

Major Offered At:
CORVALLIS

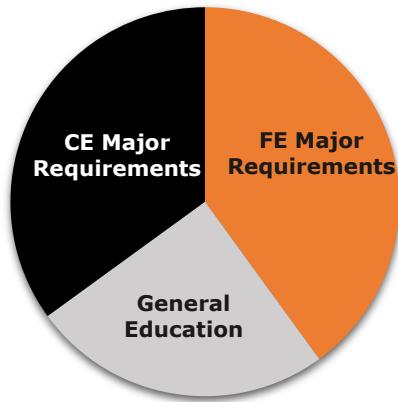
**Southwestern Oregon
Community College**

Forest - Civil Engineering Major

The Forest-Civil Engineering five year, double degree program results in a BS in Forest Engineering and a BS in Civil Engineering and is offered in cooperation with the School of Civil and Construction Engineering.

This degree expands the career opportunities of graduates by allowing them to work in both rural and urban areas, and for a wide variety of employers.

Your Bachelor's Degree (BS) in Forest-Civil Engineering



- A minimum of 228-233 credits are required for graduation; 60 must be upper division (300 and 400-level courses).
- A maximum of 135 credits earned at a community college may be applied toward a bachelor's degree at OSU.
- Only courses with letter prefixes and numbers above 100 are accepted.
- Six months of work experience related to the field
- Meet admission criteria for Forest Engr Pro-School (minimum grades of C in all major courses and 2.25 GPA in major courses)
- forestry.oregonstate.edu/undergraduate-programs/fe/forest-engineering-and-civil-engineering

Courses Required for Forest-Civil Engineering Major

FE/CE Major Requirements – Years 1 & 2	SWOCC Course	OSU Course	Notes
Civil & Construction Engr Graphics & Design	DRFT 110 or 112 can sub	CCE 201	Available online at OSU
General Chemistry for Engineering	CHEM 221Z & 227Z sub	CH 201	Available online at OSU
General Chemistry for Engineering	CHEM 222Z & 228Z sub	CH 202	Available online at OSU
Chemistry for Engineering Lab	Covered by 227Z & 228Z	CH 204	Available online at OSU
Public Speaking or Argument & Critical Discourse or Interpersonal Communication	COMM 111Z or COMM 112 or COMM 218Z	COMM 111Z or COMM 114 or COMM 218	Available online at OSU Available online at OSU Available online at OSU
Intro to Microeconomics or Intro to Macroeconomics	ECON 201Z or ECON 202Z	ECON 201Z or ECON 202Z	Available online at OSU Available online at OSU
Transitions & The Oregon State Engr Student		ENGR 110 & 115	Available online at OSU
Design Engineering & Problem-Solving		ENGR 102	Available online at OSU
Statics	ENGR 211	ENGR 211	Available online at OSU
Dynamics	ENGR 212	ENGR 212	Available online at OSU
Strength of Materials	ENGR 213	ENGR 213	Available online at OSU
Intro to Forest Engineering	ENGR 111 can sub	FE 101	
Forest Engineering Problem-Solving & Tech Engr Computation & Algorithmic Thinking	ENGR 112 can sub	FE 102 ENGR 103	Available online at OSU
Forest Surveying or Surveying Theory	F 222A	FE 208 CE 361	Available online at OSU
GIS and Forest Engineering Applications	GEOG 265 can sub	FE 257	Available online at OSU
Forest Biology	F 250	FES 240	Available online at OSU
Dendrology	F 241	FES 241	Available online at OSU
Differential Calculus	MTH 251Z	MTH 251Z	Available online at OSU
Integral Calculus	MTH 252Z	MTH 252Z	Available online at OSU
Vector Calculus	MTH 254	MTH 254	Available online at OSU
Applied Differential Equations	MTH 256	MTH 256	Available online at OSU
Intro to Matrix Algebra	MTH 264	MTH 264	Available online at OSU
Intro to Series	MTH 264	MTH 265	Available online at OSU

FE/CE Major Requirements – Years 1 & 2	SWOCC Course	OSU Course	Notes
General Physics with Calculus I	PH 211	PH 211	
General Physics with Calculus II	PH 212	PH 212	
General Physics with Calculus III	PH 213	PH 213	
Soil Science	ENV 235	SOIL 205	
Forest Soils Lab	ENV 235	SOIL 206 or FOR 206	
Intro to Statistics for Engineers		ST 314	Available online at OSU
English Composition I	WR 121Z	WR 121Z	Available online at OSU
Technical Writing	WR 227Z	WR 222Z	Available online at OSU

FE/CE Major Requirements – Yrs 3, 4 & 5	SWOCC Course	OSU Course	Notes
Civil & Construction Engineering Materials		CCE 321	
Fluid Mechanics		CE 311	
Hydraulic Engineering		CE 313	
Reality Capture for Engineering Applications		CE 362	
Structural Theory I		CE 381	
Structural Theory II		CE 382	
Design of Steel Structures or Reinforced Concrete		CE 383 or CE 481	
Intro to Highway Engineering		CE 392	
Civil Engineering Professional Practice		CE 418	
Civil Infrastructure Design		CE 419	
Transportation Engineering		CE 491	
Inclusive & Equitable Engineering		ENGR 330	Available online at OSU
Environmental Engineering		ENVE 321	
Beyond OSU II: Engage		FE 008	Available online at OSU
Forest Route Surveying		FE 310	
Forestry Field School		FE 312	
Soil Engineering		FE 315	
Soil Mechanics		FE 316	
Harvesting Process Engineering		FE 371	
Forest Road Engineering		FE 415	
Forest Road System Management		FE 416	
Forest Watershed Management		FE 434	
Forest Operations Analysis		FE 440	
Forestry Remote Sensing & Photogrammetry		FE 444	
Techniques for Forest Resource Analysis		FE 457	
Forest Management Planning & Design I		FE 459	
Forest Policy & Regulation		FE 463	
Forest Management Planning & Design II		FE 469	
Logging Mechanics		FE 470	
Forest Mensuration		FOR 321	
Forest Resource Economics I		FOR 329	
Forest Resource Economics II		FOR 332	
Silvicultural Principles		FOR 441	

General Education Courses (called Core Education)

- Complete one course in each category.
- Full listing of SWOCC courses that fulfill Core Ed requirements: admissions.oregonstate.edu/core-education-course-articulations-southwestern-oregon-community-college

FOUNDATIONAL CORE	Writing Foundations	WR 121Z required
	Arts & Humanities: General	
	Arts & Humanities: Global	
	Quantitative Literacy & Analysis	Fulfilled by major: MTH 251Z
	Communication, Media & Society	Fulfilled by major: COMM 111Z, 112 or 218Z
	Social Science	Fulfilled by major: ECON 201Z
	Scientific Inquiry & Analysis	Fulfilled by major: F 250
	Scientific Inquiry & Analysis	Fulfilled by major: PH 211
	Difference, Power, Oppression Foundations	
SIGNATURE CORE	Transitions	Fulfilled by major: ENGR 110
	Beyond OSU I: Prepare	Fulfilled by major: FE 101
	Beyond OSU II: Engage	Fulfilled by major: FE 008
	Difference, Power, Oppression Advanced	Fulfilled by major: ENGR 330
	Seeking Solutions	<i>Cannot be fulfilled by a major requirement</i>
	Writing Elevation	Fulfilled by major: WR 227Z
	Writing Intensive Course	Fulfilled by major: FE 463

Advising Contacts

Academic advisors at your community college and OSU are available to answer your questions and assist you in creating a transfer plan. **See your community college advisor first and use this Transfer Guide to help you plan.** It is important to speak with your OSU academic advisor early on, and often, to ensure correct course selection and sequencing. See visitosu.oregonstate.edu/visit-campus to schedule your personalized visit.

Southwestern Oregon Community College	Tasha L. Davison , Faculty in Forestry & Natural Resources Tasha.L.davison@socc.edu , 541-888-7284
OSU College of Forestry Student Services Office	541-737-1594 forestrystudentservices@oregonstate.edu