

MANUFACTURING SYSTEMS ENGINEERING GRADUATE OPTION

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

- Industrial Engineering - College of Engineering (<http://catalog.oregonstate.edu/college-departments/engineering/school-mechanical-industrial-manufacturing-engineering/industrial-engineering-meng-ms-phd-mais>)

This graduate option within the Industrial Engineering major distinguishes an area of specialization within the broader discipline of industrial engineering. Manufacturing Systems Engineering (MSE) focuses on the development of reliable, economically competitive, and environmentally benign manufacturing processes and systems. Topical areas include operations research, computer integrated manufacturing, environmentally responsible manufacturing, simulation, and statistical quality engineering.

Code	Title	Hours
Required Courses		
IE 521	INDUSTRIAL SYSTEMS OPTIMIZATION I	3
or IE 522	INDUSTRIAL SYSTEMS OPTIMIZATION II	
IE 563	ADVANCED PRODUCTION PLANNING AND CONTROL	3
Select 6 or more credits of the following:		6
IE 512	INFORMATION SYSTEMS ENGINEERING	
IE 515	SIMULATION AND DECISION SUPPORT SYSTEMS	
IE 545	HUMAN FACTORS ENGINEERING	
IE 564	DESIGN AND SCHEDULING OF CELLULAR MANUFACTURING SYSTEMS	
ME 515	RISK AND RELIABILITY ANALYSIS IN ENGINEERING DESIGN	
ME 516	MODELING AND ANALYSIS OF COMPLEX SYSTEMS	
ME 517	OPTIMIZATION IN DESIGN	
MFGE 536	LEAN MANUFACTURING SYSTEMS ENGINEERING	
Total Hours		12

Option Code: 3196