



## Chemeketa Community College Transfer Guide Bachelor of Science in Energy Systems Engineering

### Transfer Admissions:

[osucascades.edu/admissions/admissions-advising](https://osucascades.edu/admissions/admissions-advising)

## 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. *\*All catalog and course selection information is subject to change pending catalog declaration year.* [catalog.oregonstate.edu/regulations/#text](https://catalog.oregonstate.edu/regulations/#text)

- 180 minimum = total number of credits required to graduate
- 60 minimum = number of upper division credits required
- 45 of last 75 credits must be OSU credits
- Max 135 credits transferred to OSU
- Max 18 W grades (withdraw)
- Max 11 credits PAC

## College of Engineering Academic Standing

### Progression Model

- 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
  - Warning: OSU term GPA is below a 2.50 and/or completion is under 65%
  - Probation: After 24 OSU credits attempted, if both term and cumulative standards are not met
  - Suspension: If on probation and have a subsequent term OSU GPA under 2.50 and/or pace under 65%
- No major courses may be taken with S/U grading.

Academic Progression Model Information: <https://engineering.oregonstate.edu/current-students/advising/progression>

### 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.
- Degree requirements are subject to change and dependent on catalog year of admission and major declaration.
- MECOP Internship information: [www.mecopinc.org/](http://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: <https://admissions.oregonstate.edu/course-articulations>

## Baccalaureate Core:

x	Skills Requirements	Non-AAOT course	AAOT or ASOT
	Health/Fitness	HPE 295	AAOT completes
	Mathematics	MTH 251 in major	AAOT completes
	Writing I <sup>^</sup>	WR 121Z in major	AAOT completes
	Writing II	WR 227Z in major	AAOT completes
	Speech <sup>^</sup>	COMM 111Z/112 in major	AAOT completes
x	<b>Perspective Requirements: no more than 2 from 1 department</b>		
	Cultural Diversity	See Bacc Core guide	AAOT completes
	Literature & the Arts	See Bacc Core guide	AAOT completes
	Social Processes & Institutions	EC 201 in major	AAOT completes
	Western Culture	See Bacc Core guide	AAOT completes
	Physical Science	PH 211-213 in major	AAOT completes
	Biological Science	See Bacc Core guide	AAOT completes
	Additional Science (Physical or Biological)	CH 221-222 in major	AAOT completes
	Difference, Power & Discrimination	See Bacc Core guide	AAOT completes
x	<b>Synthesis Requirements: cannot be from the same department</b>		
	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	Major Requirement (OSU)	Chemeketa CC Approved Transfer Courses:
	CH 201: Chemistry for Engineering Majors	CH 221: General Chemistry
	CH 202/205: Chem. For Engineering Major + Lab	CH 222: General Chemistry
	COMM 111Z or COMM 114: Public Speaking or Argument & Critical Discourse	COMM 111Z or 112: Public Speaking or Persuasive Speaking
	ENGR 100: The OSU Engineering Student	GE 101: Engineering Orientation
	ENGR 102: Design Engineering & Problem Solving	EGR 248: Graphics and 3-D Modeling
	ENGR 103: Engineering Computation & Algorithmic Thinking	GE 102 + 103: Engineering Computations I & II or CS 161: Computer Sci. I
	ENGR 201: Electrical Fundamentals I	EGR 201: Electrical Fundamentals I
	ENGR 202: Electrical fundamentals II	EGR 202: Electrical Fundamentals II
	ENGR 211: Statics	EGR 211: Statics
	ENGR 212: Dynamics	EGR 212: Dynamics
	IE 212: Computational Methods for IE	OSU Only
	MTH 251: Differential Calculus	MTH 251: Differential Calculus
	MTH 252: Integral Calculus	MTH 252: Integral Calculus
	MTH 254: Vector Calculus I	MTH 254: Vector Calculus I
	MTH 256: Applied Differential Equations	MTH 256: Applied Differential Equations
	MTH 341: Linear Algebra I	MTH 253: Series Calculus/Linear Algebra
	PH 211: General Physics with Calculus	PH 211: Physics/Engineers & Scientists
	PH 212: General Physics with Calculus	PH 212: Physics/Engineers & Scientists
	PH 213: General Physics with Calculus	PH 213: Physics/Engineers & Scientists
	ST 314: Intro. to Statistics for Engineers	EGR 214: Introduction Statistics for Engineers
	WR 121Z: Composition I	WR 121Z: Composition I
	WR 227Z: Technical Writing	WR 227Z: Technical Writing

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

x	Major Requirement (OSU)	Chemeketa CC Approved Transfer Courses:
	ME 311: Introduction to Thermal-Fluid Sciences	OSU Only
	ME 312: Thermodynamics	OSU Only
	ME 331: Introductory to Fluid Mechanics	OSU Only
	ME 332: Heat Transfer	OSU Only
	ESE 450: Energy Generation Systems	OSU Only
	ESE 470: Energy Distribution Systems	OSU Only
	ESE 471: Energy Storage Systems	OSU Only
	ESE 355: Energy Regulation	OSU Only
	ESE 330: Modeling & Analysis of Dynamic Systems	OSU Only
	ESE 360: Energy Consumption Analysis	OSU Only
	ESE 430: Feedback Control 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
	ENGR 415: Engineering Capstone Design I	OSU Only
	ENGR 416: Engineering Capstone Design II	OSU Only
	Choose one (Lower Division Tech Elective): ME 444 or ESE 499	OSU Only

Business & Sustainability Courses: All courses must be completed with a C grade or better

x	Major Requirement (OSU)	Chemeketa CC Approved Transfer Courses:
	BA 357: Operations Management	OSU Only
	ENGR 390: Engineering Economy	OSU Only
	ECON 201: Intro. to Microeconomics	EC 201: Introduction to Microeconomics
	SUS 350: Sustainable Communities	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