#### TRANSFER GUIDE FOR OREGON STATE UNIVERSITY

#### Major Offered At:

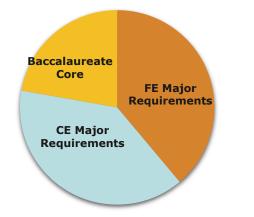
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## Clackamas Community College

#### **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 236-238 credits are required for graduation; 60 must be upper division (300 and 400level 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/undergraduateprograms/fe/forest-engineering-and-civil-engineering

## **Courses Required for Forest-Civil Engineering Major**

FE/CE Major Requirements – Years 1 & 2	Clackamas Course	OSU Course	Notes
Civil & Construction Engr Graphics & Design	ENGR 115	CCE 201	
Chemistry for Engineering Majors I	CH 221 substitutes	CH 201	Available online at OSU
Chemistry for Engineering Majors II	CH 222 substitutes	CH 202	Available online at OSU
Lab for CH 202	CH 221 substitutes	CH 205	
Public Speaking or	COMM 111Z or	COMM 111Z or	Available online at OSU
Argument & Critical Discourse	COMM 112	COMM 114	Available online at OSU
Intro to Microeconomics	EC 201	ECON 201	Available online at OSU
The Oregon State Engineering Student	ENGR 111	ENGR 100	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		FE 101	
Forest Engineering Problem-Solving & Tech	ENGR 112	FE 102	
Engr Computation & Algorithmic Thinking		ENGR 103	Available online at OSU
Forest Surveying or	ENGR 226	FE 208	Available online at OSU
Surveying Theory		CE 361	
GIS and Forest Engineering Applications		FE 257	Available online at OSU
Forest Biology		FES 240	Available online at OSU
Dendrology		FES 241	Available online at OSU
Differential Calculus	MTH 251	MTH 251	Available online at OSU
Integral Calculus	MTH 252	MTH 252	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	Available online at OSU
Intro to Series		MTH 265	Available online at OSU



FE/CE Major Requirements – Years 1 & 2	Clackamas 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		SOIL 205	
Forest Soils Lab		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 227Z	Available online at OSU

FE/CE Major Requirements – Yrs 3, 4 & 5 Clackamas Cou	rse OSU Course	Notes
Civil & Construction Engineering Materials	CCE 321	
Fluid Mechanics	CE 311	
Hydraulic Engineering	CE 313	
Structural Theory I	CE 381	
Structural Theory II	CE 382	
Design of Steel Structures	CE 383	
Intro to Highway Engineering	CE 392	
Civil Engineering Professional Practice	CE 418	
Civil Infrastructure Design	CE 419	
Reinforced Concrete I	CE 481	
Transportation Engineering	CE 491	
Environmental Engineering	ENVE 321	
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 Operations Regulations & Policy Issues	FE 460	
Forest Management Planning & Design II	FE 469	
Logging Mechanics	FE 470	
Forest Engr Practice & Professionalism	FE 480	
Forest Mensuration	FOR 321	
Forest Resource Economics I	FOR 329	
Forest Resource Economics II	FOR 332	
Silvicultural Principles	FOR 441	
Sustainability for the Common Good or	GEOG 300 or	Available online at OSU
Endangered Species, Society & Sustainability	FW 350	Available online at OSU

# General Education Courses (called the Baccalaureate Core)

- Complete one course in each Perspective category with no more than two in the same department.
- Full listing of Clackamas courses that fulfill Bacc Core requirements: <u>admissions.oregonstate.edu/baccalaureate-core-course-</u> equivalencies-clackamas-community-college

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SKILLS COURSES	Math Writing I Writing II	Completed as part of major: MTH 251 or higher WR 121Z. Required to transfer. Completed as part of major: WR 227Z
	Speech (Writing III)	Completed as part of major: COMM 111Z or 114
	Fitness	HPE 295 @ Clackamas
PERSPECTIVE COURSES	Biological Science	Completed as part of major: FES 240
	Physical Science	Completed as part of major: PH 211
	Additional Biological or Physical Science	Completed as part of major: SOIL 205 & FOR 206
	Cultural Diversity	Choose one course from Bacc Core link above
	Literature and the Arts	Choose one course from Bacc Core link above
	Social Processes and Institutions	Completed as part of major: ECON 201
	Western Culture	Choose one course from Bacc Core link above
DPD COURSE	Difference, Power, & Discrimination	Choose one course from Bacc Core link above
SYNTHESIS COURSES	Contemporary Global Issues Science, Technology, & Society	Upper-division course: complete at OSU Completed as part of major: GEOG 300 or FW 350

## **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 <u>visitosu.oregonstate.edu/visit-campus</u> to schedule your personalized visit.

Clackamas Community College Advising	clackamas.edu/academics/academic-support/academic-advising-and-education- planning
OSU College of Forestry	541-737-1594
Student Services Office	forestrystudentservices@oregonstate.edu