Computer engineers design computer systems, both hardware and software, to create new technologies and meet the ever-changing needs of society. The field of computer engineering covers a wide range of topics including computer architecture, operating systems, communications, computer networks, robotics, artificial intelligence, supercomputers, computer-aided design and neural nets. Whether designing and developing new products or improving manufacturing processes, computer engineers work at the frontier of technology.

### Freshman Year

**FALL SEMESTER**

- **EGR 101 - ENGINEERING EXPLORATION I** - 1
- **EGR 102 - FUNDAMENTALS OF ENGINEERING COMPUTING** - 2
- Choose **CHE 105 or PHY 231** - 4
- **PHY 241 - GENERAL UNIVERSITY PHYSICS LABORATORY** - 1
- **UK Core - Comp. & Comm. I** - 3
- **MA 113 - CALCULUS I** - 4

**TOTAL HOURS: 15**

**SPRING SEMESTER**

- **EGR 103 - ENGINEERING EXPLORATION II** - 2
- **UK Core - Comp. & Comm. II** - 3
- **MA 114 - CALCULUS II** - 4
- Choose **CHE 105 or PHY 231** - 4
- **CS 215 - INTRODUCTION TO PROGRAM DESIGN, ABSTRACTION, AND PROBLEM SOLVING** - 4

**TOTAL HOURS: 17**

Total Freshman Hours: 32

### Sophomore Year

**FALL SEMESTER**

- **MA 213 - CALCULUS III** - 4
- **PHY 232 - GENERAL UNIVERSITY PHYSICS** - 4
- **PHY 242 - GENERAL UNIVERSITY PHYSICS LABORATORY** - 1
- **CS 216 - INTRODUCTION TO SOFTWARE ENGINEERING TECHNIQUES** - 3
- **CPE 282 - DIGITAL LOGIC DESIGN** - 4

**TOTAL HOURS: 16**

**SPRING SEMESTER**

- **MA 214 - CALCULUS IV** - 3
- **EE 211 - CIRCUITS I** - 4
- **CPE 287 - INTRODUCTION TO EMBEDDED SYSTEMS** - 4
- **CS 270 - SYSTEMS PROGRAMMING** - 3
- **CS 275 - DISCRETE MATHEMATICS** - 4

**TOTAL HOURS: 18**

Total Sophomore Hours: 34

### Junior Year

**FALL SEMESTER**

- **EE 223 - AC CIRCUITS** - 4
- **CS 315 - ALGORITH DESIGN AND ANALYSIS** - 3
- **CPE 380 - COMPUTER ORGANIZATION** - 3
- **STA 381 - ENGINEERING STATISTICS-A CONCEPTUAL APPROACH** - 3
- **UK Core - Humanities** - 3

**SPRING SEMESTER**

- **EE 421G - SIGNALS AND SYSTEMS** - 3
- **EE 461G - INTRODUCTION TO ELECTRONICS** - 3
- **CPE 480 - ADVANCED COMPUTER ARCHITECTURE** - 3
- **CPE Elective** - 3
- **Technical Elective** - 3
- **UK Core - Social Sciences** - 3

Total Junior Hours: 36
Senior Year

FALL SEMESTER
CPE 490 - ECE CAPSTONE DESIGN I - 3
CPE Elective - 3
Technical Elective - 3
Supportive Elective - 3
UK Core - Community, Culture and Citizen - 3

TOTAL HOURS: 15

SPRING SEMESTER
CPE 491 - ECE CAPSTONE DESIGN II - 3
Hardware Elective - 3
Software Elective - 3
CPE Elective - 3
UK Core - Global Dynamics - 3

TOTAL HOURS: 15

Total Senior Hours: 30

Total Minimum hours Required for Degree: 130 hours