Bachelor of Science in Industrial Engineering
2024-2025 Catalog
Total Credits Required =122 or 123

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1. Communications (9 cr.)

_____ SPCM 2120 Fundamentals of Public Speaking (3)

_____ ENGL 3140 Technical Communication (3)

_____ ENGL 2500 Written, Oral, Visual, & Electronic Composition (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 <u>200-level or above</u>, and six credits must form a <u>sequence</u> of prerequisite or related courses.

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

3. Basic Program (24 cr.)

_____ CHEM 1670 General Chemistry for Engineering Students (4)

       or CHEM 1770 General Chemistry (4)

_____ ENGL 1500 Critical Thinking and Communication (3)

_____ ENGR 1010 Engineering Orientation (R)

_____ IE 1480 Information Engineering (3)

_____ LIB 1600 Information Literacy (1)

_____ MATH 1650 Calculus I (4)

_____ MATH 1660 Calculus II (4)

_____ PHYS 2310 and 2310L Introduction to Classical Physics I (5)

4. Math and Physical Science (17 cr.)

_____ MATH 2650 Calculus III (4)

_____ MATH 2670 Elementary Differential Equations & Laplace Transforms (4)

_____ PHYS 2320 and 2320L Introduction to Classical Physics II (5)

_____ STAT 2310 Probability & Statistical Inference for Engr (4)

5. Industrial Engineering Core (34 cr.)

_____ IE 2220 Design & Analysis Methods for System Improvements (3)

_____ IE 2480 Engineering System Design, Manufacturing Processes & Specifications (3)

_____ IE 2710 Applied Ergonomics & Work Design (3)

_____ IE 3050 Engineering Economic Analysis (3)

_____ IE 3120 Optimization (3)

_____ IE 3410 Production Systems (3)

_____ IE 3480 Solidification Processes (3)

_____ IE 3610 Statistical Quality Assurance (3)

_____ IE 4130 Stochastic Modeling, Analysis & Simulation (4)

_____ IE 4410 Industrial Engineering Design (3)

_____ IE 4480 Manufacturing Systems Engineering (3)

6. Other Remaining Courses (26 or 27 cr.)

_____ MATE 2730 Principles of Materials Sci & Engineering (3)

_____ CE 2740 Engineering Statics (3)

_____ IE 4320 Industrial Automation (3) OR: EE 4420 Introduction to Circuits and Instruments (2)

_____ ME 2310 Engineering Thermodynamics (3)

_____ Focus Electives (6)

_____ Management Elective (3)

_____ Engineering Topic Electives (6)

7. Required Seminar

_____ IE 1010 Industrial Engineering Profession (R)