

PRODUCT DEVELOPMENT OPTION

This option is offered within the following major(s):

- Manufacturing Engineering - College of Engineering (<http://catalog.oregonstate.edu/college-departments/engineering/school-mechanical-industrial-manufacturing-engineering/manufacturing-engineering-bs-hbs>)

This option, taken in conjunction with the BS in Manufacturing Engineering, will prepare students for careers in manufacturing industry that focus on the development of new products and equipment.

Code	Title	Hours
Required		
ENGR 202	ELECTRICAL FUNDAMENTALS II	3
ENGR 391	ENGINEERING ECONOMICS AND PROJECT MANAGEMENT	3
MATS 322/ENGR 322	MECHANICAL PROPERTIES OF MATERIALS	3
ME 312/NSE 312	THERMODYNAMICS	4
ME 316	MECHANICS OF MATERIALS	3
ME 317	INTERMEDIATE DYNAMICS	4
ME 331/NSE 331	INTRODUCTORY FLUID MECHANICS	4
ME 373	MECHANICAL ENGINEERING METHODS	3
ME 383	MECHANICAL COMPONENT DESIGN	4
Restricted Elective		
Select 4 credits from either of the following groups of restricted electives:		4
Systems Electives:		
IE 355	STATISTICAL QUALITY CONTROL	
IE 356	EXPERIMENTAL DESIGN FOR INDUSTRIAL PROCESSES	
IE 366	WORK SYSTEMS ENGINEERING	
IE 367	PRODUCTION PLANNING AND CONTROL	
IE 368	FACILITY DESIGN AND OPERATIONS MANAGEMENT	
IE 411	VISUAL PROGRAMMING FOR INDUSTRIAL APPLICATIONS	
IE 412	INFORMATION SYSTEMS ENGINEERING	
IE 415	SIMULATION AND DECISION SUPPORT SYSTEMS	
IE 418	TELECOMMUNICATION CONCEPTS	
IE 419	WIRELESS NETWORKS	
IE 425	INDUSTRIAL SYSTEMS OPTIMIZATION	
IE 426	STOCHASTIC MODELS OF INDUSTRIAL SYSTEMS	
IE 470	MANAGEMENT SYSTEMS ENGINEERING	
IE 471	PROJECT MANAGEMENT IN ENGINEERING	
IE 475	ADVANCED MANUFACTURING COSTING TECHNIQUES	
Process Electives:		
CHE 445	POLYMER ENGINEERING AND SCIENCE	
ECE 418	SEMICONDUCTOR PROCESSING	
MATS 322/ENGR 322	MECHANICAL PROPERTIES OF MATERIALS	

ME 312/NSE 312	THERMODYNAMICS
ME 316	MECHANICS OF MATERIALS
ME 331/NSE 331	INTRODUCTORY FLUID MECHANICS
ME 383	MECHANICAL COMPONENT DESIGN
ME 480	MATERIALS SELECTION
ME 499	SPECIAL TOPICS
MFGE 438	COMPOSITES MANUFACTURING
MFGE 499	SPECIAL TOPICS
MFGE 531	MICROMANUFACTURING
ROB 421	APPLIED ROBOTICS

Total Hours 35

Option Code: 833