

Major Offered At:

CORVALLIS

Columbia Gorge Community College

Chemical Engineering

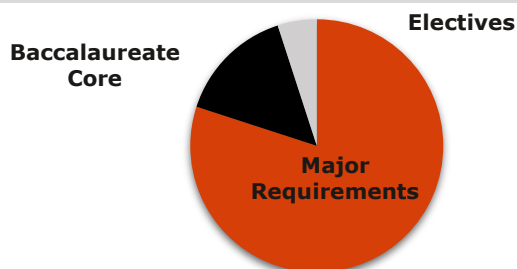
Chemical Engineering is the engineering discipline that focuses on the science and engineering of processes to convert raw materials into valued chemicals and products on a manufacturing scale. You will study heat and fluid flow to see how they are coupled with chemical reactions.

With a Chemical Engineering degree you can work in private or public sectors, including industry, government, and consulting, as well as for continued graduate study in the same or closely related fields.

Common employment industries include

- fibers and polymers,
- food and drink,
- and pulp and paper

Your Bachelor's Degree (BS) in the College of 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.
- Some courses can count towards your major and the Baccalaureate Core. Advisors can assist in selection.
- More info at cbee.oregonstate.edu/che-undergraduate-program

Courses Required for Chemical Engineering Major

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

Chemical Engineering Core Requirements	Columbia Gorge Equivalent Course	OSU Course	Notes
CBEE Orientation	None	CBEE 101	
Engr. Problem Solving & Comput.	None	CBEE 102	
Material Balances & Stoichiometry	None	CBEE 211	Offered Ecampus Winter Term at OSU, or take CBEE 280 summer term.
Energy Balances	None	CBEE 212	Offered Ecampus Spring Term at OSU, or take CBEE 280 summer term.
Process Data Analysis	None	CBEE 213	
Electrical Fundamentals I	None	ENGR 201	
Statics	None	ENGR 211	
Differential Calculus	MTH 251	MTH 251	
Integral Calculus	MTH 252	MTH 252	
Vector Calculus	None	MTH 254	
Applied Differential Equations	None	MTH 256	
Matrix & Power Series	None MTH 253	MTH 264/265	No equivalent for MTH 264, MTH 253 will fulfill MTH 265 requirement.
General Physics (Calculus)	None	PH 211	
General Physics (Calculus)	None	PH 212	
General Physics (Calculus)	None	PH 213	
General Chemistry	None	CH 231/261 CH 232/262 CH 233/263	Lecture & lab for 200-level Chemistry have separate course numbers at OSU
Organic Chemistry	None	CH 331 (LD) CH 332 (LD)	LD) = Lower Division Transfer. If complete series and pass ACS = upper division credit
Technical Writing	WR 227	WR 327 (LD)	

Public Speaking Argument & Critical Discourse	COMM 111	COMM 111 COMM 114	Complete 1(one) course
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Important Notes & Resources

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

- Grade requirements: Grade of C or better in all major coursework.
- See a sample degree plan by searching "Chemical Engineering" at admissions.oregonstate.edu/find-your-major
- Other similar majors to explore: Biological Engineering, Environmental Engineering
- Chemical Engineering students the best time to transfer is **Summer** term, particularly due to the CBEE series courses. Talk with an OSU advisor about your specific timeline.
- CBEE 280 should be taken, after pre-requisites are met, the summer before starting upper division CBEE courses.
- CBEE 211/212 will now be offered E-Campus during winter and spring term to allow for more flexibility.

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 Columbia Gorge courses that fulfill Bacc Core requirements: <https://admissions.oregonstate.edu/baccalaureate-core-course-equivalencies-columbia-gorge-community-college>

SKILLS COURSES	Math Writing I Writing II Speech (Writing III) Fitness	Completed as part of the major WR 121. Required to transfer. Completed as part of the major Completed as part of the major HE 295
PERSPECTIVE COURSES	Biological Science Physical Science Additional Biological or Physical Science Cultural Diversity Literature and the Arts Social Processes and Institutions Western Culture	Choose one course from BaccCore link above Completed as part of major Completed as part of major Choose one course from BaccCore link above Choose one course from BaccCore link above Choose one course from BaccCore link above Choose one course from BaccCore link above
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.

Columbia Gorge Community College	cgcc.edu/advising
OSU Chemical Engineering	CBEE Advisors: cbee.advising@oregonstate.edu
OSU College of Engineering Main Office	askengineering@oregonstate.edu