MANUFACTURING, CERTIFICATE

The industry employees or students who complete this manufacturing certificate program will be capable to (a) demonstrate knowledge of fundamental concepts of manufacturing, (b) use skills related to manufacturing engineering, (c) communicate effectively with manufacturers and manufacturing engineers, (d) generate solutions to problems that may arise in manufacturing engineering, (e) use skills for materials selection for manufacturing, and (f) conduct research in the field of manufacturing.

Admission Requirements

Admission to this program is limited to students holding a:

- B.S. in Mechanical Engineering, or
- B.S. in Aerospace Engineering, or
- B.S. in a closely related field

Code	Title	Hours
Select 15 credits from among the following:		**15**
MECE 544	Robot Design, Control & Application	3
MECE 585	3D Printing and Additive Manufacturing	3
MECE 563	Computer Aided Design & Manufacturing	3
MECE 671	Fundamentals and Applications of Micro Electro	3
MECE 627	Advanced Materials & Manufacturing Processes	3
MECE 694	Deformation and Failure of Polymers and Soft Materials	3
MECE 666	Analysis of Manufacturing Systems	3
MECE 661	Failure Analysis of Mechanical Systems	3
MECE 625	Analysis of Mechanical Components	3
MECE 682	Fundamentals of Composite Processing and Mechanics	3

Note:

Students may also take **MECE 696 Special Topics in Mechanical Engineering (1-4 credits)** to meet requirements, when a topic relevant to manufacturing is offered. Students wishing to do so need the approval of the program prior to enrolling in MECE 696. MECE 696 can be taken multiple times, for different topics.