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
- 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

**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: 15**

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

**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: 16**

Total Sophomore Hours: 34

**Junior Year**

**FALL SEMESTER**
- EE 223 - AC Circuits - 4
- CS 315 - Algorithm 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 HOURS: 16
Total Junior Hours: 34

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