WHAT IS COMPUTER ENGINEERING?

Computer Engineering encompasses a broad range of technologies that utilize digital devices for the benefit of society. Subdisciplines include digital electronics, VLSI chips, embedded controllers, networking, software development, memory and storage devices, cloud computing, internet-of-things, computer security, application-specific IC’s, graphics processing units, and computer architecture.

WHY COMPUTER ENGINEERING AT OSU?

The School of Electrical and Computer Engineering at OSU provides high quality, comprehensive education for both undergraduate and graduate degree seeking students. The School incorporates software, hardware, and design experiences in its curriculum. Our faculty are committed to student excellence and our students are highly recruited by industry. We emphasize both theory and application to prepare students for their first entry-level job.

HIGHLIGHTS

- Ample scholarships to a diverse student body
- Dual BS Electrical Engineering and BS Computer Engineering degree
- “4+1” BS Electrical Engineering/Computer Engineering and Master of Engineering degree
- Ample software, hardware, computer, laboratory, and design experiences
- Highly engaged faculty and student-centric culture

CAREER INDUSTRIES & FOCUS AREAS

OPTIONS

“4+1” Accelerated BS and Master of Engineering program
Dual bachelor degree option for computer and electrical engineering

CAREER OPPORTUNITIES

- VLSI and computer architecture engineering
- Software engineering
- Memory and storage engineering
- Networking and cybersecurity engineering
- Computer systems engineering
- Consulting, manufacturing, management, and marketing

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# Typical Four-Year Curriculum

## FIRST YEAR

### Fall Semester
- ENGR 1111 Intro to Engr
- MATH 2144 Calculus I
- CHEM 1414 Gen Chemistry
- CS 1113 Comp Science I
- ENGL 1113 Engl Comp I

### Spring Semester
- CS 2133 Comp Science II
- CS 2351 UNIX Prog
- MATH 2153 Calculus II
- POLS 1113 American Gov’t
- PHYS 2014 Gen Physics I
- ECEN 3223 Digital Logic Des
- XXXX XXXX “H” elective

## SECOND YEAR

### Fall Semester
- MATH 2163 Calculus III
- PHYS 2114 Gen Physics II
- MATH 2233 Diff Equations
- HIST 1103 American History
- ECEN 2714 Fund Elec Circuits

### Spring Semester
- PHYS 3313 Intro Device Physics
- CS 3653 Discrete Math
- ENSC 3213 Comp Based Systems
- ECEN 3714 Network Analysis
- XXXX XXXX “S/I/D” Elective

## THIRD YEAR

### Fall Semester
- MATH 3013 Linear Algebra
- ECEN 3613 EM Fields
- ENGL 3323 Technical Writing
- CS 4343 Data Structures
- ECEN 3314 Electr Dev & Appl

### Spring Semester
- IEM 3503 Engr Economics
- ECEN 3513 Signal Analysis
- CS 4323 Op Systems
- XXXX XXXX “H” Elective
- XXXX XXXX “S/I/D” Elective

## FOURTH YEAR

### Fall Semester
- ECEN 4013 Design Engr Sys
- ECEN 4503 Random Signals
- ECEN 4303 Dig Elec Ckt Des
- ECEN 4213 Emb Comp Sys
- XXXX XXXX “H” Elective

### Spring Semester
- ECEN 4024 Capstone Design
- ECEN 4243 Comp Arch
- ECEN XXXX ECEN Area
- XXXX XXXX Tech Elective

### ECEN AREA CLASS OPTIONS
- ECEN 4233 High Speed Comp Arith
- ECEN 4273 Software Engineering
- ECEN 4283 Computer Networks

### ECEN TECHNICAL ELECTIVE OPTIONS
- *Any 3000 level or above from the following ECSC, ENGR, ECEN, BAE, MAE, CIVE, IEM, PHYS, MATH, CHEM, STAT, or CS

**TOTAL HOURS: 124**


Contact | ceat.recruitment@okstate.edu | (405)-744-5279

This course plan is for general guidance only. An official course plan will be provided upon enrollment.