

Major Offered At:

CORVALLIS

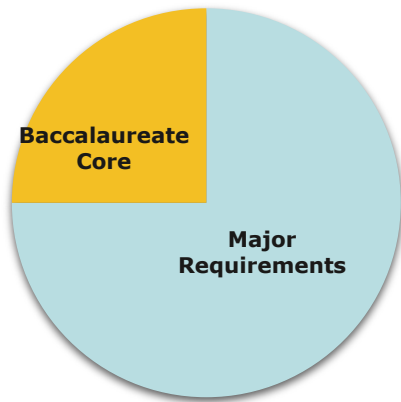
**Portland
Community College**

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 | PCC Course | OSU Course | Notes |
|--|-----------------------|----------------------|--|
| Civil & Construction Engr Graphics & Design | ENGR 102 | CCE 201 | |
| Chemistry for Engineering Majors | CH 221 substitutes | CH 201 | Available online at OSU |
| Public Speaking or Argument & Critical Discourse | COMM 111 or COMM 112 | COMM 111 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 | ENGR 101 | FE 101 | |
| Forest Engineering Problem-Solving & Tech | ENGR 114 | FE 102 | |
| Forest Surveying | ENGR 226 | FE 208 | Available online at OSU |
| GIS and Forest Engineering Applications | GEO 264 or 265 | FE 257 | Available online at OSU |
| Intro to Forestry | | FOR 111 | Available online at OSU |
| Forest Biology | BI 141 | 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 |
| General Physics with Calculus I | PHY 211 | PH 211 | |
| General Physics with Calculus II | PHY 212 | PH 212 | |
| Soil Science | CSS 200 | SOIL 205 | |
| Forest Soils Lab | FOR 208 online at OSU | FOR 206 | |
| Principles of Statistics | MTH 243 | ST 201 | 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 Major Requirements – Years 3 & 4 | PCC 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 | | FE 330 | |
| 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 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 PCC courses that fulfill Bacc Core requirements: admissions.oregonstate.edu/baccalaureate-core-course-equivalencies-portland-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 HE 295 & PE 295 @ PCC |
| 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.

| | |
|--|---|
| Portland Community College | pcc.edu/advising/ |
| OSU College of Forestry Prospective Student Advisor | Autumn VanderLinden 541-737-9135 Autumn.VanderLinden@oregonstate.edu |