

INDUSTRIAL ENGINEERING

Computing Emphasis Area

2020 – 2021 Curriculum (updated May 2020)

Student: _____
 Date: _____
 CUID: _____
 Advisor: _____

FRESHMAN YEAR

- | | |
|------------------------------------------------------|---------------------------------------------------|
| _____ 4 CH 1010 General Chemistry | _____ 3 ENGR 1410 Programming and Problem Solving |
| _____ 3 ENGL 1030 Composition and Rhetoric | _____ 4 MATH 1080 Calculus of One Variable II |
| _____ 2 ENGR 1020 Engineering Disciplines and Skills | _____ 3 PHYS 1220 Physics with Calculus I |
| _____ 4 MATH 1060 Calculus of One Variable I | _____ 3 Gen Ed _____ |
| _____ 3 Gen Ed _____ | _____ 4 Lab Science Requirement _____ |
| 16 | 17 |

SOPHOMORE YEAR

- | | |
|-------------------------------------------------------------|-----------------------------------------------------------------|
| _____ 3 CE 2010 Statics | _____ 4 CPSC 1020 Computer Science II |
| _____ 4 CPSC 1010 Computer Science I <i>OR</i> | _____ 3 IE 2100 Design & Analysis of Work Systems |
| 3 CPSC 1110 Introduction to Programming in C | _____ 4 IE 3010 Systems Design I |
| _____ 2 ENGR 2080 Engr. Graphics & Machine Design <i>OR</i> | _____ 3 IE 3600 Industrial Apps of Probability and Statistics I |
| 2 ENGR 2090 Intro. to Engr./Computer Graphics <i>OR</i> | _____ 3 IE 3800 Deterministic Operations Research |
| 2 ENGR 2100 Computer-Aided Design & Engr. Graphics | 17 |
| _____ 4 MATH 2060 Calculus of Several Variables | |
| _____ 3 MATH 3110 Linear Algebra | |
| 15-16 | |

JUNIOR YEAR

- | | |
|------------------------------------------------------------------|---------------------------------------------------|
| _____ 3 IE 3610 Industrial Apps of Probability and Statistics II | _____ 3 IE 3140 Seminar in Industrial Engineering |
| _____ 3 IE 3810 Probabilistic Operations Research | _____ 3 IE 3860 Production Planning and Control |
| _____ 3 IE 3840 Engineering Economic Analysis | _____ 3 IE 4610 Quality Engineering |
| _____ 3 IE 4400 Decision Support Systems in IE | _____ 3 IE 4650 Facilities Planning and Design |
| _____ 3 PHYS 2210 Physics with Calculus II | _____ 4 IE 4820 Systems Modeling |
| _____ 1 PHYS 2230 Physics Laboratory II | _____ 3 Oral Communication Requirement |
| 16 | 17 |

SENIOR YEAR

- | | |
|----------------------------------------------------------------|----------------------------------------------|
| _____ 4 CPSC 2120 Algorithms and Data Structures | _____ 4 IE 4670 Systems Design II |
| _____ 3 IE 4880 Human Factors Engineering | _____ 3 MSE 2100 Intro. to Materials Science |
| _____ 2 ECE 2070 Basic Electrical Engineering <i>AND</i> | _____ 3 Management Requirement _____ |
| _____ 1 ECE 2080 Basic Electrical Engineering Lab. I <i>OR</i> | _____ 3 Gen Ed _____ |
| 3 ECE 2020 Electric Circuits I <i>AND</i> | 13 |
| 1 ECE 2110 Electrical Engineering Lab I | |
| _____ 3 Ethics & Professional Practice Requirement _____ | |
| _____ 3 Gen Ed _____ | |
| 16 | |

128 Total Semester Hours

General Education Requirements

LIT	Non-Lit	SS1	SS2	CCA	STS
					IE 4880

Comments: _____

Change of Major Checklist	
Required	Completed
CH 1010	
ENGL 1030	
ENGR 1020	
ENGR 1410	
MATH 1060	
MATH 1080	
PHYS 1220	
GPA = 2.0; C or better required in each class eGPA = 2.0	

Students should always refer to the Academic Catalog for course descriptions and for course pre-requisites, corequisites, and concurrent enrollment requirements. Academic Catalog can be found here: <https://www.clemson.edu/registrar/academic-catalogs/>