

**Industrial & Systems Engineering Curriculum  
2012-13 (Effective Spring 2012) Rev. 2-14-12**

**FRESHMAN YEAR**

English Comp I	ENGL 1100	3	English Comp II	ENGL 1120	3
Core Fine Arts		3	Core History <sup>1,2</sup>		3
Calculus I	MATH 1610	4 (P)	Calculus II	MATH 1620	4 (P)
Fund. of Chem I	CHEM 1030	3 (P)	Physics I	PHYS 1600	4 (P)
Chem I Lab	CHEM 1031	1 (P)	Intro to Comp Prog (Matlab)	COMP 1200	2 (P)
<b>Engr Orientation</b>	<b>ENGR 1100</b>	<b>0 (P)</b>			
<b>Intro to Engr</b>	<b>ENGR 1110</b>	<b>2 (P)</b>			
	<b>TOTAL</b>	<b>16</b>		<b>TOTAL</b>	<b>16</b>

**SOPHOMORE YEAR**

Core Literature <sup>1</sup>		3	Linear Algebra	MATH 2660	3
Physics II	PHYS 1610	4	ENGR Elective <sup>3,5</sup>		3
Calculus III	MATH 2630	4	<b>Safety &amp; Ergo Methods &amp; Work Measurement</b>	<b>INSY 3020</b>	<b>3</b>
Diff EQ	MATH 2650	3	<b>Prob. &amp; Stat II</b>	<b>STAT 3610</b>	<b>3</b>
<b>Prob &amp; Stat I</b>	<b>STAT 3600</b>	<b>3</b>	<b>Applied Stat Lab</b>	<b>STAT 3611</b>	<b>1</b>
	<b>TOTAL</b>	<b>17</b>		<b>TOTAL</b>	<b>16</b>

**JUNIOR YEAR**

Core History or Social Science <sup>1,2</sup>		3	Core Social Science <sup>1,2</sup>		3
<b>Spreadsheet- Based Apps</b>	<b>COMP 3010</b>	<b>3</b>	TECH Elective <sup>4,5</sup>		3
<b>Stochastic O.R.</b>	<b>INSY 3400</b>	<b>3</b>	<b>Simulation</b>	<b>INSY 3420</b>	<b>3</b>
<b>Deterministic O.R.</b>	<b>INSY 3410</b>	<b>3</b>	<b>Oper. Planning</b>	<b>INSY 3700</b>	<b>3</b>
<b>Eng. Economy</b>	<b>INSY 3600</b>	<b>3</b>	<b>Mfg. Systems I</b>	<b>INSY 3800</b>	<b>3</b>
	<b>TOTAL</b>	<b>15</b>		<b>TOTAL</b>	<b>15</b>

**SENIOR YEAR**

Core Humanities (PHIL 1020, 1030, or 1040)		3	Core Social Science <sup>1,2</sup>		3
Fund. Elec. Engr	ELEC 3810	3	Core Literature or Humanities <sup>1,2</sup>		3
<b>Quality Control Prof. Prac.</b>	<b>INSY 4330</b>	<b>3</b>	<b>Senior Design</b>	<b>INSY 4800</b>	<b>3</b>
<b>Mfg. Systems II</b>	<b>INSY 4700</b>	<b>3</b>	<b>INSY Elective</b>		<b>3</b>
<b>INSY Elective</b>		<b>3</b>	TECH Elective <sup>4,5</sup>		3
	<b>TOTAL</b>	<b>16</b>	Graduation UNIV 4AAoEN1		0
				<b>TOTAL</b>	<b>15</b>

- Students must complete a minimum of one course in either history or literature and in one of these subjects, a two-course sequence must be taken.
- Students must include at least one of these courses (or Honors equivalent) in their core selection: ANTH 1000, FLGC 1150, GEOG 1010, HIST 1010 or 1020, PSYC 2010, SOCY 1000, UNIV 2710 or 2720.
- ENGR 2050, ENGR 2200, ENGR 2100, MECH 2110, MATL 2100 (ENGR 2100 must be taken if completing Automotive Minor).
- Any ISE course not required for major or COMP 5000, ELEC 3820, ELEC 5150, MATL 3100, MECH 3220, MECH 5510, STAT 4610, STAT 4620, STAT 4630, STAT 5630, STAT 5670, STAT 5690, or a course with ISE department approval.
- Six hours of ROTC required courses can be substituted for the ENGR and TECH Electives. Three hours BET count as one TECH elective.
- General Note: **Bold** classes represent major classes. Total Hours for degree = 126. (P) Denotes courses required to complete pre-engineering. Abbreviations used: O.R.=Operations Research; Mfg.=Manufacturing; Engr=Engineering; Oper=Operations, Prog=Programming, Prof=Professional; Prac=Practice.