

Industrial Engineering

4-Year Study Plan (Fall 2024 and After)

First Year	
Fall	Spring
<div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> MATH 180 (4) MATH 121 (≥C) or Department Placement Test F&S PW: 7 </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> ME 250 (3) Eligible to register for ENGL 160 or credit in ENGL 160 F&S PW: 4 </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> ENGL 160 (3) Department Placement Test F&S PW: 3 </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> CHEM 122 (3) CHEM 123 (2) CHEM 101 (≥C) or Department Placement Test F&S PW: 1 </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> ENGR 100 (0) Admission to COE Freshman and Transfer Only F&S PW: 1 </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> Gen. Ed. (3) Select from one of five General Education Core categories F&S PW: 1 </div>	<div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> MATH 181 (4) MATH 180 (≥C) F&S PW: 6 </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> PHYS 141 (4) [Credit/Concurrent Registration in MATH 180 (≥C)] and [PHYS 100 (≥C) or Department Placement Test] F&S PW: 4 </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> CS 109 (3) Credit/Concurrent Registration in MATH 180 F&S PW: 2 </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> ENGL 161 (3) ENGL 160 or waiver and consent F&S PW: 2 </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> Gen. Ed. (3) Select from one of five General Education Core categories F&S PW: 1 </div>
18 Credit Hours	17 Credit Hours

Second Year	
Fall	Spring
<div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> MATH 210 (3) MATH 181 (≥C) F&S PW: 5 </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> IE 201 (3) MATH 181 F&S PW: 3 </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> CME 201 (3) MATH 181 and PHYS 141 F&S PW: 3 </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> PHYS 142 (4) PHYS 141 (≥C) and [Credit/Concurrent Registration in MATH 181 (≥C)] F&S PW: 1 </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> ECE 210 (3) Credit/Concurrent Registration in MATH 180 F&S PW: 1 </div>	<div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> MATH 220 (3) MATH 210 (≥C) F&S PW: 4 </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> IE 342 (3) MATH 181 F&S PW: 5 </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> CME 203 (3) CME 201 F&S PW: 2 </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> MATH 310 (3) MATH 181 (≥C) F&S PW: 2 </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> Gen. Ed. (3) Select from one of five General Education Core categories F&S PW: 1 </div>
16 Credit Hours	15 Credit Hours

Third Year	
Fall	Spring
<div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> IE 345 (3) IE 342 Fall Only PW: 3 </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> IE 365 (3) IE 342 Fall Only PW: 2 </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> IE 471 (4) MATH 310 Fall Only PW: 2 </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> IE 348 (3) IE 342 F&S PW: 1 </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> Gen. Ed. (3) Select from one of five General Education Core categories F&S PW: 1 </div>	<div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> STAT 362 (2) STAT 361 (≥C) or IE 342 (≥C) or STAT 381 (≥C) F&S PW: 1 </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> IE 472 (3) CS 109 and IE 471 Spring Only PW: 1 </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> IE 442 (3) IE 342 Spring Only PW: 1 </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> MGMT 340 (3) ENGL 161 F&S PW: 1 </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> Free Elective (3) Select any non-required course, not lower than a previously taken or required course F&S PW: 1 </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> Tech. Elective (3) Select a 400-level IE course that is not required, or from IE 392, ME 205, ME 210, or ME 347 F&S PW: 1 </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> Gen. Ed. (3) Select from one of five General Education Core categories F&S PW: 1 </div>
16 Credit Hours	17 Credit Hours

Fourth Year	
Fall	Spring
<div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> IE 396 (3) IE 201 and IE 345 and Senior Standing Fall Only PW: 2 </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> IE 467 (3) IE 342 Fall Only PW: 2 </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> IE 380 (3) CME 203 F&S PW: 1 </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> Tech. Elective (3) Select a 400-level IE course that is not required, or from IE 392, ME 205, ME 210, or ME 347 F&S PW: 1 </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> Tech. Elective (3) Select a 400-level IE course that is not required, or from IE 392, ME 205, ME 210, or ME 347 F&S PW: 1 </div>	<div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> IE 397 (2) Must be taken final semester after IE 396 Spring Only PW: 1 </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> IE 466 (3) [Credit/Concurrent Registration in IE472] and IE345 Spring Only PW: 1 </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> IE 463 (3) [Credit/Concurrent in IE 201] and [Credit/Concurrent in IE 365] and [Credit/Concurrent in IE 345] and [Credit/Concurrent in IE 472] Spring Only PW: 1 </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> IE 499 (0) Must be taken final semester F&S PW: 1 </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> Tech. Elective (3) Select a 400-level IE course that is not required, or from IE 392, ME 205, ME 210, or ME 347 F&S PW: 1 </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> Gen. Ed. (3) Select from one of five General Education Core categories F&S PW: 1 </div>
15 Credit Hours	14 Credit Hours

Legend
<div style="border: 1px solid black; padding: 5px; display: inline-block;"> Course Code (Credits) Prerequisites or Corequisites Term Offered Positional Weight </div>
<p>Blue Box: Part of prerequisite chain Red Box: Terminal class</p> <p>Term Offered: Whether the class is offered in Fall Only, Spring Only, or Fall & Spring.</p> <p>Positional Weight (PW): The number of classes remaining in the prerequisite chain. The higher the number, the more important the class is to be taken the proposed semester. PW-1 is the number of semesters remaining to a possible graduation.</p>

Additional Information		
<p>Equivalent Courses: CHEM 122 & 123 = CHEM 112 (≥C) = CHEM 116 (≥C) MATH 180 = MATH 165 = MATH 170 ME 328 = ME 428 MATH 310 = MATH 320 (With petition) ECE 210 = ECE 225 (With petition) CS 109 = CS 111 = MCS 260 (With petition)</p>	<p>Free Elective - Outside the Major Rubric: The free elective is an <u>elective outside of the Major Rubric</u> (required classes). Students may use this to expand their knowledge in a subject matter. Many classes not required by the IE degree may satisfy this requirement, provided: 1) The class must be credit granting and 100+ level 2) The class must be higher level than a previously taken course (if one was taken)</p> <p>Examples of Free Electives may be: - An additional Gen. Ed. of interest to the student - An additional IE technical elective of interest to the student</p> <p>Note: A Modification of Major form may be needed to approve some Free Electives</p>	<p>Technical Electives: Technical Electives may be any 400-level IE class, that is of interest to the student, except IE 442, IE 463, IE 466, IE 467, IE 471, IE 472, IE 496, IE 497, and IE 499. Note: Most 400-level classes are only offered once or less per year</p> <p>Additional Technical Electives include: ME 205 - Introduction to Thermodynamics ME 210 - Engineering Dynamics ME 347 - Engineering Design and Graphics</p> <p>IE 392 - Undergraduate Research Requires: 1) faculty approval, 2) a research proposal, and 3) approval of Director of Undergraduate Studies</p>
<p>Required General Education Core Categories: Understanding the Individual and Society Understanding the Past Understanding the Creative Arts Understanding U.S. Society Exploring World Cultures</p> <p>One general education course from each category must be completed with a satisfactory grade.</p>		