

Updated 3/22/2016

FRESHMAN			SOPHOMORE			JUNIOR			SENIOR		
Fall	Winter	Spring	Fall	Winter	Spring	Fall	Winter	Spring	Fall	Winter	Spring
<b>Intro. to Industrial &amp; Manufacturing Engineering</b> <b>IME 101 (1)</b>	<b>Intro. To Design &amp; Manufacturing</b> <b>IME 144 (4)</b> <small>(Recom: IME 140, ME 129/151)</small>	<b>Basic Electronics Manufacturing</b> <b>IME 156 (2)</b>		<b>Process Improvement Fundamentals</b> <b>IME 223 (4)</b> <small>(MATH 141, Recom: IME 101)</small>	<b>Mechanics of Materials I</b> <b>CE 204 (3)</b> <small>(ME 211)</small>	<b>Fundamentals of Manufacturing Engineering</b> <b>IME 330 (4)</b> *	<b>Computer-Aided Manufacturing I</b> <b>IME 335 (4)</b> *	<b>Manufacturing Process &amp; Tool Engineering</b> <b>IME 450 (4)</b> <small>(Math 244, IME 330, Recom: IME 335)</small>	<b>Approved Technical Elective (4)</b> ***	<b>Product-Process Design</b> <b>IME 418 (4)</b> <small>(Sr. standing, Recom: IME 450)</small>	<b>Approved Technical Elective (3)</b> ***
<b>Graphics Communication &amp; Modeling</b> <b>IME 140 (2)</b>	<b>General Chemistry for Physical Science &amp; Engineering I</b> <b>CHEM 124 (4)*</b> [B3/B4]	<b>Gen. Chem...II</b> <b>CHEM 125 (4)</b> <small>(CHEM 124)</small>	<b>Engineering Statics</b> <b>ME 211 (3)</b> <small>(PHYS 131 or 141, MATH 241†)</small>	<b>Engineering Dynamics</b> <b>ME 212 (3)</b> <small>(MATH 241; ME 211 or ARCE 211)</small>	<b>Probability and Statistics for Engineers and Scientists</b> <b>STAT 321 (4)</b> [B6]	<b>Test Design &amp; Analysis in Manufacturing Engineering</b> <b>IME 327 (4)</b> <small>(STAT 321 w/min C- or Instr. consent; or ME 236)</small>	<b>Manufacturing Systems Integration</b> <b>IME 342 (4)</b> <small>(MATH 241 &amp; IME 223, or Instr. consent, Recom: STAT 321)</small>	<b>Manufacturing Automation</b> <b>IME 356 (4)</b> <small>(EE 321)</small>	<b>Approved Technical Elective (4)</b> ***	<b>Quality Engineering</b> <b>IME 430 (4)</b> <small>(IME 326, 327, 503, STAT 302 or 312)</small>	<b>Approved Technical Elective (3)</b> ***
<b>Manufacturing Processes: Net Shape</b> <b>IME 141 (1)</b>	<b>General Physics IA</b> <b>PHYS 141 (4)</b> <small>(MATH 141 w/min C-, MATH 142 or 182†)</small> [Add'l Area B]	<b>General Physics II</b> <b>PHYS 132 (4)</b> <small>(PHYS 131, HNRS 131, or PHYS 141)</small>	<b>General Physics III</b> <b>PHYS 133 (4)</b> <small>(PHYS 131, HNRS 131, or PHYS 141; MATH 142; Recom: MATH 241)</small>		<b>Take concurrently: BIO 213 (2) &amp; BMED 213 (2)</b> <small>(MATH 142, Recom: CHEM 124)</small> [B2]	<b>Electric Circuit Theory</b> <b>EE 201 (3)</b> <small>(MATH 244 &amp; PHYS 133)</small>	<b>Thermodynamics I</b> <b>ME 302 (3)</b> <small>(PHYS 132; ME 212 or CHEM 128)</small>	<b>Engineering Economics</b> <b>IME 314 (3)</b> <small>(MATH 241)</small>	<b>Supply Chain &amp; Logistics Management</b> <b>IME 417 (4)</b> <small>(IME 342 or 410 or Instr. consent)</small>	<b>Senior Project Design Laboratory I</b> <b>IME 481 (2)</b> <small>(Sr. Standing &amp; Instr. consent)</small>	<b>Senior Project Design Laboratory II</b> <b>IME 482 (3)</b> <small>(IME 481)</small>
<b>Manufacturing Processes: Materials Joining</b> <b>IME 142 (2)</b>	<b>Calculus I</b> <b>MATH 141 (4)</b> * [B1]	<b>Calculus II</b> <b>MATH 142 (4)</b> <small>(MATH 141 w/min C-)</small> [B1]	<b>Calculus III</b> <b>MATH 143 (4)</b> <small>(MATH 142 w/min C-)</small> [Add'l Area B]	<b>Calculus IV</b> <b>MATH 241 (4)</b> <small>(MATH 143)</small>	<b>Linear Analysis I</b> <b>MATH 244 (4)</b> <small>(MATH 143)</small>	<b>Materials Engineering</b> <b>MATE 210 (3)</b> <small>(CHEM 111, 124, or 127, Recom: MATE 215†)</small>	<b>Electric Circuits Laboratory</b> <b>EE 251 (1)</b> <small>(Concurrent: EE 201)</small>	<b>Electronics</b> <b>EE 321 (3)</b> <small>(EE 201)</small>	<b>GE (4)</b> **	<b>GE (4)</b> **	<b>GE (4)</b> **
<b>Expository Writing</b> <b>ENGL 133 or 134 (4)**</b> <small>Can be taken anytime during Freshman Year</small> [A1]				<b>GE (4)</b> **		<b>Materials Laboratory I</b> <b>MATE 215 (1)</b> <small>(MATE 210†)</small>	<b>GE (4)</b> **				<b>GE (4)</b> **
<b>Oral Communication</b> <b>COMS 101 or 102 (4)**</b> <small>Can be taken anytime during Freshman Year</small> [A2]				<b>GE (4)</b> **							
	<b>Technical Writing for Engineers</b> <b>ENGL 149 (4)</b> [A3] <small>(Completion of GE A1 with a C- or better, Recom: Completion of GE A2) Can be taken anytime between Winter of Freshman and Winter of Sophomore Years</small>					<b>Graduation Writing Requirement GWR*</b> <small>(Students can attempt to fulfill the requirement after 90 earned units; students should complete the requirement before senior year)</small>					
14	20	17	15	19	15	16	14	15	16	14	17
										<b>TOTAL:</b>	<b>192</b>

**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.

\*\*\* At least 10 units of technical electives must be upper level (300-level or above) engineering or computer science courses. A max of 4 units of technical electives may be upper level (300-level or above) courses from outside of the College or Engineering or lower level (100 or 200-level) engineering or computer science courses. IME 400 and IME 500 require a special problems form and substitution form and no more than 4 total units are allowed.

† Course can be taken previously or concurrently.

**Legend:**

Course Title Course # (Units) <small>(Prerequisite)</small>		<b>Major (74)</b>
		<b>Support (78)</b>
		<b>General Ed. (40)</b>
[GE Area]		