. See *FE Pro-School requirements below.

Year 4: Civil Engr Junior Year

To enter the Civil Engineering junior year, students must be in good standing with the College of Engineering. This requires students to maintain a 2.5 cumulative OSU GPA each term, and pass at least 65% of their OSU coursework each term to stay in Good Standing. More information on Academic Standing in the College of Engineering can be found here: engineering.oregonstate.edu/current-students/advising/progression

*FE Pro-School Requirements

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

1. a grade of C or better in all Pre-FE/CE courses 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 the Forest Engineering professional program will be available on the College of Forestry website in March of the sophomore year. Applications will be due in early April, and applicants will be notified of their admission status by early May. The number of students admitted to the program is determined based on available resources. Students meeting the minimum Pre-Forest Engineering GPA of 2.25 may or may not be admitted depending on available resources.

**College of Engineering Academic Requirements and Policies

To assure that all College of Engineering graduates have the strongest possible educational preparation for a professional career in engineering with no deficiencies in any required area of study, the College of Engineering has adopted policies and rules that can be found online: <https://engineering.oregonstate.edu/tools-services/advising>.

****School of Civil & Construction Engineering Academic Requirements**

Students must demonstrate that adequate background has been gained in all coursework used to satisfy program requirements. Therefore, all coursework must be passed with a grade of C or better.

Regarding sequence courses or courses with prerequisites, a student receiving a grade below C in a prerequisite course will not be able to proceed in the sequence. Students should see an academic advisor for assistance.

Requirements for Graduation

In addition to the University and degree program requirements, students in the Forest-Civil Engineering program must also meet specific requirements to graduate.

S/U Grading — FE/CE students may not take for S/U (Satisfactory/Unsatisfactory) grading any course listed as a requirement for the major. 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 FE/CE program.

Approved Work Experience. Six months of work experience is required in the Forest-Civil Engineering degree program.

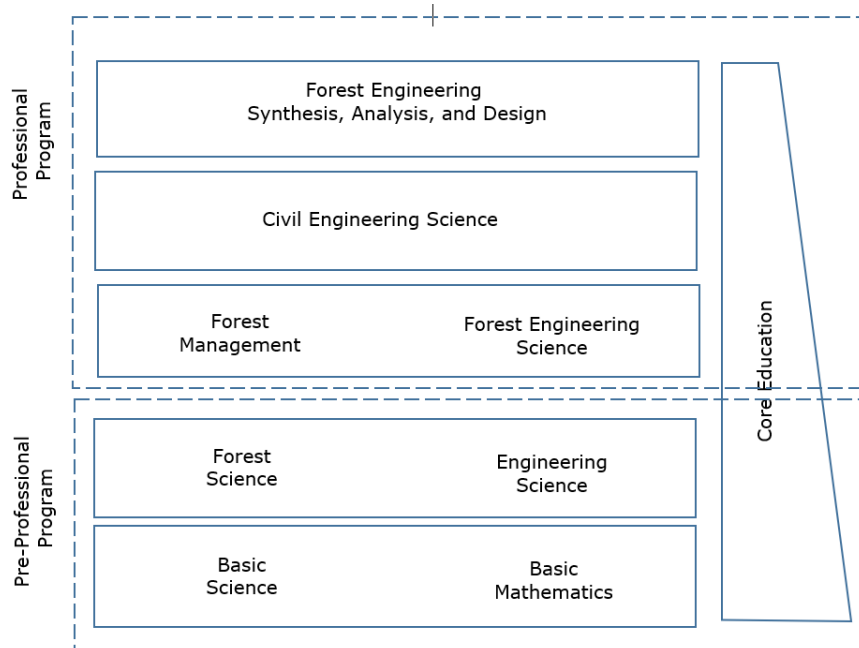
Professional Licensure

The pathway to licensure for Professional Engineers and Professional Land Surveyors is located at <https://www.oregon.gov/osbeels/obtaining/Pages/Licensing-Process-in-Oregon.aspx>. An important part of the pathway to licensure is passing the Fundamentals of Engineering Exam, and Oregon State University supports all engineering students with exam review assistance <https://engineering.oregonstate.edu/current-students/advising/fundamentals-engineering-exam>.

Forest Engineering/Civil Engineering Program Overview

Coursework in the FE/CE program begins with a broad foundation in science and math, followed by forest science and engineering to bridge between the basic sciences and forest management, forest engineering, and civil engineering (see figure below). Incorporating the University's Core Education requirements provides basic skills and broader perspectives. The curriculum is completed with forest engineering synthesis, analysis and design, the hallmark of forest engineering practice.

The FE/CE program is divided into pre-professional and professional coursework. Pre-professional courses are foundational, and should be completed in the freshman and sophomore years. The professional coursework typically begins in the junior year.



In addition to the organization illustrated above, the FE/CE program has been structured to satisfy the accreditation criteria of the Society of American Foresters (SAF) and the Engineering Accreditation Commission of ABET, Inc. SAF divides Forestry curricula into seven categories; Communication, Science and Math, Humanities and Social Science, Forest Ecology and Biology, Forest Measurements, Forest Management, and Forest Policy and Administration. ABET divides engineering curricula into three categories: Mathematics and Basic Science, Engineering topics and a General Education Component. Courses may include material that can fit in more than one category.

Grade Requirements for Accreditation

Mathematics (all required courses must be graded C or higher)

A grade of C or higher is required in all Mathematics courses with the MTH prefix (e.g. MTH 251: Differential Calculus). Preparatory mathematics courses not required for your major (such as MTH 111Z: College Algebra) can be taken for S/U grading, but you must earn an S grade in order to meet the prerequisite requirements for the subsequent courses. You should consult with your advisor on any grading questions.

Basic Science (all courses must be graded C or higher)

The Basic Science requirements include Physics, Chemistry, Soil Science, and an array of Forestry courses. Some Forestry courses include subject matter that is considered to be an Engineering Topic as well.

Engineering Topics (all courses must be graded C or higher)

Engineering Science (ENGR courses) provides the bridge between the basic sciences and engineering synthesis and design. The classical Engineering Science sequence, Statics, Dynamics, and Strength of Materials, is easily identifiable as engineering science course material. Many other components of engineering science are less easily delineated, and make up only portions of engineering or other courses. In some cases, courses taught by other departments have engineering science character appropriate to Forest Engineering. For example, the application of basic mathematics to the Engineering and Management analysis of the “time value of money” is an engineering science topic even though it is presented in Forest Resource Economics I (FOR 329). Similarly, the application of mathematics and statistics to measurement of forest resource quantities is an engineering science topic even though it is presented in Forest Mensuration (FOR 321).

The heart of engineering practice is Synthesis and Design; hence Synthesis and Design are the capstone of an engineering education. Within Forest Engineering coursework, the most common occurrence of engineering science topics is in the beginning of a course or course sequence, the latter portion of which is engineering synthesis or design. The Engineering Design experience in the Forest Engineering program culminates in the Forest Planning Sequence (FE 459 and FE 469). This sequence provides the challenge and opportunity for students to integrate components of the entire curriculum, including the disciplines of Engineering, Forest Ecology, Silviculture, Fisheries, and Wildlife, into the design of a timber harvesting plan that meets a set of financial objectives developed with consideration of the time value of money and forest growth.

Forest - Civil Engineering Degree Credit Distribution

Check Completed	Course Title	Course Prefix and Number	Basic Science and Mathematics Credit	Engineering Topics Credit	Supporting General Education Credits
Forest Engineering/Civil Engineering Pre-Professional Program					
	Chemistry for Engineering Majors **	CH 201 & CH 204	4		
	Introduction to Forest Engineering **	FE 101		1	1
	Differential Calculus [CE] **	MTH 251Z	4		
	English Composition [CE] **	WR 121Z			4
	Chemistry for Engineering Majors **	CH 202	3		
	Design Engineering & Problem Solving **	ENGR 102		3	
	Forest Engineering Problem Solving and Technology **	FE 102	1	1	1
	Speech Communication [CE] **	COMM111Z or COMM 114 or COMM 218Z			3-4
	Integral Calculus **	MTH 252	4		
	General Physics with Calculus [CE] **	PH 211	4		
	Forest Biology**	FES 240	4		
	Vector Calculus I **	MTH 254	4		
	Economics [CE] **	ECON 201Z or ECON 202Z			4
	Civil Engr and Const Engr Graphics & Design **	CCE 201		3	
	Statics **	ENGR 211		3	
	Forest Surveying **	FE 208		4	
	Introduction to Matrix Algebra**	MTH 264	2		
	Introduction to Series **	MTH 265	2		
	General Physics with Calculus **	PH 212	4		
	General Physics with Calculus **	PH 213	4		
	Strength of Materials **	ENGR 213		3	
	GIS & Forest Engineering Applications **	FE 257		3	
	Intro to Statistics for Engineers**	ST 314	3		
	Technical Writing [CE]	WR 227Z			4
	Dynamics **	ENGR 212		3	
	Dendrology**	FES 241	3		
	Soil Science [CE] **	SOIL 205	3		
	Forest Soils lab or Soil Science lab and Forest Soil recitation	FOR 206 OR SOIL 206	1		
	Applied Differential Equations **	MTH 256	4		
Forest Engineering/Civil Engineering Professional Program					
	Forest Engineering Field School	FE 312		2	
	Harvesting Process Engineering	FE 371		4	
	Forest Watershed Management	FE 434	2	2	
	Forest Mensuration	FOR 321	1	1	3
	Soil Engineering	FE 315		4	
	Forest Operations Analysis	FE 440		4	
	Forest Resource Economics I	FOR 329		1	3
	Logging Mechanics	FE 470		4	
	Forest Route Surveying	FE 310		4	
	Soil Mechanics	FE 316		4	
	Silviculture Principles	FOR 441	4		
	Inclusive & Equitable Engineering	ENGR 330	1		2

Forest - Civil Engineering Degree Credit Distribution (Continued)

Check Completed	Course Title	Course Prefix and Number	Basic Science and Mathematics Credit	Engineering Topics Credit	Supporting General Education Credits
Forest Engineering/Civil Engineering Professional Program continued					
	Fluid Mechanics I	CE 311		4	
	Structural Theory I	CE 381		4	
	Civil & Construction Engineering Materials	CCE 321		4	
	Hydraulic Engineering	CE 313		4	
	Reality Capture for Engineering Applications	CE 362		3	
	Structural Theory II	CE 382		4	
	Introduction to Highway Engineering	CE 392		4	
	Design of Steel Structures or Reinforced Concrete I	CE 383 or CE481		4	
	Transportation Engineering	CE 491		3	
	Environmental Engineering Fundamentals	ENVE 321		4	
	Design of Steel Structures	CE 383		4	
	Forestry Remote Sensing and Photogrammetry	FE 444		4	
	Techniques for Forest Resource Analysis	FE 457		4	
	Forest Policy and Regulation [WIC]	FE 463		3	
	Forest Resource Economics II	FOR 332		1	1
	Civil Engineering Professional Practice [WIC]	CE 418		3	
	Forest Management Planning and Design I	FE 459		4	
	Forest Road Engineering	FE 415		3	
	Forest Engineering Practice & Professionalism	FE 480		1	
	Civil Infrastructure Design	CE 419		3	
	Forest Management Planning and Design II	FE 469		4	
	Forest Road System Management	FE 416		4	
	International Forestry	FE 456	1		2
Other Core Education Courses [Core Ed]					
	Transitions	ENGR 110 & 115 or ENGR 310			3
	Beyond OSU: Engage	FE 008			0
	Art & Humanities: General				3
	Arts & Humanities: Global				3
	Difference/Power/Oppression: Foundations				3
	Seeking Solutions				3
Category Credit Totals			66	130	43-44

** Pre-Professional Course that must be completed before entering the Professional Program.

DISCLAIMER:

Future term data are continually updated. Check the web frequently for current information.