MECHANICAL ENGINEERING at PORTLAND STATE UNIVERSITY

The **Mechanical and Materials Engineering** Department at Portland State University offers a Bachelor of Science in Mechanical Engineering (BSME).

Our undergraduate program is accredited by ABET and is focused on Mechanical Engineering design with application in the thermal and fluid sciences and in

machinery and mechanical systems. This four year major prepares students for entry-level positions in Mechanical Engineering (ME).

Students apply to the ME major in the Maseeh College once all required lower division coursework has been nearly completed in order to take upper division (300/400– level) engineering courses. This is a separate application from the PSU Admission Application. Details of admission to the ME major including application deadlines and the application can be found at: http://www.pdx.edu/mme/how-to-apply

General education: Transfer students enter into PSU's University Studies program based on the quantity of credits completed and must also complete specific lower division Arts and Letters/Social Science (A&L/SS) Requirements. These requirements for ME majors include WR 121 and a Public Speaking class. Details of the A&L/SS requirements, can be found on the handout "Maseeh College of Engineering and

Computer Science Arts & Letters/Social Science Requirement" (look at the general education link on this page: http://www.pdx.edu/cecs/transferring-credits).

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Writing 327 (upper division Technical Report Writing) will be taken at PSU, therefore ME majors are not required to take lower-division WR 227 (Introductory Technical Writing).

TIPS:

- Apply for admission to <u>PSU</u> by the priority admission deadlines (December 1 for the following fall)
- Apply to the <u>BSME program</u> once required lower division courses are nearly completed, (more info: pdx.edu/mme/how-to-apply) following MME Department deadlines; lower division courses may be taken at PSU or at community college
- Transferring to PSU in the fall term provides a smooth beginning as many classes are "sequenced" and
 may only begin in the fall term; beginning in a winter or spring term may limit the classes from which you
 can select
- In order to apply for PSU scholarships, students must have already applied to PSU. Scholarship application due date = Feb. 1 for the next academic year that begins in September (pdx.edu/scholarships)
- All new PSU students must complete Orientation before registering; students must have been admitted to PSU before they can sign up for Orientation (pdx.edu/orientation/)
- Advising is available to community college students planning to transfer to PSU (contact the Maseeh College Student Services Office: 503.725.4631; advisor@cecs.pdx.edu)

MECHANICAL ENGINEERING course equivalencies

Required PSU MATH courses:	PCC:	Clackamas:	Chemeketa:	MHCC:
Math 251/Calculus 1	Math 251	Math 251	Math 251	Math 251
Math 252/Calculus 2	Math 252	Math 252	Math 252	Math 252
Math 261/Linear Algebra	Math 261	Math 261		Math 261
Math 254/Calculus 4	Math 254	Math 254	Math 254	Math 254
Math 256/Differential Equations	Math 256	Math 256	Math 256	Math 256
Required PSU SCIENCE courses:	PCC:	Clackamas:	Chemeketa:	MHCC:
CH 221&227 and CH 222&228*/General Chemistry with labs	CH 221 & 222*	CH 221 & 222*	CH 221 & 222*	CH 221 & CH 222*
PH 211 or 221 & 214; PH 212 or 222 & 215; PH 213 or 223 & 216/General Physics (Calculus) with labs	PH 211, 213, 212	PH 211, 212, 213	PH 211, 213, 212	PH 211, 213, 212
Required PSU 100— level ENGINEERING courses:	PCC:	Clackamas:	Chemeketa:	MHCC:
Required PSU 100— level ENGINEERING courses: ME 120, 121, 122#	PCC: ENGR 101 & 102*	Clackamas: ENGR 111, 112, and 115*	Chemeketa: GE 101+GE 102+EGR 248*	MHCC: GE 101+GE102+ GE 115 or ENGR 248*
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ME 120, 121, 122#	ENGR 101 & 102*	ENGR 111, 112, and 115*	GE 101+GE 102+EGR 248*	GE 101+GE102+ GE 115 or ENGR 248*
ME 120, 121, 122# Required PSU 200– level ENGINEERING courses:	ENGR 101 & 102* PCC:	ENGR 111, 112, and 115* Clackamas:	GE 101+GE 102+EGR 248* Chemeketa:	GE 101+GE102+ GE 115 or ENGR 248* MHCC:
ME 120, 121, 122# Required PSU 200— level ENGINEERING courses: EAS 211/Statics	ENGR 101 & 102* PCC: ENGR 211	ENGR 111, 112, and 115* Clackamas: ENGR 211	GE 101+GE 102+EGR 248* Chemeketa: EGR 211	GE 101+GE102+ GE 115 or ENGR 248* MHCC: ENGR 211
ME 120, 121, 122# Required PSU 200— level ENGINEERING courses: EAS 211/Statics EAS 212/Strength of Materials	PCC: ENGR 211 ENGR 213	ENGR 111, 112, and 115* Clackamas: ENGR 211 ENGR 213	GE 101+GE 102+EGR 248* Chemeketa: EGR 211 EGR 213	GE 101+GE102+ GE 115 or ENGR 248* MHCC: ENGR 211 ENGR 213
ME 120, 121, 122# Required PSU 200— level ENGINEERING courses: EAS 211/Statics EAS 212/Strength of Materials EAS 215/Dynamics	PCC: ENGR 211 ENGR 213 ENGR 212	ENGR 111, 112, and 115* Clackamas: ENGR 211 ENGR 213 ENGR 212	GE 101+GE 102+EGR 248* Chemeketa: EGR 211 EGR 213	GE 101+GE102+ GE 115 or ENGR 248* MHCC: ENGR 211 ENGR 213



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*All courses listed above are required for the ME degree at PSU. Four of those courses do not have to be completed before admission to the upper division program: CH 222/228 General Chemistry, the Engineering Graphics class, ME 213 Properties of Materials and ME 241 Manufacturing Processes. Although these courses are not required for department admission, they are required for graduation, and you are advised to take them in the order they appear on the blue sheet/course plan. Delaying them could result in prerequisite deficiencies that may slow your progress to graduation in the senior year.

#ME 120-122 or the community college equivalent must be completed entirely at either PSU or the community college. These sequences cannot be mixed together.