Lane Community College Transfer Guide
Bachelor of Science in Energy Systems Engineering

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

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/

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	HE 275	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^	COMM 111/112 in major	AAOT completes
x	**Perspective Requirements:** *no more than 2 from 1 department*		
	Cultural Diversity	See Bacc Core guide	AAOT completes
	Literature & the Arts	See Bacc Core guide	AAOT completes
	Social Processes & Institutions	ECON 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	**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	Major Requirement (OSU)	Lane Approved Transfer Courses:
	ENGR 112: Intro. to Engineering Computing	ENGR 102: Engineering Orientation II
	ENGR 201: Electrical Fundamentals I	ENGR 221: Electrical Fundamentals I
	ENGR 211: Statics	ENGR 211: Statics
	ENGR 212: Dynamics	ENGR 212: Dynamics
	MTH 251: Differential Calculus	MTH 251: Calculus I – Differential Calculus
	MTH 252: Integral Calculus	MTH 252: Calculus II – Integral Calculus
	MTH 254: Vector Calculus I	MTH 254: Vector Calculus I
	MTH 256: Applied Differential Equations	MTH 256: Applied Differential Equation
	MTH 341: Linear Algebra I	MTH 253 + 261: Calculus III + Intro. to Linear Algebra
	CH 201: Chemistry for Engineering Majors	CH 221: General Chemistry I
	PH 211: General Physics with Calculus	PH 211: General Physics with Calculus
	PH 212: General Physics with Calculus	PH 212: General Physics with Calculus
	PH 213: General Physics with Calculus	PH 213: General Physics with Calculus
	COMM 111 or COMM 114: Public Speaking or Argument & Critical Discourse	COMM 111 or COMM 112: Fundamentals of Public Speaking or Persuasive Speech
	WR 121: English Composition	WR 121: Academic Composition
	IE 212: Computational Methods for IE	IE 212: Computational Methods for IE
	MIME 101: Introduction to MIME	ENGR 101: Engineering Orientation
	ENGR 202: Electrical fundamentals II	ENGR 202: Electrical Fundamentals II
	ST 314: Intro. to Statistics for Engineers	MTH 265: Statistics for Scientists and Engineers
	CH 202/205: Chem. For Engineering Major + Lab	CH 222: General Chemistry II
	WR 327: Technical Writing	WR 227: Technical Writing
	Choose one (Lower Division Tech Elective): ENGR 213: Strength of Materials or ENGR 248: Engineering Graphics & 3-D Modeling	Choose one (Lower Division Restricted Elective): ENGR 213 or ENGR 115

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

x	Major Requirement (OSU)	Lane 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
	ESE 497: MIME Capstone Design	OSU Only
	ESE 498: MIME Capstone Design	OSU Only
	Choose one (Upper Division Tech Elective): ME 444 or ESE 499	OSU Only

Business & Sustainability Courses:

x	Major Requirement (OSU)	Lane Approved Transfer Courses:
	BA 357: Operations Management	OSU Only
	ENGR 390: Engineering Economy	OSU Only
	ECON 201: Microeconomics	EC 201: Principles of ECON: 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