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.

Bachelor of Science 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 124 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.
- OSU Catalog has a list of courses required for your major and option: catalog.oregonstate.edu

Courses for this Major offered at Clatsop Community College

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Clatsop CC Course</th>
<th>OSU Course</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Chemistry</td>
<td>CH 221, 222, 223</td>
<td>CH 231/261, 232/262, 233/263</td>
<td>Labs are under a separate course number at OSU.</td>
</tr>
<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>
<td></td>
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<tr>
<td>Introduction to Series</td>
<td>MTH 253</td>
<td>MTH 253</td>
<td></td>
</tr>
<tr>
<td>Physics with Calculus</td>
<td>PH 211, 212, 213</td>
<td>PH 211, 212, 213</td>
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Revised as of December 2019
Important Notes & Resources

Important Notes for the College and Major:
• Grade of C or better are required in all major specific courses.
• See a sample 4 year degree plan at https://cbee.oregonstate.edu/transfer-students
• Other similar majors to explore: Biological and Environmental Engineering
• For 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 major coursework.

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: oregonstate.edu/admissions/transfer.html
• Want to take classes at both OSU and an Oregon community college? Check out the Degree Partnership Program: partnerships.oregonstate.edu/students
• Visit OSU for a campus tour and meet with an advisor; schedule your visit at visitosu.oregonstate.edu/visit-campus

General Education Courses (called Baccalaureate Courses)

• Complete one course in each Perspectives category with no more than two in the same department.
• For full listing of courses that fulfill Baccalaureate Core, please refer to admissions.oregonstate.edu/baccalaureate-core-course-equivalencies-clatsop-community-college

<table>
<thead>
<tr>
<th>SKILL COURSES</th>
<th>Math</th>
<th>Completed as part of major.</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Writing I</td>
<td>WR 121. Required to transfer.</td>
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<tr>
<td></td>
<td>Writing II</td>
<td>WR 227</td>
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<td></td>
<td>Speech (Writing III)</td>
<td>COMM 111 or COMM 112</td>
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<tr>
<td></td>
<td>Fitness</td>
<td>HE 295</td>
</tr>
<tr>
<td>PERSPECTIVE COURSES</td>
<td>Biological Science</td>
<td>Completed as part of major.</td>
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<td></td>
<td>Physical Science</td>
<td>Completed as part of major.</td>
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<tr>
<td></td>
<td>Additional Biological or Physical Science</td>
<td>Completed as part of major.</td>
</tr>
<tr>
<td></td>
<td>Cultural Diversity</td>
<td>Many options, see BaccCore link above.</td>
</tr>
<tr>
<td></td>
<td>Literature and the Arts</td>
<td>Many options, see BaccCore link above.</td>
</tr>
<tr>
<td></td>
<td>Social Processes and</td>
<td>Many options, see BaccCore link above.</td>
</tr>
<tr>
<td></td>
<td>Institutions Western Culture</td>
<td>Many options, see BaccCore link above.</td>
</tr>
<tr>
<td>DPD COURSES</td>
<td>Difference, Power, and Discrimination</td>
<td>Many options, see BaccCore link above.</td>
</tr>
<tr>
<td>SYNTHESIS COURSES</td>
<td>Contemporary Global Issues</td>
<td>Upper division course, take through OSU.</td>
</tr>
<tr>
<td></td>
<td>Science, Technology, and Society</td>
<td>Upper division course, take through OSU.</td>
</tr>
</tbody>
</table>

Advising Contacts

It is important to speak with your OSU academic advisor early on, and often, to ensure correct course selection and sequencing.

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. Also, consider visiting OSU to take a campus tour and meet with an advisor. See visitosu.oregonstate.edu/visit-campus to schedule your personalized visit.

Clatsop Community College Advisor
OSU Chemical Engineering Advisor  CBEE Advisors: cbee.advising@oregonstate.edu
OSU College of Engineering Main Office  askengineering@oregonstate.edu