PRODUCT DEVELOPMENT OPTION

This option is offered within the following major(s):


This option, taken in conjunction with the BS in Manufacturing Engineering, will prepare students for careers in manufacturing industry that focus on the development of new products and equipment.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ENGR 202</td>
<td>ELECTRICAL FUNDAMENTALS II</td>
<td>3</td>
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<tr>
<td>ENGR 391</td>
<td>ENGINEERING ECONOMICS AND PROJECT MANAGEMENT</td>
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<tr>
<td>MATS 322/ENGR 322</td>
<td>MECHANICAL PROPERTIES OF MATERIALS</td>
<td>3</td>
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<tr>
<td>ME 312/NSE 312</td>
<td>THERMODYNAMICS</td>
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<tr>
<td>ME 316</td>
<td>MECHANICS OF MATERIALS</td>
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<td>ME 317</td>
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<tr>
<td>ME 331/NSE 331</td>
<td>INTRODUCTORY FLUID MECHANICS</td>
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<tr>
<td>ME 373</td>
<td>MECHANICAL ENGINEERING METHODS</td>
<td>3</td>
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<tr>
<td>ME 383</td>
<td>MECHANICAL COMPONENT DESIGN</td>
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**Restricted Elective**
Select 4 credits from either of the following groups of restricted electives: 4

**Systems Electives:**
- IE 355  STATISTICAL QUALITY CONTROL
- IE 356  EXPERIMENTAL DESIGN FOR INDUSTRIAL PROCESSES
- IE 366  WORK SYSTEMS ENGINEERING
- IE 367  PRODUCTION PLANNING AND CONTROL
- IE 368  FACILITY DESIGN AND OPERATIONS MANAGEMENT
- IE 411  VISUAL PROGRAMMING FOR INDUSTRIAL APPLICATIONS
- IE 412  INFORMATION SYSTEMS ENGINEERING
- IE 415  SIMULATION AND DECISION SUPPORT SYSTEMS
- IE 418  TELECOMMUNICATION CONCEPTS
- IE 419  WIRELESS NETWORKS
- IE 425  INDUSTRIAL SYSTEMS OPTIMIZATION
- IE 426  STOCHASTIC MODELS OF INDUSTRIAL SYSTEMS
- IE 470  MANAGEMENT SYSTEMS ENGINEERING
- IE 471  PROJECT MANAGEMENT IN ENGINEERING
- IE 475  ADVANCED MANUFACTURING COSTING TECHNIQUES

**Process Electives:**
- CHE 445  POLYMER ENGINEERING AND SCIENCE
- ECE 418  SEMICONDUCTOR PROCESSING
- MATS 322/ENGR 322  MECHANICAL PROPERTIES OF MATERIALS

**Option Code: 833**