### 4-Year Study Plan for Industrial Engineering (Fall 2016 and After)

#### Admission to COE

**Education (3)**
- **MATH 180 (4)**
- **CHEM 123 (1)**
- **CHEM 122 (4)**

**ENGL 160 (3)**

**ENGR 100 (0)**
- Admission to COE
  - Eligible to register for ENGL 160

**MATH 121 (≥C)**

**General**
- **ENGL 160 (3)**
  - Such preparatory courses cannot be used as nonmajor electives or free electives.
- **Credit for graduation is not given by the College of Engineering (COE) for courses numbered below CHEM 112, PHYS 141, and MATH 180; such preparatory courses cannot be used as nonmajor electives or free electives.**

**First Year**
- **First Semester**
  - **16 hours**
    - **MATH 180 (4)**
    - **CHEM 123 (1)**
    - **CHEM 122 (4)**
    - **ME 250 (3)**
    - **CS 109 (3)**
    - **ME 205 (3)**
    - **IE 201 (3)**
    - **ENGL 160 (3)**

**Second Semester**
- **16 hours**
  - **MATH 181 (3)**
  - **CHEM 122 (4)**
  - **ME 210 (3)**
  - **CS 109 (3)**
  - **ME 210 (3)**
  - **IE 342 (3)**
  - **ENGL 161 (3)**

**Total for First Year:** **32 hours**

#### Second Year

**First Semester**
- **16 hours**
  - **MATH 181 (3)**
  - **CHEM 122 (4)**
  - **ME 210 (3)**
  - **CS 109 (3)**
  - **ME 210 (3)**
  - **IE 342 (3)**
  - **ENGL 160 (3)**

**Second Semester**
- **16 hours**
  - **MATH 210 (3)**
  - **CHEM 122 (4)**
  - **ME 210 (3)**
  - **CS 109 (3)**
  - **ME 210 (3)**
  - **IE 472 (3)**
  - **ENGL 161 (3)**

**Total for Second Year:** **32 hours**

#### Third Year

**First Semester**
- **16 hours**
  - **MATH 210 (3)**
  - **CHEM 122 (4)**
  - **ME 210 (3)**
  - **CS 109 (3)**
  - **ME 210 (3)**
  - **IE 473 (3)**
  - **ENGL 161 (3)**

**Second Semester**
- **16 hours**
  - **MATH 210 (3)**
  - **CHEM 122 (4)**
  - **ME 210 (3)**
  - **CS 109 (3)**
  - **ME 210 (3)**
  - **IE 472 (3)**
  - **ENGL 161 (3)**

**Total for Third Year:** **32 hours**

#### Fourth Year

**First Semester**
- **16 hours**
  - **MATH 210 (3)**
  - **CHEM 122 (4)**
  - **ME 210 (3)**
  - **CS 109 (3)**
  - **ME 210 (3)**
  - **IE 342 (3)**
  - **ENGL 161 (3)**

**Second Semester**
- **16 hours**
  - **MATH 210 (3)**
  - **CHEM 122 (4)**
  - **ME 210 (3)**
  - **CS 109 (3)**
  - **ME 210 (3)**
  - **IE 342 (3)**
  - **ENGL 161 (3)**

**Total for Fourth Year:** **32 hours**

**Fourth Year (Fall 2016 and After)**
- **18 hours**
  - **MATH 210 (3)**
  - **CHEM 122 (4)**
  - **ME 210 (3)**
  - **CS 109 (3)**
  - **ME 210 (3)**
  - **IE 342 (3)**
  - **ENGL 161 (3)**

**Total:** **128 hours**

### ADDITIONAL INFORMATION:

**Equivalent Courses:**
- **CHEM 122 and CHEM 123 = CHEM 112(C) = CHEM 116(C)**
- **MATH 180 = MATH 165 = MATH 170**
- **MATH 310 = MATH 320**
- **ECE 210 = ECE 225**
- **Both IE 396 and IE 397 = Both IE 444 and IE 445**

**Prerequisite(s):**
- **IE 392 (3)** (up to 6)
- **ME 205 (3)**
- **PHYS 141 & MATH 181**
- **ME 210 (3)**
- **CME 201**
- **ME 347 (3)**
- **MATH 220 & MATH 203 & MATH 250**
- **IE COURSE 400 LEVEL not required above**

**Course Code:**
- **IE 398 (3)**
- **IE 399 (3)**

**Technical Electives:**
- Select two of the following to satisfy the requirements needed:
  - **IE 467 (3)**
  - **IE 468 (3)**
  - **IE 499 (3)**

**Legend:**
- **Symbol meaning:**
  - **(C) = Need grade C or better**
  - **& = and**
  - **approval = approval from the department**
  - **c = must have credit or concurrent enrollment to the course**
- **Positional Weight (PW):**
  - Means that the higher the number the more critical it is to take the class on time.
  - Means that there are (n-1) semesters after that, that depends on the course; meaning (n-1) courses after for example: MATH 180 has a PW: 7 which means there are 6 semesters after you take MATH 180 that requires this course.

**Course Code (Credit Hours):**
- **Prerequisites**
  - **Enrollment to the course**
- **Concurrent Enrollment**
  - **Consent from instructor/department head**
- **Absolute Prerequisite**
  - **Eligible to Register**

**Course Offered:** IE 396 is only offered in the fall and IE 397 is only offered in the spring.

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