### Recommended Industrial Management and Technology Course Sequence

**Undergraduate Catalog - 2011/2012**

**Total undergraduate credits: 120**

<table>
<thead>
<tr>
<th>Freshman (Fall)</th>
<th>Freshman (Spring)</th>
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</thead>
<tbody>
<tr>
<td>3 TECH 211 - Computer-Aided-Design</td>
<td>3 COMS 100 - Communications</td>
</tr>
<tr>
<td>3 MATH 155 - Trigonometry</td>
<td>3 ENGL 104 - Composition I</td>
</tr>
<tr>
<td>3 CHEM 110 - General Chemistry I</td>
<td>4 PHYS 150A - Physics or Phy 210 - General Physics I</td>
</tr>
<tr>
<td>1 CHEM 111 - General Chemistry I Lab</td>
<td>3 General Education Requirement 2</td>
</tr>
<tr>
<td>3 ENGL 103 - Composition I</td>
<td>3 General Education Requirement 3</td>
</tr>
<tr>
<td>3 General Education Requirement 1</td>
<td>16</td>
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<table>
<thead>
<tr>
<th>Sophomore (Fall)</th>
<th>Sophomore (Spring)</th>
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<tbody>
<tr>
<td>3 Technology Area of Study 1</td>
<td>3 General Education Requirement 5</td>
</tr>
<tr>
<td>3 General Education Requirement 4</td>
<td>3 General Education Requirement 6</td>
</tr>
<tr>
<td>3 TECH 265 - Basic Manufacturing Processes</td>
<td>3 ACCY 288 (or ACCY 206) - General Accounting</td>
</tr>
<tr>
<td>3 STAT 208 - Basis Statistics or STAT 301 - Elementary Statistics</td>
<td>3 Technology Area of Study 2</td>
</tr>
<tr>
<td>3 TECH 175 - Electricity and Electrical Fund.</td>
<td>3 Ind Mgmt &amp; Tech Elective 1</td>
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<tr>
<td>1 TECH 175A - Electricity and Electrical Fund. Lab</td>
<td>15</td>
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<thead>
<tr>
<th>Junior (Fall)</th>
<th>Junior (Spring)</th>
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<tbody>
<tr>
<td>3 TECH 404 - Supervision In Industry</td>
<td>3 General Education Requirement 1</td>
</tr>
<tr>
<td>3 TECH 391 - Industrial Quality Control</td>
<td>3 Engl 308 Tech Writing or Mgmt 346 - Business Communications</td>
</tr>
<tr>
<td>15</td>
<td>3 Technology Area of Study 4</td>
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<td></td>
<td>3 Technology Area of Study 5</td>
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<thead>
<tr>
<th>Senior (Fall)</th>
<th>Senior (Spring)</th>
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<tbody>
<tr>
<td>3 Technology Area of Study 6</td>
<td>3 Technology Elective 2</td>
</tr>
<tr>
<td>3 Ind Mgmt &amp; Technology Elective 2</td>
<td>3 Technology Area of Study 8</td>
</tr>
<tr>
<td>3 Technology Area of Study 7</td>
<td>3 TECH 496 - Industrial Project Management</td>
</tr>
<tr>
<td>3 Technology Elective 1</td>
<td>3 General Elective 2</td>
</tr>
<tr>
<td>3 TECH 492 - Manufacturing Distribution Applications</td>
<td>12</td>
</tr>
</tbody>
</table>

Industrial Management and Technology Electives (Choose 2)

- TECH 402 - Industrial Training and Evaluation
- TECH 442 - Work Simplification & Measurement
- TECH 443 - Engineering Economy
- TECH 473 - Advanced Digital Design
- TECH 482 - Industrial Safety Engineering Analysis
- TECH 483 - Applied Ergonomics
- TECH 485 - Risk Management
- TECH 491 - Hazard Control in Industrial Operations
- TECH 498 - Ergonomics
- TECH 499 - Internship

**Areas of Concentration within the Industrial Management & Technology Program**

#### Computer-Aided-Design (CAD)

<table>
<thead>
<tr>
<th>Course</th>
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</thead>
<tbody>
<tr>
<td>TECH 262 - Machine Production Processes</td>
</tr>
<tr>
<td>TECH 311 - Computer-Aided Modeling</td>
</tr>
<tr>
<td>TECH 312 - Design Dimensioning and Tolerancing</td>
</tr>
<tr>
<td>TECH 313 - Product Design and Development for Manufacturability</td>
</tr>
<tr>
<td>TECH 365 - Metrology</td>
</tr>
<tr>
<td>TECH 414 - Computer-Aided Machine Design</td>
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Two of the following:

- TECH 344 - Materials and Processes in the Plastics Industry
- TECH 345 - Plastic Molding Processes
- TECH 365 - Metrology
- TECH 409 - Internship
- TECH 420 - Computer-Integrated Manufacturing

#### Manufacturing Technology

<table>
<thead>
<tr>
<th>Course</th>
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</thead>
<tbody>
<tr>
<td>TECH 260 - Metal Fabrication Processes</td>
</tr>
<tr>
<td>TECH 262 - Machine Production Processes</td>
</tr>
<tr>
<td>TECH 311 - Computer-Aided Modeling</td>
</tr>
<tr>
<td>TECH 313 - Product Design and Development for Manufacturability</td>
</tr>
<tr>
<td>TECH 365 - Metrology</td>
</tr>
<tr>
<td>TECH 420 - Computer-Integrated Manufacturing</td>
</tr>
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</table>

Two of the following:

- TECH 312 - Design Dimensioning and Tolerancing
- TECH 344 - Materials and Processes in the Plastics Industry
- TECH 345 - Plastic Molding Processes
- TECH 409 - Internship
- TECH 441 - Hazard Control in Industrial Operations

#### Electronics Technology

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>TECH 270 - Electrical Fundamentals and Circuit Analysis I</td>
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<tr>
<td>TECH 270A - Electrical Fundamentals and Circuit Analysis Lab I</td>
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<tr>
<td>TECH 276 - Electronics I</td>
</tr>
<tr>
<td>TECH 276A - Electronics I Lab</td>
</tr>
<tr>
<td>TECH 277 - Digital Logic Design</td>
</tr>
<tr>
<td>TECH 277A - Digital Logic Design Lab</td>
</tr>
<tr>
<td>TECH 285 - Manufacturing Computer Applications</td>
</tr>
<tr>
<td>TECH 377 - Microprocessors and Interfacing</td>
</tr>
<tr>
<td>TECH 377A - Microprocessors and Interfacing Lab</td>
</tr>
</tbody>
</table>

Two of the following:

- TECH 409 - Internship
- TECH 425 - Programmable Electronic Controllers
- TECH 430 - Microcontrollers Interfacing and Applications
- TECH 473 - Advanced Digital Design

#### Environmental Health and Safety

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<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>TECH 231 - Safety Programs</td>
</tr>
<tr>
<td>TECH 245 - Pollution, Pestilence, Prevention, and the Cost of Doing Business</td>
</tr>
<tr>
<td>TECH 432 - Disaster Preparedness</td>
</tr>
<tr>
<td>TECH 436 - Design and Administration of Industrial Safety Programs</td>
</tr>
<tr>
<td>TECH 437 - Fundamentals of Industrial Hygiene</td>
</tr>
<tr>
<td>TECH 441 - Hazard Control in Industrial Operations</td>
</tr>
<tr>
<td>TECH 481 - Ergonomics</td>
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One of the following:

- TECH 409 - Internship
- TECH 431 - Industrial Ventilation
- TECH 433 - Toxicology for Industry
- TECH 435 - Legal Aspects of Safety
- TECH 438 - Safety in Transportation Systems
- TECH 440 - Monitoring & Evaluating Exposures to Hazardous Materials
- TECH 482 - Industrial Safety Engineering Analysis
- TECH 483 - Applied Ergonomics
- TECH 485 - Risk Management

**Notes:**

- A Technical elective course may be any course offered within the Department of Technology, with consent of the faculty advisor.
- A general elective course may be any course offered from any department or campus.