

TRANSFER GUIDE FOR OREGON STATE UNIVERSITY

Major Offered At:

CORVALLIS

**Treasure Valley
Community College**

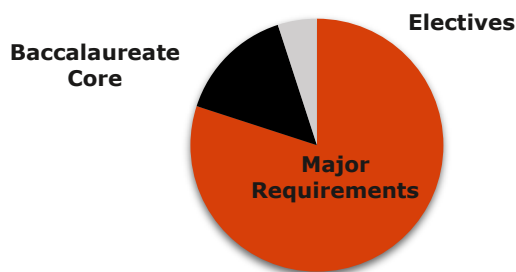
Ecological Engineering

The Ecological Engineering (EcoE) program at OSU was the first-of-its-kind in the nation, and the discipline is rapidly developing as an important emerging area of engineering. Ecological Engineering blends engineering and scientific principles/problem-solving techniques to optimize the design of sustainable systems (natural, urban, and agricultural) that integrate human activities into the natural environment to the benefit of both.

EcoE graduates are highly employable and have found work in a variety of employment sectors, including:

- Engineering design & consulting firms
- Government agencies (federal, state, local)
- Natural resource management/ restoration firms
- Sustainable farms & vineyards
- Surveying & ecological modeling firms
- Water and wastewater treatment facilities

Your Bachelor's Degree (BS) in the College of Engineering



- A minimum of 180 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.
- Some courses can count towards your major and the Baccalaureate Core. Advisors can assist in selection.
- More info at bee.oregonstate.edu/biological-and-ecological-engineering/ecological-engineering-

Courses Required for Ecological Engineering Major

This list is comprehensive. Speak with OSU advisor for more information

| Ecological Engineering Core Requirements | TVCC Equivalent Course | OSU Course | Notes |
|--|------------------------|--------------|--|
| Ecological Engineering I | None | BEE 101 | Starting Fall 2021, will be offered at OSU as ENGR 100 |
| Ecological Engineering II | None | BEE 102 | Starting Winter 2022, will be offered at OSU as ENGR 102 |
| Ecological Engineering III | None | BEE 103 | Starting Spring 2022, will be offered at OSU as ENGR 103 |
| Fundamentals of Eco Engr. | None | BEE 221 | |
| Ecological Engr. Computation | None | BEE 222 | |
| Ecology for Engineers | None | BEE 270 | |
| Statics | None | ENGR 211 | |
| Strength of Materials | None | ENGR 213 | |
| General Chemistry (with lab) | CH 221 | CH 231/261 | |
| General Chemistry (with lab) | CH 222 | CH 232/262 | |
| General Chemistry (with lab) | CH 223 | CH 233/263 | |
| Differential Calculus | MTH 251 | MTH 251 | |
| Integral Calculus | MTH 252 | MTH 252 | |
| Vector Calculus I | None | MTH 254 | |
| Applied Differential Equations | None | MTH 256 | |
| Intro to Matrix Algebra | None | MTH 264 | |
| Intro to Series | MTH 253 | MTH 265 | |
| Intro to Statistics for Engineers | None | ST 314 | |
| General Physics (with Calculus) | PH 211 | PH 211 | |
| General Physics (with Calculus) | PH 212 | PH 212 | |
| General Physics (with Calculus) | PH 213 | PH 213 | |
| Soil Science (with lab) | None | SOIL 205/206 | |

Courses Required for Ecological Engineering Major, cont.

| Ecological Engineering Core Requirements | TVCC Equivalent Course | OSU Course | Notes |
|---|------------------------|----------------------------------|---------------------------------------|
| Technical Writing | WR 227 | WR 327 (LD) | LD = Lower-division transfer |
| Public Speaking Argument & Critical Discourse Interpersonal Communication | SP 111 SP 112 | COMM 111 COMM 114 COMM 218 | Complete 1(one) course |
| Intro to Environ. Econ & Policy Intro to Microeconomics | EC 201 | AEC 250 ECON 201 | Complete 1(one) course |
| Ethics | None | PHL 205 | Other courses available post-transfer |

Important Notes & Resources

Important Notes for the College of Engineering and Ecological Engineering Major:

- Grade requirements: Grade of C or better in all major coursework.
- See a sample degree plan by searching "Ecological Engineering" at admissions.oregonstate.edu/find-your-major
- Other similar majors to explore: Environmental Engineering, Environmental Science
- The best time to transfer is **Fall**. Talk with OSU Ecological Engineering advisor, Rachel Jones, about your specific timeline. It is important to speak with Rachel early and often, to ensure correct course selection and sequencing.

Resources and OSU Information:

- Students do not have to complete a transfer degree in order to transfer to OSU.
 - If you've completed the Oregon AAOT, all requirements of the Baccalaureate Core are complete except for Synthesis Courses and Writing Intensive Courses.
- Preparing to apply to OSU? See admissions info: transfer.oregonstate.edu
- Want to take classes at both OSU and an Oregon community college? Check out the Degree Partnership Program: partnerships.oregonstate.edu/students
- Schedule your OSU campus tour and meet with an advisor at visitosu.oregonstate.edu/visit-campus

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 TVCC courses that fulfill Bacc Core requirements: admissions.oregonstate.edu/baccalaureate-core-course-equivalencies-treasure-valley-community-college

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| SKILLS COURSES | Math Writing I Writing II Speech (Writing III) Fitness (Only HHS 231) | Completed as part of the major WR 121. Required to transfer. Completed as part of the major Completed as part of the major HPE 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 Completed as part of major Completed as part of major Choose one course from BaccCore link above Choose one course from BaccCore link above Completed as part of major Can be completed as part of major: see advisor |
| DPD COURSE | Difference, Power, & Discrimination | Choose one course from BaccCore link above |
| SYNTHESIS COURSES | Contemporary Global Issues Science, Technology, & Society | Upper division course, take through OSU Upper division course, take through OSU |

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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| Treasure Valley Community College | tvcc.cc/advising/index.cfm |
| OSU Ecological Engineering | Rachel Jones: rachel.jones@oregonstate.edu |
| OSU College of Engineering Main Office | askengineering@oregonstate.edu |