Engineering and Information Technology, M.S.

Requirements

The M.S. in engineering and information technology program is currently being revised. Applications are not being accepted at this time.

The Master of Science program in engineering and information technology requires 30 s.h. of graduate credit. Students must maintain a cumulative g.p.a. of at least 3.00. Students are allowed up to 6 s.h. of approved transfer credit.

All courses are taught at the John Deere Davenport Works in Davenport, Iowa. Students work with an academic advisor to formulate a plan of study. The degree requires 12 s.h. of core courses and 18 s.h. in a subprogram—information technology or mechanical engineering.

The M.S. with a major in engineering and information technology requires the following coursework.

Core Courses

Students should consult their advisor for appropriate course selection.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EIT:5120</td>
<td>Modern Automation and Control</td>
<td>3</td>
</tr>
<tr>
<td>EIT:5135</td>
<td>Modern Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>EIT:5150</td>
<td>Applied Artificial Intelligence</td>
<td>3</td>
</tr>
<tr>
<td>EIT:5155</td>
<td>Cyber-Physical Systems</td>
<td>3</td>
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Specialization Areas

Students choose one of the two subprograms below.

Information Technology

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>EIT:5351</td>
<td>Cybersecurity</td>
<td>3</td>
</tr>
<tr>
<td>EIT:5352</td>
<td>Modern Database Systems</td>
<td>3</td>
</tr>
<tr>
<td>EIT:5353</td>
<td>Big Data and Machine Learning</td>
<td>3</td>
</tr>
<tr>
<td>EIT:5380</td>
<td>Software Engineering Methods, Tools, and Frameworks</td>
<td>3</td>
</tr>
<tr>
<td>EIT:5381</td>
<td>Enterprise Software Engineering</td>
<td>3</td>
</tr>
<tr>
<td>EIT:5382</td>
<td>Human-Computer Interaction Design and User Experience</td>
<td>3</td>
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</tbody>
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Mechanical Engineering

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<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>EIT:5211</td>
<td>Machine Learning and Scientific Computing in Engineering</td>
<td>3</td>
</tr>
<tr>
<td>EIT:5216</td>
<td>Manufacturing Process and Modeling</td>
<td>3</td>
</tr>
<tr>
<td>EIT:5220</td>
<td>Advanced Control Engineering</td>
<td>3</td>
</tr>
<tr>
<td>EIT:5224</td>
<td>Mechanical Design and Realization</td>
<td>3</td>
</tr>
<tr>
<td>EIT:5240</td>
<td>Kinematics of Modern Robotics</td>
<td>3</td>
</tr>
<tr>
<td>EIT:5298</td>
<td>Mechanical Component Durability and Integrity Analysis</td>
<td>3</td>
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