MANUFACTURING ENGINEERING TECHNOLOGY, DESIGN & TECHNICAL GRAPHICS OPTION (BACHELOR OF SCIENCE, B.S.)

Overview

Manufacturing Engineering Technology is the profession in which an understanding and application of a broad range of technologies is necessary for production and control of manufacturing processes. Manufacturing includes methods of production of industrial commodities and consumer products. The manufacturing professional must be able to plan, design, and implement sequence of operations using current technologies to produce products at competitive prices. Four-year B.S. degree graduates qualify for jobs related to production, productivity improvement, and process design. They also qualify for supervisory and managerial positions in plant engineering.

The Design & Technical Graphics option in the B.S. MET program focuses on the computer applications, especially computer aided drafting and design, in industries. It is created to meet the business and industrial trend of more and more computer applications in production.

Program Educational Objectives (BS MET)

1. Possess the general knowledge of manufacturing industry such as concepts, terminologies, basic and standard problem-solving techniques.
2. Demonstrate the ability to analyze and implement production systems in a manufacturing setting.
3. Function effectively in a group environment in the industrial workplace through demonstration of technical and communication skills.
4. Understand professional, ethical, and social responsibilities.
5. Possess strong background knowledge and skills in computer aided drafting and design in industries.

Requirements

Students who choose this bachelor degree program will have no more than 6 years from admission or subsequent declaration to meet the requirements listed below. If certification, accreditation or statutory requirements change and additional requirements become effective during this time, the new requirements take precedence.

Code	Title	Credit Hours
General Studies		
Students must complete General Studies courses (http://catalog.missouriwestern.edu/undergraduate/university-information/academic-standards-regulations/baccalaureate-degree/#bachelor-general-studies)		42
Major Requirements		
ART 100	Introduction to Art	3
ART 110	Beginning Drawing I	3
ART 120	Two-Dimensional Design	3
CET 270	Electrical Installations	3
CET 308	Analysis of Structures	3
CET 358	Structural Steel and Wood Design	3
EGT 102	Programming for Engineering Technology	3
EGT 202	Surveying I	3
EGT 205	Computer-Aided Drafting I	3
EGT 215	Computer-Aided Drafting II	3
EGT 220	Engineering Materials	3
EGT 260	Statics	3
EGT 325	Machine Parts and Mechanical Design	3
EGT 345	3D Modeling and Design Processes	3
EGT 350	Technical Report Writing	3
EGT 356	Fluids and Hydraulics	3
EGT 370	Financial Aspects of Engineering Projects	2
EGT 490	Engineering Technology Internship	4
MAT 116	College Algebra	3
MAT 119	Trigonometry	2
MAT 147	Applied Calculus	5
MET 111	Manufacturing Processes	2
MET 260	Mechanics of Materials	4
MET 315	Mechanical Systems	3
PHY 110	College Physics I	4

Program Graduation Requirements

1. Earn a grade of C or higher in all CET, EGT, and MET prefix major coursework.
2. Earn an overall GPA of at least 2.0 and a major GPA of at least 2.0.

University Graduation Requirements

1. Earn a minimum of 120 credit hours (100 level and higher, maximum of 6 CED credit hours applicable).
2. Earn a minimum of 30 credit hours in upper-division courses. Lower-division transfer courses accepted as meeting upper-division departmental course requirements cannot be used to fulfill this requirement.
3. Earn 30 of the last 45 credit hours at MWSU in institutional coursework (exclusive of credit by examination).
4. Participate in required departmental and campus wide assessments.
5. Fulfill the Missouri Constitution requirement.
6. Successfully pass the Missouri Higher Education Civics Achievement exam.