

# TRANSFER GUIDE FOR OREGON STATE UNIVERSITY

Major Offered At:

**CORVALLIS**

**Clackamas  
Community College**

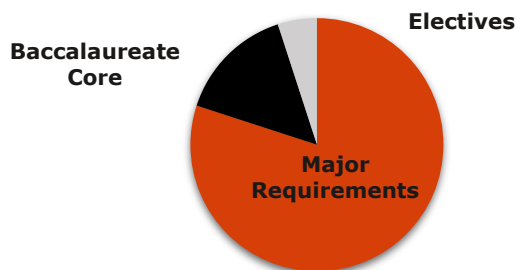
## Mechanical Engineering

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, & autonomous vehicles
- Design miniature heat pumps for use in protective clothing
- Develop new materials for medical products & sports equipment
- Design wind turbines, photovoltaic panels, & other renewable energy systems
- Design cook stoves for low resource environments

## Your Bachelor's 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 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 [mime.oregonstate.edu/academics/undergrad/me](http://mime.oregonstate.edu/academics/undergrad/me)

## Courses Required for Mechanical Engineering Major

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

| Mechanical Engineering Core Requirements | Clackamas Equivalent Course | OSU Course   | Notes                                    |
|--|-----------------------------|--------------|--|
| Intro to Engineering Computing           | ENGR 112                    | ENGR 112     |  |
| Electrical Fundamentals I                | ENGR 221                    | ENGR 201     |  |
| Electrical Fundamentals II               | ENGR 222                    | ENGR 202     |  |
| Statics                                  | ENGR 211                    | ENGR 211     |  |
| Dynamics                                 | ENGR 212                    | ENGR 212     |  |
| Strength of Materials                    | ENGR 213                    | ENGR 213     |  |
| Engr. Graphics & 3-D Modeling            | ENGR 115                    | ENGR 248     |  |
| Micro or Macro Economics                 | EC 201 or EC 202            | ECON 201/202 | Complete 1 (one) course                  |
| Intro to MIME                            | ENGR 111                    | MIME 101     |  |
| Intro to Manufacturing Processes         | MFG 111                     | ME 250       |  |
| Differential Calculus                    | MTH 251                     | MTH 251      |  |
| Integral Calculus                        | MTH 252                     | MTH 252      |  |
| Vector Calculus I                        | MTH 254                     | MTH 254      |  |
| Applied Differential Equations           | MTH 256                     | MTH 256      |  |
| Linear Algebra I                         | MTH 253                     | MTH 341      | Transfers in as MTH 306, approved for ME |
| Intro to Statistics for Engineers        | --                          | ST 314 (LD)  | (LD) = Lower Division Transfer           |
| General Physics (Calculus)               | PH 211                      | PH 211       |  |
| General Physics (Calculus)               | PH 212                      | PH 212       |  |
| General Physics (Calculus)               | PH 213                      | PH 213       |  |
| Chemistry for Engineers                  | CH 221                      | CH 201       | Transfers in as CH 231 + 261             |
| Chemistry for Engineers                  | CH 222                      | CH 202       | Transfers in as CH 232 + 262             |
| Chemistry for Engineers lab              | CH 222                      | CH 205       | Transfers in as CH 232 + 262             |

## Courses Required for Mechanical Engineering Major, continued

| Mechanical Engineering Core Requirements | Clackamas Equivalent Course | OSU Course  | Notes                          |
|--|-----------------------------|-------------|--------------------------------|
| Public Speaking                          | COMM 111                    | COMM 111    | Complete 1(one) course         |
| Argument & Critical Discourse            | COMM 112                    | COMM 114    |                                |
| Technical Writing                        | WR 227                      | WR 327 (LD) | (LD) = Lower Division Transfer |
| English Comp                             | WR 121                      | WR 121      |                                |

## Important Notes & Resources

### Important Notes for the College of Engineering and Mechanical Engineering Major:

- Grade requirements: Grade of C or better in all major coursework.
- See a sample degree plan by searching "Mechanical Engineering" at [admissions.oregonstate.edu/find-your-major](https://admissions.oregonstate.edu/find-your-major)
- A dual major in Manufacturing Engineering (Product Development option) is also possible
- ME students: You can transfer **ANY** term. Talk with an OSU IE advisor **TWO TERMS** before you intent to transfer to discuss your specific timeline.
- ME majors can participate in two six-month paid internships with MECOP: [mecopinc.org](https://mecopinc.org)

### 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](https://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](https://partnerships.oregonstate.edu/students)
- Schedule your OSU campus tour and meet with an advisor at [visitosu.oregonstate.edu/visit-campus](https://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 Clackamas courses that fulfill Bacc Core requirements: [clackamas.edu/academics/departments-programs](https://clackamas.edu/academics/departments-programs)

|                            |  |  |
|----------------------------|--|--|
| <b>SKILLS COURSES</b>      | Math<br>Writing I<br>Writing II<br>Speech (Writing III)<br>Fitness   | Completed as part of the major<br>WR 121. Required to transfer.<br>Completed as part of the major<br>Completed as part of the major<br>HPE 295   |
| <b>PERSPECTIVE COURSES</b> | Biological Science<br>Physical Science<br>Additional Biological or Physical Science<br>Cultural Diversity<br>Literature and the Arts<br>Social Processes and Institutions<br>Western Culture | Choose one course from BaccCore link above<br>Completed as part of the major<br>Completed as part of the major<br>Choose one course from BaccCore link above<br>Choose one course from BaccCore link above<br>Choose one course from BaccCore link above<br>Choose one course from BaccCore link above |
| <b>DPD COURSE</b>          | Difference, Power, & Discrimination  | Choose one course from BaccCore link above   |
| <b>SYNTHESIS COURSES</b>   | Contemporary Global Issues<br>Science, Technology, & Society   | Upper division course, take through OSU<br>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](https://visitosu.oregonstate.edu/visit-campus) to schedule your personalized visit.

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|---|---|
| <b>Clackamas Community College</b>            | <a href="https://clackamas.edu/academics/departments-programs">clackamas.edu/academics/departments-programs</a> |
| <b>OSU Mechanical Engineering</b>             | MIME Advisor, <a href="mailto:MIME.advising@oregonstate.edu">MIME.advising@oregonstate.edu</a>                  |
| <b>OSU College of Engineering Main Office</b> | <a href="mailto:askengineering@oregonstate.edu">askengineering@oregonstate.edu</a>                              |