**Industrial Engineering Curriculum Flow Chart, 2019**

- **Freshman Fall Semester** 16 Hours
  - ENGR 1250* Probl Solvin in Engineering
  - UNIV 1131* or ENGR 1101*
  - IE 1205* Intro to Industrial Engineering
  - MATH 1426* Calculus I
  - CHEM 1441* General Chemistry I with Lab
  - ENGL 1301* Rhetoric & Composition I

- **Freshman Spring Semester** 18 Hours
  - IE 2305* Computers & IE
  - MAE 1351* Intro to Engineering Design
  - MATH 2425* Calculus II
  - CHEM 1442* General Chemistry II with Lab
  - PHYS 1443* Physics I with Lab

- **Sophomore Fall Semester** 16 Hours
  - HIST 1311 US to 1865
  - MATH 2326* Calculus III
  - PHYS 1444* Physics II with Lab
  - COMS 2302 Professional & Technical Communication
  - MATH 3319* Differential Equations & Linear Algebra

- **Sophomore Spring Semester** 15 Hours
  - HIST 1312 US post 1865
  - IE 2308* Engineering Economics
  - IE 3301* Engineering Probability
  - PHYS 3444* Physics II with Lab
  - Language, Philosophy, & Cultural Elective

- **Junior**
  - **Fall Semester** 15 Hours
    - IE 3314* Engineering Research Methods
    - IE 3315* Operations Research I
    - MATH 3319* Differential Equations & Linear Algebra
    - Technical Elective
  - **Spring Semester** 18 Hours
    - IE 4314* Enterprise Simulation
    - IE 4315* Operations Research II
    - IE 4316* Engineering Project Management
    - Technical Elective

- **Junior**
  - **Fall Semester** 15 Hours
    - IE 4302* Engineering Administration & Organization
    - IE 4303* Production & Inventory Control
    - Technical Elective
  - **Spring Semester** 15 Hours
    - IE 4308* Quality Systems
    - IE 4309* Production Development, Producbility and Design
    - Technical Elective

- **Senior**
  - **Fall Semester** 15 Hours
    - IE 4302* Engineering Administration & Organization
    - IE 4303* Production & Inventory Control
    - Technical Elective
  - **Spring Semester** 15 Hours
    - IE 4318* Enterprise Design
    - IE 4345* Decision Analysis in System Design
    - Technical Elective

- **Language, Philosophy, & Cultural Elective***
  - 3 Hrs

- **Foreign Language Deficiency:**
  - 2 Years in HS
  - Other (6 credit hours)

* Must complete theses courses with grade of C or better and a minimum GPA of 2.25 to take professional courses.
** Engineering Professional Program acceptance required for all IE classes listed in Junior and Senior years.
*** Must be approved.