

Major Offered At:

CORVALLIS

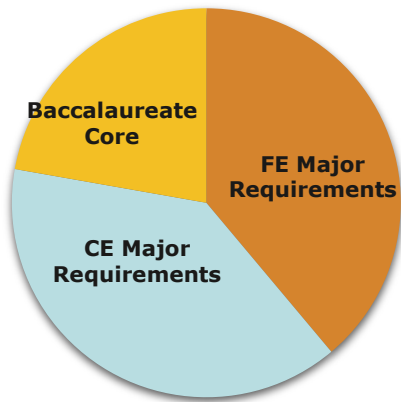
**Umpqua
Community College**

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 242 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	UCC Course	OSU Course	Notes
Civil & Construction Engineering Orientation	ENGR 111	CCE 101	
Civil & Construction Engr Graphics & Design	DRF 112	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 Argument & Critical Discourse	SP 111 or SP 112	COMM 111 or COMM 114	Available online at OSU Available online at OSU
Intro to Microeconomics	ECON 201	ECON 201	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	FOR/ENGR 112	FE 102	
Forest Surveying	FOR/SUR 161	FE 208	Available online at OSU
GIS and Forest Engineering Applications	GIS 134 or FOR/GIS 234	FE 257	Available online at OSU
Forest Biology	FOR/NR 240	FES 240	Available online at OSU
Dendrology	FOR/NR 241	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
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 & SOIL 206	SOIL 205	

FE/CE Major Requirements – Years 1 & 2	UCC Course	OSU Course	Notes
Forest Soils Lab	FOR/SOIL 206	FOR 206	
Intro to Statistics for Engineers	MTH 265	ST 314	Available online at OSU
English Composition I	WR 121	WR 121	Available online at OSU
Technical Writing	WR 227	WR 327	Available online at OSU

FE/CE Major Requirements – Yrs 3, 4 & 5	UCC Course	OSU Course	Notes
Civil & Construction Engineering Materials		CCE 321	
Fluid Mechanics		CE 311	
Hydraulic Engineering		CE 313	
Surveying Theory		CE 361	
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	
CE Design Elective		Varies	
Electrical Fundamentals	ENGR 201	ENGR 201	Available online at OSU
Environmental Engineering		ENVE 321	
Forest Route Surveying	SUR 163	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 330	
Silvicultural Principles		FOR 441	
Sustainability for the Common Good or Endangered Species, Society & Sustainability		GEOG 300 or FW 350	Available online at OSU 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 UCC courses that fulfill Bacc Core requirements: admissions.oregonstate.edu/baccalaureate-core-course-equivalencies-umpqua-community-college

SKILLS COURSES	Math Writing I Writing II Speech (Writing III) Fitness	Completed as part of major: MTH 251 or higher WR 121. Required to transfer. Completed as part of major: WR 327 Completed as part of major: COMM 111 or 114 HPE 295 @ Umpqua
PERSPECTIVE COURSES	Biological Science Physical Science Additional Biological or Physical Science Cultural Diversity Literature and the Arts Social Processes and Institutions Western Culture	Completed as part of major: FES 240 Completed as part of major: PH 211 Completed as part of major: SOIL 205 & FOR 206 Choose one course from Bacc Core link above Choose one course from Bacc Core link above Completed as part of major: ECON 201 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 visitosu.oregonstate.edu/visit-campus to schedule your personalized visit.

Umpqua Community College	Clay Baumgartner, Engineering Faculty 541-580-4116 Clay.baumgartner@umpqua.edu
OSU College of Forestry Prospective Student Advisor	Autumn Granger 541-737-9135 Autumn.granger@oregonstate.edu