Bachelor of Science in Industrial Engineering  
2015 Catalog

Total Credits Required = 122

1. Communications (6 cr.)  
   ____ SP CM 212 Fundamentals of Public Speaking (3)  
   ____ ENGL 314 Technical Communication (3)

2. Social Science & Humanities (12 cr.)*  
   ____ U.S. Diversity (3)  
   ____ International Perspectives (3)  
   ____ (3)  
   ____ (3)  

Note: Six credits in the SSH area must be 200-level or above, and six credits must form a sequence of prerequisite or related courses.

*See the list of courses approved by the IMSE Department.

3. Basic Program (27 cr.)  
   ____ CHEM 167 General Chemistry for Engineering Students (4)  
   or CHEM 177 General Chemistry and Chemistry Lab (4)  
   ____ ENGL 150 Critical Thinking and Communication (3)  
   ____ ENGL 250 Written, Oral, Visual, & Electronic Composition (3)  
   ____ ENGR 101 Engineering Orientation (R)  
   ____ I E 148 Information Engineering (3)  
   ____ LIB 160 Introduction to Library (1)  
   ____ MATH 165 Calculus I (4)  
   ____ MATH 166 Calculus II (4)  
   ____ PHYS 221 Introduction to Classical Physics I (5)

4. Math and Physical Science (17 cr.)  
   ____ MATH 265 Calculus III (4)  
   ____ MATH 267 Elementary Differential Equations & Laplace Transforms (4)  
   ____ STAT 231 Probability & Statistical Inference for Engr (4)  
   ____ PHYS 222 Introduction to Classical Physics II (5)

5. Industrial Engineering Core (34 cr.)  
   ____ I E 222 Design & Analysis Methods for System Improvements (3)  
   ____ I E 248 Engineering System Design, Manufacturing Processes & Specifications (3)  
   ____ I E 271 Applied Ergonomics & Work Design (3)  
   ____ I E 305 Engineering Economic Analysis (3)  
   ____ I E 312 Optimization (3)  
   ____ I E 341 Production Systems (3)  
   ____ I E 348 Solidification Processes (3)  
   ____ I E 361 Statistical Quality Assurance (3)  
   ____ I E 413 Stochastic Modeling, Analysis & Simulation (4)  
   ____ I E 441 Industrial Engineering Design (3)  
   ____ I E 448 Manufacturing Systems Engineering (3)

6. Other Remaining Courses (26 cr.)  
   ____ MAT E 273 Principles of Materials Sci & Engineering (3)  
   ____ E M 274 Statics of Engineering (3)  
   ____ M E 231 Thermodynamics (3)  
   ____ E E 442 Introduction to Circuits and Instruments (2)  
   ____ Engineering Topic Elective (6)  
   ____ Focus Elective (6)  
   ____ Management Elective (3)

7. Required Seminar  
   ____ I E 101 Industrial Engineering Profession (R)

Last updated 6/2015 (KJW)