BSIE - Industrial and Systems Engineering Program

Freshmen Year
- Fall: 16 Credits
  - College Writing
    - Wrt 1120 (3)
    - Lib. Ed. I.a
  - Introduction to Solid Modeling
    - ENGR 1222 (2)
  - Gen. Chem. Lab I
    - Chem 1154 (1)
    - Lib. Ed. II.a
  - Gen. Chem. I
    - Chem 1153 (4)
    - Lib. Ed. II.a
  - Calculus I
    - Math 1296 (5)
    - Lib. Ed. I.c
  - Computer Science
    - CS 1121 (3) or
    - CS 1411 (4)
    - CS 1511 (5) or
    - CS 2121 (3)
    - Lib. Ed. I.c
- Spring: 17 Credits
  - Humanities Elective (3)
  - Lib. Ed. II.c

Sophomore Year
- Fall: 17 Credits
  - Introduction to Engineering
    - ENGR 1210 (2)
  - Matl. Science
    - ME 2105 (3)
  - Gen. Physics Lab I
    - Phys 2014 (1)
    - Lib. Ed. II.a
  - Gen. Physics Lab II
    - Phys 2016 (1)
    - Lib. Ed. II.a
  - Material Processing Engineering Lab
    - IE 3122 (2)
  - Stat for Engineers
    - Stat 3411 (3)
    - Lib. Ed. I.b
  - Engineering Mechanics
    - ME 2017 (5)
- Spring: 16 Credits
  - Advanced Writing
    - Wrt 3130/50/80 (3)
  - Six-Sigma Quality
    - IE 4010 (3)
  - Lean Production Management
    - IE 4020 (3)
  - Engineering Economic Analysis
    - IE 3125 (3)
    - Lib. Ed. II.b
  - Human Factors
    - IE 3140 (3)
  - Occupational Systems Lab
    - IE 3222 (2)
  - Operations Research
    - IE 3115 (4)
  - IE Technical Elective (3)
  - Fine Arts Elective (3)
  - Lib. Ed. II.d

Junior Year
- Fall: 17 Credits
  - Engineering Prof. and Practice
    - EMGT 4110 (2)
  - Systems Integration
    - IE 4230 (3)
  - Systems Integration Lab
    - IE 4222 (5)
  - IE Technical Elective (3)
  - MIE Seminar
    - IE 4993 (1)
  - Multidisciplinary Senior Design
    - IE 4255 (4)
- Spring: 15 Credits
  - Facil. Planning and Simulation
    - IE 4115 (4)
  - IE Technical Elective (3)
  - IE Elective
    - IE 4495 or
    - IE 53x5 (3)
  - Sustainability Elective (3)
    - Lib. Ed. III.c
  - Business Elective
    - Blaw 2001 (3)
    - Lib. Ed. II.c
  - Communication Elective
    - Comm 1112 (3)
    - Lib. Ed. I.b

Senior Year
- Fall: 16 Credits
  - Multidisciplinary Senior Design
    - IE 4255 (4)
  - Systems Integration Lab
    - IE 4222 (5)
  - IE Technical Elective (3)
  - IE Elective
    - IE 4495 or
    - IE 53x5 (3)
  - Sustainability Elective (3)
    - Lib. Ed. III.c
  - Business Elective
    - Blaw 2001 (3)
    - Lib. Ed. II.c
  - Communication Elective
    - Comm 1112 (3)
    - Lib. Ed. I.b
- Spring: 16 Credits
  - Multidisciplinary Senior Design
    - IE 4255 (4)
  - Systems Integration Lab
    - IE 4222 (5)
  - IE Technical Elective (3)
  - IE Elective
    - IE 4495 or
    - IE 53x5 (3)
  - Sustainability Elective (3)
    - Lib. Ed. III.c
  - Business Elective
    - Blaw 2001 (3)
    - Lib. Ed. II.c
  - Communication Elective
    - Comm 1112 (3)
    - Lib. Ed. I.b

129 Credits Total

NOTES:
- Liberal education courses must meet Cultural Diversity, Global Perspective, and Sustainability requirements.
- Solid arrows are pre-requisites, dashed arrows are co-requisites, courses in bold boxes are offered only once per year.
- Upper Division: Minimum cumulative UMD GPA 2.50. Applicants not meeting this requirement may be admitted on a space-available basis.