MANUFACTURING ENGINEERING

Requirements

The goal of this minor is to provide interested students with an opportunity to broaden their knowledge of the methods, processes and technologies related to the analysis and design of manufacturing systems.

At the completion of this minor, students will be able to:

1. Describe methods, processes and /or technologies used in manufacturing.
2. Identify, formulate, and solve problems in the area of manufacturing.
3. Analyze and design manufacturing technologies and systems within reasonable constraints such as economic, manufacturability, sustainability and environmental by applying appropriate theories and methods.
4. Communicate effectively about manufacturing engineering problem solutions, technologies, and system designs.
5. Describe interactions between humans and systems in the workplace.

Requirements

To earn the Minor in Manufacturing Engineering, a student must complete 28 credit hours according to the guidelines shown below.

Code	Title	Hours
Core Course		
ME 317	Design for Manufacturing	4
or ENGD 260	Product Design Studio	
Manufacturing Electives		
Select 16 - 20 credit hours (4-5 courses) from the following list of manufacturing elective courses:		16-20
EMGT 330	Introduction to Engineering Management	
EMGT E524	Production/Operations Management	
EMGT E445	Quality Methods	
EMGT E446	Statistical Methods in Six Sigma	
EMGT E589	Manufacturing Systems	
ME 412	Lean Manufacturing	
ME 435	Robotics Engineering	
ME 517	Mechanics of Metal Forming	
ME 520	Computer-Aided Design & Manufacturing (CAD/CAM)	
EMGT E540	Human Factors	
EMGT E541	Work Analysis and Design	
EM 304	Advanced CAD | Professional Certification	
EM 305	Advanced CAD | Design Applications	
HSSA Electives		
Select 4 - 8 credit hours (1-2 courses) from the following HSSA courses:		4-8
ECON S151	Introduction to Microeconomics	
ECON S152	Introduction to Macroeconomics	
PSYC S100	Introduction to Psychology	
PSYC S220	Social Psychology	
ECON S253	Managerial Economics	
ECON S352	Corporate Finance	