

# TRANSFER GUIDE FOR OREGON STATE UNIVERSITY

Major Offered At:

**CORVALLIS**

**Chemeketa  
Community College**

## Manufacturing Engineering – Product Development Option (MfgE-PD)

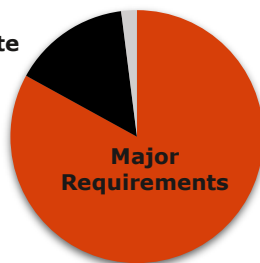
Manufacturing engineers design processes and facilities for making the many products that we take for granted. They choose the best way to make a product — and develop the necessary machining tools, automation procedures, and quality control workflows. Oregon State’s MFGE-PD program is closely aligned with industry. Students can choose a dual major with mechanical engineering.

Examples of what MFGE engineers can do:

- Designing precision machines for efficient, high quality smartphone manufacturing
- Developing new alloys using metal powders for 3D printing of nuclear reactor components
- Designing silicon chip manufacturing processes to reduce cost and improve product quality
- Implementing laser cutting and welding for producing rock-climbing equipment

## Your Bachelor’s Degree (BS) in the College of Engineering

Baccalaureate  
Core



Electives

- 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.
- Other options available: Manufacturing Systems (not required)
- More info at [mime.oregonstate.edu/industrial-engineering-undergraduate-program](http://mime.oregonstate.edu/industrial-engineering-undergraduate-program)

## Courses Required for Manufacturing Engineering Major, Prod. Dev. option

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

| Manufacturing Engr.- Prod. Dev. Core Requirements | Chemeketa Equivalent Course | OSU Course   | Notes                               |
|---|-----------------------------|--------------|-------------------------------------|
| The OSU Engineering Student                       | GE 101                      | ENGR 100     |                                     |
| Design ENGR & Problem Solving                     | GE 102                      | ENGR 102     |                                     |
| Compt. & Algorithmic Thinking                     | GE 103                      | ENGR 103     |                                     |
| Electrical Fundamentals I                         | EGR 201                     | ENGR 201     |                                     |
| Electrical Fundamentals I                         | EGR 202                     | ENGR 202     |                                     |
| Statics   | EGR 211                     | ENGR 211     |                                     |
| Dynamics  | EGR 212                     | ENGR 212     |                                     |
| Strength of Materials                             | EGR 213                     | ENGR 213     |                                     |
| Engr. Graphics & 3-D Modeling                     | EGR 248 or DRF 210          | ENGR 248     |                                     |
| Micro or Macro Economics                          | EC 201 or EC 202            | ECON 201/202 | Choose 1 (one) course               |
| 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                                    |                             | MTH 341      |                                     |
| Intro to Statistics for Engineers                 | EGR 214                     | 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 201                      | CH 201       |                                     |
| Chemistry for Engineers                           | CH 202                      | CH 202       |                                     |
| Chemistry for Engineers lab                       | CH 202*                     | CH 205       | *lab included in Chemeketa’s CH 202 |
| Public Speaking                                   | COMM 111                    | COMM 111     |                                     |



**Oregon State  
University**

|                                 |          |             |                                |
|---------------------------------|----------|-------------|--------------------------------|
| Argument and Critical Discourse | COMM 112 | COMM 114    |                                |
| Technical Writing               | WR 227   | WR 327 (LD) | (LD) = Lower Division Transfer |

## Important Notes & Resources

### Important Notes for the College of Engineering and Manufacturing Engineering Major, Product Development Option:

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

## 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 Chemeketa courses that fulfill Bacc Core requirements: [admissions.oregonstate.edu/baccalaureate-core-course-equivalencies-chemeketa-community-college](https://admissions.oregonstate.edu/baccalaureate-core-course-equivalencies-chemeketa-community-college)

|                            |  |  |
|----------------------------|--|--|
| <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>Chemeketa Community College</b> | <a href="https://chemeketa.edu/students/advising">chemeketa.edu/students/advising</a> |
|------------------------------------|---|

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|---|--|
| <b>OSU MfgE- PD 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>             |