



Professional Concentration in Manufacturing Engineering

The professional concentration in Manufacturing Engineering provides engineering students the opportunity to expand their knowledge of manufacturing-related topics such as production management, statistical quality control, and manufacturing processes. The requirements for the professional concentration in Manufacturing Engineering are listed below. Interested students must fill out an application form available from the MAE Department office. Changes to the Manufacturing Engineering concentration requirements must be approved by the MAE department chair or executive officer. Students successfully completing the following requirements receive a Dean's Certificate in Manufacturing Engineering.

Required Courses

ES260 Materials Science
STAT383 Applied Statistics I **or**
MA330 Advanced Engineering Mathematics
OM331 Operations and Supply Chain Management
ME390 Manufacturing Processes
OM351 Quality Management and Lean Enterprise

Elective Courses – (three required)

ME385 Design of Electromechanical Systems
ME444 Computer-aided Engineering
AE/ME457 Composite Mechanics and Design
ME492 Welding Metallurgy
ES351 Materials Characterization Laboratory
ES357 Microelectronic Fabrication
ES360 Materials Science II
ES365 Polymer Materials
ES405 Design of Experiments & Analysis of Data

Other courses may be designated by the MAE department chair or executive officer. A complete list of courses is available in the MAE department office.