

TRANSFER GUIDE FOR OREGON STATE UNIVERSITY

Major Offered At:

CORVALLIS

**Chemeketa
Community College**

Manufacturing Engineering –Systems Option (MfgE-SYS)

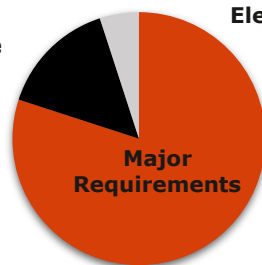
Manufacturing engineers design processes and facilities for making the many products that we take for granted. They choose the best way to make a product — and develop the necessary machining tools, automation procedures, and quality control workflows. Oregon State’s MFGE-SYS program is closely aligned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

Examples of what MFGE engineers can do:

- Developing new sensor technologies for energy efficient freeze drying of ice cream
- Designing silicon chip manufacturing processes to reduce cost and improve product quality
- Implementing laser cutting and welding for producing rock-climbing equipment
- Identifying the most cost-effective facility layout for composite aircraft manufacturing

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

Baccalaureate
Core



Electives

Major
Requirements

- 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: Product Development (not required)
- More info at mime.oregonstate.edu/manufacturing-engineering-undergraduate-program

Courses Required for Manufacturing Engineering Major, Systems option

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

Manufacturing Engr.- Systems 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	
Comp, Methods for Industrial Engr.		IE 212	Must be taken at OSU
Quantitative Analysis of Industrial Engineering		IE 255	Must be taken at OSU
Electrical Fundamentals I	EGR 201	ENGR 201	
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	
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 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	*included lab component



**Oregon State
University**

Courses Required for Manufacturing Engr. Major - Systems option, Cont.

Manufacturing Engr.- Systems Core Requirements	Chemeketa Equivalent Course	OSU Course	Notes
Public Speaking	COMM 111	COMM 111	Choose 1(one) course
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, Systems 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
- A dual major in Mechanical Engineering is also possible
- MfgE-SYS students: You can transfer **ANY** term. Talk with an OSU advisor **TWO TERMS** before you intent to transfer to discuss your specific timeline.
- MfgE-SYS can participate in two six-month paid internships with MECOP: 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
- 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 Chemeketa courses that fulfill Bacc Core requirements: admissions.oregonstate.edu/baccalaureate-core-course-equivalencies-chemeketa-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 HPE 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 the major Completed as part of the 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.

Chemeketa Community College	chemeketa.edu/students/advising
OSU MfgE- Systems Engineering	MIME Advisor, MIME.advising@oregonstate.edu
OSU College of Engineering Main Office	askengineering@oregonstate.edu