2017-2018 Required Computer Engineering Courses

CMJ 103
Public Communication

ENG 101
College Composition

ECE 100
Seminar

ECE 101
Intro to ECE

ECE 177
Intro to Programming

ECE 275
Sequential Logic

ECE 277
Intro to Programming II

ECE 473
Computer Arch. & Org.

ECE 471
Embedded Systems

ECE 477
Hardware Applications in C

ECE 471
Intro to Unix Sys. Admin.

ECE 477
Operating Systems

MAT 126
Calculus I

MAT 127
Calculus II

MAT 258
Diff. Equations, Linear Algebra

MAT 228
Calculus III

PHY 121
Physics I

PHY 122
Physics II

ECE 210
Electric Circuits

ECE 214
Electrical Network Lab

ECE 314
Signals And Systems

ECE 342
Electronics I

ECP 214
Engineering Writing I

ECE 316
Random Signal Analysis

STS 332
Statistics

ECP 403
Engineering Writing III

ECE 486
Digital Signal Processing

ECE 405
Design Project I

ECE 406
Design Project II

ECE 403
Design Project III

ECE 471
Embedded Systems

ECE 477
Hardware Applications in C

ECE 331
Intro to Unix Sys. Admin.

COS 331
Operating Systems

Pre-requisite

C

C or better Prerequisite

C–

or better Prerequisite

Prerequisites: ECE271 and any two of these: ECE 342, ECE 471, ECE 473, ECE 477

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2017-2018 Computer Engineering Technical Electives

CE Focus Technical Electives: You must take at least three of these

- ECE 417 Introduction to Robotics (ECE177 & MAT228)
- ECE 471 Embedded Systems (ECE271)
- ECE 478 Industrial Computer Control (ECE271)
- ECE 477 Hardware Applications in C (ECE277)
- ECE 498 Selected Topics with CE focus (varies)
- COS 3xx Computer Science Elective (varies)
- COS 4xx Computer Science Elective (varies)

If you wish to specialize in an area, some possibilities are:

**Embedded Control**
- ECE478, ECE477, ECE471, ECE414

**High Performance Computing**
- ECE331, ECE477

**Robotics**
- ECE417, ECE477, ECE471, ECE487

- ECE 414 Feedback Control Systems (ECE314)
- ECE 484 Communications Engineering (ECE314 & ECE316)
- ECE 323 Electric Power Conversion (ECE214 & C- in ECE210)
- ECE 444 Analog IC Design (ECE314 & ECE343)
- ECE 462 Semiconductor Devices (Chy131,PHY122,MAT258)
- ECE 498 Selected Topics (varies)

- ECE 351 Fields and Waves (ECE210 & MAT228)
- ECE 427 Electric Power Systems (C- in ECE210)
- ECE 445 Digital IC Design (ECE342)
- ECE 464 Microelectronics Engineering (Chy131,PHY122,MAT258)
- Other Courses with Adviser Approval (varies)

- ECE 453 Microwave Engineering (ECE351)
- ECE 465 Introduction to Sensors (junior standing)

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