## MANUFACTURING ENGINEERING TECHNOLOGY, B.S.

Students in the Bachelor of Science in manufacturing engineering technology major will be introduced to the fundamentals and advanced concepts of engineering, materials and production processes used within industry. The program provides in-depth technical content of advanced manufacturing, with emphasis on automated manufacturing, robotics, and computer-aided drafting and design, often collectively referred to as computer-integrated manufacturing (CIM). Laboratory courses require students to design, develop and construct projects independently as well as in small groups. Technologies commonly used by major corporations are emphasized throughout the curriculum. Juniors and seniors are encouraged to participate in a cooperative education or internship experience to further enhance their knowledge in technical areas within an industrial environment.

Manufacturing engineers are responsible for planning the production process of manufactured products. Typical entry-level employment titles for graduates of this program include production managers, production engineers, manufacturing engineers, manufacturing process engineers, technical salespersons and quality assurance engineers. Graduates of the MFET major enjoy outstanding placement in their field at present with salaries among the highest of any majors on campus.

## **Major in Manufacturing Engineering Technology**

Code	Title	Hours	
CORE REQUIREMENTS 54			
AENG 130	Production Materials & Processes		
<b>AENG 241</b>	Drafting Communications		
AENG 261	Electronic Systems		
AENG 262	Semiconductor Electronics		
AENG 271	Processing Nonmetallic Materials		
<b>AENG 281</b>	Processing Metallic Materials		
AENG 325	Power Conversion and Control		
AENG 326	Fluid Power		
AENG 342	Computer-Aided Engineering Drawing		
AENG 344	Product Design		
AENG 345	Statics/Strength of Materials		
AENG 375	Polymer and Ceramic Technology		
AENG 382	Automated Manufacturing		
AENG 425	Industrial Robotic Systems		
AENG 427	Programmable Logic Controllers		
AENG 448	Machine Tool Design		
AENG 492	Technical Entrepreneurship		
<b>AENG 494</b>	Total Quality Management		
DIRECTED ELECTIVES - Choose 1 class for at least 3 hours from:			
AENG 300	Co-Op Ed Experience in AENG		
AENG 376	Woodworking Technology		
AENG 392	Intro to Industrial Training		
AENG 400	Co-Op Ed Experience in AENG		
AENG 446	Advanced Applications in Drafting and Design		

AENG 467 Mobile Robotics	

## **Req Related for Manufacturing Engineering Tech**

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Code	Title	Hours
MATH 161	Calculus 1	4
Survey of Statis	etics	3
MATH 130	Elements of Statistics 1	
Physics I with A	lgebra - Choose 1 of the following:	4-5
PHYS 131	Physics 1 with Algebra	
PHYS 231	Physics 1 with Calculus	
Physics II with	4-5	
PHYS 132	Physics 2 with Algebra	
PHYS 232	Physics 2 with Calculus	
CHEM 111	Introductory Chemistry 1	4
Total Hours		19-21