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>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 202</td>
<td>ELECTRICAL FUNDAMENTALS II</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 391</td>
<td>ENGINEERING ECONOMICS AND PROJECT MANAGEMENT</td>
<td>3</td>
</tr>
<tr>
<td>MATS 322/ENGR 322</td>
<td>MECHANICAL PROPERTIES OF MATERIALS</td>
<td>3</td>
</tr>
<tr>
<td>ME 312/NSE 312</td>
<td>THERMODYNAMICS</td>
<td>4</td>
</tr>
<tr>
<td>ME 316</td>
<td>MECHANICS OF MATERIALS</td>
<td>3</td>
</tr>
<tr>
<td>ME 317</td>
<td>INTERMEDIATE DYNAMICS</td>
<td>4</td>
</tr>
<tr>
<td>ME 331/NSE 331</td>
<td>INTRODUCTORY FLUID MECHANICS</td>
<td>4</td>
</tr>
<tr>
<td>ME 373</td>
<td>MECHANICAL ENGINEERING METHODS</td>
<td>3</td>
</tr>
<tr>
<td>ME 383</td>
<td>MECHANICAL COMPONENT DESIGN</td>
<td>4</td>
</tr>
</tbody>
</table>

**Restricted Elective**

Select 4 credits from either of the following groups of restricted electives:

- **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

**Total Hours:** 35

Option Code: 833