# B.S. in MECHANICAL ENGINEERING

(Heating, Ventilating, Air-Conditioning and Refrigerating Concentration)

Suggested 4-Year Academic Flowchart

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Winter</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>Intro to ME I (ME 128)</td>
<td>Calculus I (MATH 141)</td>
<td>Intro to ME II (ME 129)</td>
</tr>
<tr>
<td></td>
<td>Orientation to ME</td>
<td>Calculus II (MATH 142)</td>
<td>Introduction to ME III (ME 130)</td>
</tr>
<tr>
<td>15</td>
<td>Orientation to ME</td>
<td>Intro to Detailed Design w/Sold Modeling</td>
<td>ME 211 (3)</td>
</tr>
<tr>
<td></td>
<td>Manufacturing Processes: Material Testing</td>
<td>Calculus III (MATH 143)</td>
<td>Engineering Statics</td>
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<tr>
<td>16</td>
<td>Manufacturing Processes: Material Removal</td>
<td>ME 212 (3)</td>
<td>Engineering Dynamics</td>
</tr>
<tr>
<td></td>
<td>MANF. Processes Review</td>
<td>Linear Analysis I</td>
<td>Philosophy of Design</td>
</tr>
<tr>
<td>17</td>
<td>MANF. Processes Review</td>
<td>Linear Analysis II</td>
<td>Intermediate Dynamics</td>
</tr>
<tr>
<td></td>
<td>ENGL 149 (4)</td>
<td>Linear Analysis II</td>
<td>Design for Strength &amp; Stiffness</td>
</tr>
<tr>
<td></td>
<td>ENGL 149 (4)</td>
<td>Linear Analysis II</td>
<td>Mechanical Systems Design</td>
</tr>
<tr>
<td></td>
<td>ENGL 149 (4)</td>
<td>Linear Analysis II</td>
<td>Mechanical Control Systems</td>
</tr>
<tr>
<td></td>
<td>ENGL 149 (4)</td>
<td>Linear Analysis II</td>
<td>Thermal System Design</td>
</tr>
</tbody>
</table>

**Notes:**

- MOST GENERAL EDUCATION COURSES CAN BE TAKEN IN ANY ORDER AS LONG AS PREREQUISITES ARE MET
- * Refer to current catalog for prerequisites.
- ** One course from each of the following GE areas must be completed: A1, A2, C1, C2, C3, C4, D1, D2, D3, D4. C4 should be taken only after Junior standing is reached (90 units).
- Refer to online catalog for GE course selection, United States Cultural Pluralism (USCP) and Graduation Writing Requirement (GWR).
- USCP requirement can be satisfied by some (but not all) courses within GE categories: C3, C4, D1, D3, or D4.
- *** Refer to current catalog for course selection.
- † Course can be taken previously or concurrently.
- ‡ Can be taken anytime during Freshman Year.
- †† Can be taken anytime during Sophomore Year.
- [A1] Can be taken anytime during Senior Year.
- [A2] Can be taken anytime during Junior Year.

**Suggested 4-Year Academic Flowchart:**

- **Freshman Year:**
  - Orientation to ME
  - Calculus I
  - Intro to ME I
  - Intro to ME II

- **Sophomore Year:**
  - Engineering Statics
  - Engineering Dynamics
  - Philosophy of Design
  - Intermediate Dynamics

- **Junior Year:**
  - Design for Strength & Stiffness
  - Mechanical Systems Design

- **Senior Year:**
  - Mechanical Control Systems
  - Thermal System Design

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**Legend:**

- **Course Title:**
  - (**Major (59))**
  - (*)
  - (Support (76-80))
  - (Concentration (21))
  - (GE Area)
  - (General Ed. (40))

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