TMFG 5133 Automated Manufacturing Systems  
3 Credit Hours. 0.2 Lecture Hours. 0.3 Lab Hours.  
Computer Integrated Manufacturing (CIM) concentrating on advanced computer numerical control machining, and the interface of robotics systems in manufacturing. Experiences using programming techniques, production equipment simulations and rapid prototyping are emphasized. Prerequisite(s): ENGR 1133. Cross Listing(s): TMFG 5133G.

TMFG 5133G Automated Manufacturing Systems  
3 Credit Hours. 3 Lecture Hours. 0 Lab Hours.  
Computer Integrated Manufacturing (CIM) concentrating on advanced computer numerical control machining, and the interface of robotics systems in manufacturing. Experiences using programming techniques, production equipment simulations and rapid prototyping are emphasized. Graduate students will be given an extra assignment determined by the instructor that undergraduates will not be required to do. Prerequisite(s): ENGR 1133. Cross Listing(s): TMFG 5133.

TMFG 5230 International Manufacturing  
3 Credit Hours. 3 Lecture Hours. 0 Lab Hours.  
A study of opportunities, issues, and problems involved in manufacturing products for import and export, and in dealing with global suppliers of materials, parts, and assemblies. Focus is on those aspects unique to the management of technical operations, such as ISO (International Organization for Standardization) quality standards, scheduling, and technology transfer. Additional topics may include transportation, customs documentation, global trends and trade policies, and cultural issues. Cross Listing(s): TMFG 5230G.

TMFG 5230G International Manufacturing  
3 Credit Hours. 3 Lecture Hours. 0 Lab Hours.  
A study of opportunities, issues, and problems involved in manufacturing products for import and export, and in dealing with global suppliers of materials, parts, and assemblies. Focus is on those aspects unique to the management of technical operations, such as ISO (International Organization for Standardization) quality standards, scheduling, and technology transfer. Additional topics may include transportation, customs documentation, global trends and trade policies, and cultural issues. Graduate students will be given an extra assignment determined by the instructor that undergraduates will not be required to do. Cross Listing(s): TMFG 5230.

TMFG 5233 Manufacturing Applications in Information Technology  
3 Credit Hours. 3 Lecture Hours. 0 Lab Hours.  
A senior level seminar emphasizing the application of commercially available software to solve manufacturing production problems. Topics include Theory of Constraints, Failure Mode and Effect Analysis, Flow Charting, and Project Management. Cross Listing(s): TMFG 5233G.

TMFG 5233G Manufacturing Applications in Information Technology  
3 Credit Hours. 3 Lecture Hours. 0 Lab Hours.  
A senior level seminar emphasizing the application of commercially available software to solve manufacturing production problems. Topics include Theory of Constraints, Failure Mode and Effect Analysis, Flow Charting, and Project Management. Graduate students will be given an extra assignment determined by the instructor that undergraduates will not be required to do. Cross Listing(s): TMFG 5233.