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

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>AENG 130</td>
<td>Production Materials &amp; Processes</td>
<td></td>
</tr>
<tr>
<td>AENG 241</td>
<td>Drafting Communications</td>
<td></td>
</tr>
<tr>
<td>AENG 261</td>
<td>Electronic Systems</td>
<td></td>
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<tr>
<td>AENG 262</td>
<td>Semiconductor Electronics</td>
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<tr>
<td>AENG 271</td>
<td>Processing Nonmetallic Materials</td>
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</tr>
<tr>
<td>AENG 281</td>
<td>Processing Metallic Materials</td>
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<tr>
<td>AENG 325</td>
<td>Power Conversion and Control</td>
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</tr>
<tr>
<td>AENG 326</td>
<td>Fluid Power</td>
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<td>AENG 342</td>
<td>Computer-Aided Engineering Drawing</td>
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<tr>
<td>AENG 344</td>
<td>Product Design</td>
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<td>AENG 345</td>
<td>Statics/Strength of Materials</td>
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<tr>
<td>AENG 375</td>
<td>Polymer and Ceramic Technology</td>
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<tr>
<td>AENG 382</td>
<td>Automated Manufacturing</td>
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<td>AENG 425</td>
<td>Industrial Robotic Systems</td>
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<td>AENG 427</td>
<td>Programmable Logic Controllers</td>
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<td>AENG 448</td>
<td>Machine Tool Design</td>
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<td>AENG 492</td>
<td>Technical Entrepreneurship</td>
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<td>AENG 494</td>
<td>Total Quality Management</td>
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<tr>
<td>AENG 467</td>
<td>Mobile Robotics</td>
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Total Hours: 57

Req Related for Manufacturing Engineering Tech

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<thead>
<tr>
<th>Code</th>
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<tbody>
<tr>
<td>MATH 161</td>
<td>Calculus 1</td>
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<tr>
<td>MATH 130</td>
<td>Elements of Statistics 1</td>
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<tr>
<td>PHYS 131</td>
<td>Physics 1 with Algebra</td>
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<tr>
<td>PHYS 231</td>
<td>Physics 1 with Calculus</td>
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</tr>
<tr>
<td>PHYS 132</td>
<td>Physics 2 with Algebra</td>
<td>4-5</td>
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<tr>
<td>PHYS 232</td>
<td>Physics 2 with Calculus</td>
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<tr>
<td>CHEM 111</td>
<td>Introductory Chemistry 1</td>
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Total Hours: 19-21