# Industrial Engineering Undergraduate Requirements

For those entering Fall 2019 and beyond

## 126 Total Credits Required

### Math Requirements (18 or 19 credits)
- **MATH 0220** (Calculus 1) 
- **MATH 0230** (Calculus 2)
- **MATH 0240** (Calculus 3) 
- **MATH 0280** (Linear Algebra) 
- **MATH 0290** (Diff. Eq.) or **MATH 413** (Theor. Math)

### IE Core (49 Credits)
- **IE 0015** (Information Systems) 
- **IE 1035** (Engineering Management) 
- **IE 1040** (Engineering Economy) 
- **IE 1051** (Engr Product Design) 
- **IE 1052** (Mtg. Processes) 
- **IE 1054** (Productivity Analysis) 
- **IE 1055** (Facl. Layout & Mat'l Hand) 
- **IE 1061** (Human Factors) 
- **IE 1070** (Prob., Rand Var., Distrb.) 
- **IE 1071** (Stat. Test.& Regression) 
- **IE 1072** (DOE and QA) 
- **IE 1080** (Supply Chain) 
- **IE 1081** (Operations Research) 
- **IE 1082** (Probabilistic OR) 
- **IE 1083** (Simulation) 
- **IE 1090** (Senior Design)

### Physics Requirements (8 credits)
- **PHYS 0174** (Calc based Phys 1) 
- **PHYS 0175** (Calc based Phys 2) 

### Chemistry Requirements (6 credits)
- **CHEM 0960** (Chemistry 1) 
- **CHEM 0970** (Chem 2 w/ lab) 

### Freshman Engineering Courses (6 credits)
- **ENGR 0011** (or ENGR 0015) 
- **ENGR 0012** (or ENGR 0016) 

### Technical Electives (15 credits)**
- Technical Elective 1 
- Technical Elective 2 
- Technical Elective 3 
- Technical Elective 4 
- Technical Elective 5 

ENGR Courses - Select 2 of 3 - ENGR 0022 (Materials), ENGR 0135 (Statics & Dynamics), or any Introductory Circuits Course (ENGR 1869, ECE 0031, COE 0031, MEMS 0031, ECE 0101, ECE 0201, BIOENG 1310) (6 credits)**

### H/SS electives (18 credits)
- H/SS 1 
- H/SS 2 
- H/SS 3 
- H/SS 4 
- H/SS 5 
- H/SS 6 

H/SS Must satisfy:
- Depth (at least two in the same area and one not an intro course)
- Breadth (at least 3 different h/ss areas)
- "W" (writing course - can be satisfied with a non h/ss course)

**Students are encouraged to take the 3rd of these as a technical elective

### International Requirement (Option A OR Option B):

**Option A - Travel plus one (1) globally focused h/ss course:**

**Option B - Three (3) globally focused (preferably related) h/ss courses:**

### Notes
- Advisor Signature _____________________________________
- Student Signature____________________________________
- Date _____________________________
- Date _____________________________

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** Two of the technical electives should be IE courses unless a student is working on a technical minor or certificate

** Students are encouraged to take the 3rd of these as a technical elective