

Major Offered At:

CORVALLIS

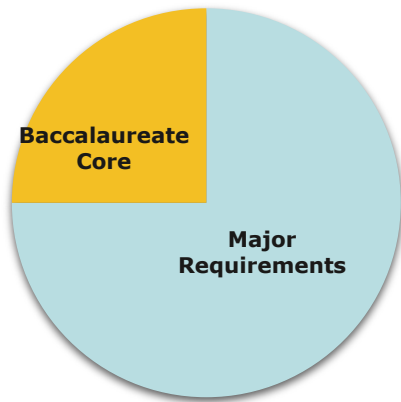
Central Oregon Community College

Forest Engineering Major

Forest Engineers are the technical backbone of all forest operations, providing the skills and knowledge required to implement complex forest and natural resource operations. This program emphasizes analytical skills required for evaluating engineering

Systems, integrating the mechanical and economic requirements of forest operations with the biological requirements of the forest and the need to protect soil and water resources.

Your Bachelor's Degree (BS) in Forest Engineering



- A minimum of 192 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)
- [More info at forestry.oregonstate.edu/undergraduate-programs/fe/forest-engineering](http://forestry.oregonstate.edu/undergraduate-programs/fe/forest-engineering)

Courses Required for Forest Engineering Major

FE Major Requirements – Years 1 & 2	COCC Course	OSU Course	Notes
Civil & Construction Engr Graphics & Design	CIS 125A1 or CIS 135C1	CCE 201	
Chemistry for Engineering Majors	CH 221 substitutes	CH 201	Available online at OSU
Public Speaking or Argument & Critical Discourse	COMM 111Z or COMM 114	COMM 111Z or COMM 114	Available online at OSU Available online at OSU
Intro to Microeconomics	EC 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	GE 101	FE 101	
Forest Engineering Problem-Solving & Tech	GE 102	FE 102	
Forest Surveying	FOR 230B	FE 208	Available online at OSU
GIS and Forest Engineering Applications	GEOG 265	FE 257	Available online at OSU
Intro to Forestry	FOR 111	FOR 111	Available online at OSU
Forest Biology	FOR 240A	FES 240	Available online at OSU
Dendrology	FOR 241A & 241B	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
General Physics with Calculus I	PH 211	PH 211	
General Physics with Calculus II	PH 212	PH 212	
Soil Science	FOR 208	SOIL 205	
Forest Soils Lab	FOR 208	FOR 206	
Principles of Statistics	STAT 243Z	ST 243Z	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 Major Requirements – Years 3 & 4	COCC Course	OSU Course	Notes
Forest Route Surveying		FE 310	
Forestry Field School		FE 312	
Soil Engineering		FE 315	
Soil Mechanics		FE 316	
Forest Engr Fluid Mechanics & Hydraulics or Ecological Fluid Mechanics		FE 330 or BEE 311	
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	
Harvesting Management		FE 471	
Forest Engr Practice & Professionalism		FE 480	
Forest Mensuration	FOR 235	FOR 321	
Forest Resource Economics I		FOR 329	
Forest Resource Economics II		FOR 332	
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 COCC courses that fulfill Bacc Core requirements: admissions.oregonstate.edu/baccalaureate-core-course-equivalencies-central-oregon-community-college

SKILLS COURSES	Math Writing I Writing II Speech (Writing III) Fitness	Completed as part of major: MTH 251 or higher WR 121Z. Required to transfer. Completed as part of major: WR 227Z Completed as part of major: COMM 111Z or 114 HHP 295
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: EC 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.

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