Mechanical engineers design, develop, and improve devices, products, processes, and systems. As a ME student, you'll take classes in mathematics, science, computer science, and design. As a mechanical engineer, the types of projects you can work on are endless. At Oregon State, ME areas of focus include design, materials, mechanics, dynamics and controls, and thermal-fluid sciences.

Examples of what ME engineers can do:
- Build satellites, rockets, and autonomous vehicles
- Design miniature heat pumps for use in protective clothing
- Develop new materials for medical products and sports equipment
- Design wind turbines, photovoltaic panels, and other renewable energy systems
- Design cook stoves for low-resource environments

Bachelor of Science Degree (BS) in the College of Engineering

- A minimum of 180 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 Lane Community College

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Lane CC Course</th>
<th>OSU Course</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry for Engineers I &amp; lab</td>
<td>CH 221*</td>
<td>CH 231+261 lab</td>
<td>*Fulfills CH 205 lab req.</td>
</tr>
<tr>
<td>Chemistry for Engineers II</td>
<td>CH 222</td>
<td>CH 232 + 262 lab</td>
<td></td>
</tr>
<tr>
<td>Engineering Orientation I &amp; II</td>
<td>ENGR 101 &amp; 102</td>
<td>MIME 101, ENGR 112</td>
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<tr>
<td>Electrical Fundamentals I &amp; II</td>
<td>ENGR 221</td>
<td>ENGR 201</td>
<td></td>
</tr>
<tr>
<td>Statics &amp; Dynamics</td>
<td>ENGR 211, 212</td>
<td>ENGR 211, 212</td>
<td></td>
</tr>
<tr>
<td>Strength of Materials</td>
<td>ENGR 213</td>
<td>ENGR 213</td>
<td></td>
</tr>
<tr>
<td>Solid Works</td>
<td>ENGR 115</td>
<td>ENGR 248</td>
<td></td>
</tr>
<tr>
<td>Calculus Series</td>
<td>MTH 251, 252, 254</td>
<td>MTH 251, 252, 254</td>
<td></td>
</tr>
<tr>
<td>Differential Equations</td>
<td>MTH 256</td>
<td>MTH 256</td>
<td></td>
</tr>
<tr>
<td>Power Series OR Linear Algebra</td>
<td>MTH 253*+ MTH 261</td>
<td>MTH 341</td>
<td>MTH 341 @ OSU preferred</td>
</tr>
<tr>
<td>Calc-Based Physics I, II, III</td>
<td>PH 211, 212, 213</td>
<td>PH 211, 212, 213</td>
<td></td>
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<tr>
<td>Statistics for Engineers</td>
<td>MTH 265</td>
<td>ST 314</td>
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</tbody>
</table>
Important Notes & Resources

Important Notes for the College and Major:

- All major requirements must be taken for a letter grade. Min grade of C or better is required.
- See a sample degree plan at https://mime.oregonstate.edu/undergrad/advising/acadplan
- ME majors can participate in two six-month paid internships with MECOP: https://www.mecopinc.org/
- A dual major in Manufacturing Product Development is also possible.
- Minor information: https://mime.oregonstate.edu/academics/undergrad/minors
- It is important to speak with your OSU ME advisor early on, and often, to ensure correct course selection and sequencing.

Resources and OSU Information:

- Students do not have to complete a transfer degree in order to transfer to OSU. However, 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
- Students can transfer any term. Contact your OSU ME advisor at least two terms before you intend to start at OSU. Submit an official transcript from your community college at that time, but be sure to order a final copy that shows all your grades once they are recorded.

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-lane-community-college

<table>
<thead>
<tr>
<th>SKILL COURSES</th>
<th>Math</th>
<th>WR 121. Required to transfer.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Writing I</td>
<td>WR 227</td>
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<tr>
<td></td>
<td>Writing II</td>
<td>COMM 111 or COMM 112</td>
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<tr>
<td></td>
<td>Speech (Writing III)</td>
<td>HE 295</td>
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<tr>
<td></td>
<td>Fitness</td>
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</tr>
</tbody>
</table>

| PERSPECTIVE COURSES    | Biological Science         | Completed as part of major.   |
|                        | Physical Science           |                               |
|                        | Additional Biological or Physical Science | Completed as part of major. |
|                        | Cultural Diversity         |                               |
|                        | Literature and the Arts    |                               |
|                        | Social Processes and Institutions | Many options, see BaccCore link above. |
|                        | Western Culture            | Many options, see BaccCore link above. |

| DPD COURSES            | Difference, Power, and Discrimination | Many options, see BaccCore link above. |

| SYNTHESIS COURSES      | Contemporary Global Issues     | Upper division course, take through OSU. |
|                        | Science, Technology, and Society | 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. 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.

<table>
<thead>
<tr>
<th>Lane Community College Advisor</th>
<th>OSU Mechanical Engineering Advisor</th>
<th><a href="mailto:cassie.pitkin@oregonstate.edu">cassie.pitkin@oregonstate.edu</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>OSU Mechanical Engineering Advisor</td>
<td>OSU College of Engineering Main Office</td>
<td><a href="mailto:askengineering@oregonstate.edu">askengineering@oregonstate.edu</a></td>
</tr>
</tbody>
</table>