



Oregon State University Cascades

COCC Transfer Guide

Bachelor of Science in Engineering Science

NOTE:

Students are encourage to dually enroll at OSU-Cascades spring term of their second year, to avoid a year delay in the ESC program. ST 314, is only offered spring term and once a year. ST 314 is an important pre-requisite for upper division courses offered fall term of third year. Failure to take ST 314 could result in a year delay in the ESE program.

Transfer Admissions:

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Program Requirements

OSU Graduation Requirement:

Students are required to meet the University Graduation requirements as well as complete course work required for their major to graduate with a Bachelor of Science in Energy Systems Engineering.

- 180 total college credits
- 60 upper division credits
- 45 out of last 75 credits must be OSU credits

College of Engineering Academic Standing

- Grades of C or better and a minimum of 2.50 cumulative OSU GPA
- Maintain 2.50 term and/or cumulative OSU GPA and 65% of courses completed

Important Notes:

- It is the student's responsibility to double check that all requirements are met. The advisor can suggest courses and assist the student in constructing a plan of study, but the student in the end is responsible for assuring all requirements for graduation are met.
- MECOP Internship information: www.mecopinc.org/

Students will work with their Academic Advisor and use the Bacc Core approved list for OSU-Cascades to choose courses for the Bacc Core requirements. To find information about Bacc Core or for the approved list, visit:

osucascades.edu/admissions/cocc-transfer-guides

Baccalaureate Core:

| x | Skills Requirements | Non-AAOT COCC course | AAOT or ASOT |
|---|---|----------------------|----------------|
| | Health/Fitness | HHP 295 | AAOT completes |
| | Mathematics | MTH 251 in major | AAOT completes |
| | Writing I^ | WR 121 in major | AAOT completes |
| | Writing II | WR 227 in major | AAOT completes |
| | Speech^ | SP 111/114 in major | AAOT completes |
| x | Perspective Requirements: no more than 2 from 1 department | | |
| | Cultural Diversity | See COCC guide | AAOT completes |
| | Literature & the Arts | See COCC guide | AAOT completes |
| | Social Processes & Institutions | See COCC guide | AAOT completes |
| | Western Culture | See COCC guide | AAOT completes |
| | Physical Science | PH 211-213 in major | AAOT completes |
| | Biological Science | See COCC guide | AAOT completes |
| | Additional Science (Physical or Biological) | CH 221-222 in major | AAOT completes |
| | Difference, Power & Discrimination | See COCC guide | AAOT completes |
| x | Synthesis Requirements: cannot be from the same department | | |
| | Contemporary Global Issues – Met by SUS 350 (in ESE Major) | OSU Only | OSU Only |
| | Science, Technology & Society | OSU Only | OSU Only |

A student who has completed (or plans on completing) an ASOT-Business or an AAOT has completed all Skills & Perspectives requirements in the Bacc Core. Students still need to complete synthesis courses.

Major Requirements

First & Second year courses: All courses must be completed with a C grade or better

| x | Course | Title | |
|---|------------|--|----------|
| | CH 221 | General Chemistry | COCC |
| | CH 222 | General Chemistry II | COCC |
| | CIS 135S1 | Solidworks I | COCC |
| | CS 161 | Computer Science I | COCC |
| | CS 162 | Computer Science II | COCC |
| | ENGR 201 | Electrical Fundamentals I | COCC |
| | ENGR 202 | Electrical Fundamentals II | COCC |
| | ENGR 203 | Electrical Fundamentals III | OSU Only |
| | ENGR 211 | Statics | COCC |
| | ENGR 212 | Dynamics | COCC |
| | GE 101 | Engineering Orientation | COCC |
| | MTH 251 | Calculus I | COCC |
| | MTH 252 | Calculus II | COCC |
| | MTH 253 | Calculus III | COCC |
| | MTH 254 | Vector Calculus I | COCC |
| | MTH 256 | Applied Differential Equations | COCC |
| | PH 211 | General Physics I | COCC |
| | PH 212 | General Physics II | COCC |
| | PH 213 | General Physics III | COCC |
| | SP 111/114 | Fundamentals Public Speaking/ Argument & Discourse | COCC |
| | ST 314 | Introduction to Statistics for Engineers | OSU Only |
| | WR 121 | Academic Composition | COCC |
| | WR 227 | Technical Writing | COCC |

Third & Fourth year courses: All courses must be completed with a C grade or better

| x | Course | Title | |
|---|-------------|---|----------|
| | CS 290 | Web Development | OSU Only |
| | ECE 271/272 | Digital Logic Design + Lab | OSU Only |
| | ECE 322 | Electronics I | OSU Only |
| | ENGR 390 | Engineering Economy | OSU Only |
| | ESC 340 | Intro to Experimentation | OSU Only |
| | ESC 350 | Engineering Materials | OSU Only |
| | ESC 440 | Computational Methods for Engineers | OSU Only |
| | ESC 497 | ESC Capstone Design | OSU Only |
| | ESC 498 | ESC Capstone Design | OSU Only |
| | ESE 330 | Modeling & Analysis of Dynamic Systems | OSU Only |
| | ESE 430 | Feedback Control Systems | OSU Only |
| | ESE 470 | Energy Distribution Systems | OSU Only |
| | IE 415 | Simulation and Decision Support Systems | OSU Only |
| | IE 425 | Industrial Systems Optimization | OSU Only |
| | IE 471 | Project Management in Engineering | OSU Only |
| | ME 311 | Introduction to Thermal-Fluid Sciences | OSU Only |
| | ME 331 | Introductory to Fluid Mechanics | OSU Only |

NOTES

* All info is subject to change at catalog policy

See Academic Advisor for Restricted Elective information

All PH courses need to be taken at the same institution