Major Offered At: CORVALLIS

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

<table>
<thead>
<tr>
<th>Chemical Engineering Core Requirements</th>
<th>LCC Equivalent Course</th>
<th>OSU Course</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBEE Orientation</td>
<td>ENGR 101</td>
<td>CBEE 101</td>
<td></td>
</tr>
<tr>
<td>Engr. Problem Solving &amp; Comput.</td>
<td>ENGR 102</td>
<td>CBEE 102</td>
<td></td>
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<tr>
<td>Material Balances &amp; Stoichiometry</td>
<td>None</td>
<td>CBEE 211</td>
<td>Offered Ecampus Winter Term at OSU, or take CBEE 280 summer term.</td>
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<tr>
<td>Energy Balances</td>
<td>None</td>
<td>CBEE 212</td>
<td>Offered Ecampus Spring Term at OSU, or take CBEE 280 summer term.</td>
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<tr>
<td>Process Data Analysis</td>
<td>None</td>
<td>CBEE 213</td>
<td></td>
</tr>
<tr>
<td>Electrical Fundamentals I</td>
<td>ENGR 221</td>
<td>ENGR 201</td>
<td></td>
</tr>
<tr>
<td>Statics</td>
<td>ENGR 211</td>
<td>ENGR 211</td>
<td></td>
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<tr>
<td>Differential Calculus</td>
<td>MTH 251</td>
<td>MTH 251</td>
<td></td>
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<tr>
<td>Integral Calculus</td>
<td>MTH 252</td>
<td>MTH 252</td>
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<tr>
<td>Vector Calculus</td>
<td>MTH 254</td>
<td>MTH 254</td>
<td></td>
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<tr>
<td>Applied Differential Equations</td>
<td>MTH 256</td>
<td>MTH 256</td>
<td></td>
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<tr>
<td>Matrix &amp; Power Series</td>
<td>MTH 261</td>
<td>MTH 264/265</td>
<td>MTH 261 transfers as general MTH credit, CBEE will honor towards our matric algebra requirement.</td>
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<tr>
<td>General Physics (Calculus)</td>
<td>PH 211</td>
<td>PH 211</td>
<td></td>
</tr>
<tr>
<td>General Physics (Calculus)</td>
<td>PH 212</td>
<td>PH 212</td>
<td></td>
</tr>
<tr>
<td>General Physics (Calculus)</td>
<td>PH 213</td>
<td>PH 213</td>
<td></td>
</tr>
<tr>
<td>General Chemistry</td>
<td>CH 221</td>
<td>CH 231/261</td>
<td>Lecture &amp; lab for 200-level Chemistry have separate course numbers at OSU</td>
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<td></td>
<td>CH 222</td>
<td>CH 232/262</td>
<td></td>
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<tr>
<td></td>
<td>CH 223</td>
<td>CH 233/263</td>
<td></td>
</tr>
<tr>
<td>Organic Chemistry</td>
<td>CH 241</td>
<td>CH 331 (LD)</td>
<td>LD) = Lower Division Transfer. If complete series and pass</td>
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<tr>
<td></td>
<td>CH 242</td>
<td>CH 332 (LD)</td>
<td>ACS = upper division credit</td>
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<tr>
<td></td>
<td>CH 243</td>
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</tbody>
</table>
Complete one course in each Perspective category with no more than two in the same department.

Full listing of Lane courses that fulfill Bacc Core requirements: admissions.oregonstate.edu/baccalaureate-core-course-equivalencies-lane-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
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.

Lane Community College
OSU Chemical Engineering
OSU College of Engineering Main Office

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.
  o 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 Lane courses that fulfill Bacc Core requirements: admissions.oregonstate.edu/baccalaureate-core-course-equivalencies-lane-community-college

Technical Writing
WR 227
WR 327 (LD)
(LD) = Lower Division Transfer
Public Speaking
COMM 111
COMM 111
Argument & Critical Discourse
COMM 112
COMM 114
Complete 1(one) course