# Department of Electrical Engineering and Computer Science

## Computer Engineering Catalog 2020

**Fall 15 hours**

- **Math 141 or 147 (4) FA, SP, SU**  
  Prereq- Math 32 or Math 141/147 and EF 105 or CS 101 or CS 102  
  Coreq- Math 132 or 141 or 147  
  CS 102 (4) FA, SP, SU  
  Coreq- Math 132 or 141 or 147  
  English 101/102 or 198 or 131 (3) FA, SP, SU  
  English 101/102 or 198 or 131 (3) FA, SP, SU  
  English 101/102 or 198 or 131 (3) FA, SP, SU

**Spring 15 hours**

- **Math 142 or 146 (4) FA, SP, SU**  
  Prereq- Math 132 or 141 or 147 grade of C or better  
  Coreq- Math 142 or 148  
  CS 102 (4) FA, SP, SU  
  Coreq- CS 102 with C or better  
  English 102 or 290 or 268 or 132 (3) FA, SP, SU  
  English 102 or 290 or 268 or 132 (3) FA, SP, SU  
  English 102 or 290 or 268 or 132 (3) FA, SP, SU

**Fall 16 hours**

- **Math 231 or 237 (5) FA, SP, SU**  
  Prereq- Math 142 or 148 grade of C or better  
  ECE 201 (3) FA, SP  
  Prereq- EF 152/158 and Math 142/148 grades C or better  
  CS 146 (4) FA, SP  
  Prereq- CS 130 with grade of C or better  
  Physics 231 (3) FA, SP, SU  
  Prereq- EF 153 or EF 151 and 152  
  ECE 205 (3) FA, SP  
  Prereq- CS 130 with grade of C or better  
  Coreq- Math 142 or 148

**Spring 17 hours**

- **Math 241 or 247 (4) FA, SP, SU**  
  Prereq- Math 142 or 148 grade of C or better  
  ECE 250 (3) FA, SP, SU  
  Prereq- ECE 201 with grade of C or better  
  Math 251 or 257 (3) FA, SP, SU  
  Prereq- Math 142 or 146 grade of C or better  
  ECE 299 (3) FA, SP  
  Prereq- ECE 201 with grade of C or better  
  ECE 196 (1) FA, SP  
  Prereq- ECE 202 with grade of C or better  
  Coreq- Math 131

**Fall 17 hours**

- **ECE 351 or 357 (3) FA, SP**  
  Prereq- ECE 250 with grade of C or better  
  ECE 335 (3) FA, SP  
  Prereq- ECE 202 with grade of C or better  
  CS 352 or 367 (4) FA, SP  
  Prereq- Math 142 or 146 grade of C or better  
  ECE 331 or 371 (3) FA, SP  
  Prereq- CS 142 or 148 grades C or better  
  ECE 399 (1) FA, SP  
  Prereq- ECE 202 with grade of C or better  
  Gen. Ed. (3) FA, SP, SU  
  Cultures and Civilizations

**Spring 16 hours**

- **ECE 315 (3) FA, SP**  
  Prereq- ECE 202 with grade of C or better  
  ECE 326 (3) FA, SP  
  Prereq- ECE 201 with grade of C or better  
  CS 311 or 317 (3) FA, SP  
  Prereq- CS 140 and Math 142 or 148 with grades C or better  
  CS 360 or 367 (4) FA, SP  
  Prereq- CS 130 and 302 or 307 with grades C or better  
  ECE 399 (1) FA, SP  
  Prereq- ECE 202 with grade of C or better  
  Gen. Ed. (3) FA, SP, SU  
  Arts and Humanities

**Fall 17 hours**

- **ECE 401 (3) FA**  
  Prereq- ECE 315 or 351 or 357 with grades of C or better  
  Core Elective (3) FA, SP**  
  Senior Elective (3) FA, SP***  
  Senior Elective (3) FA, SP  
  Gen. Ed. (3) FA, SP, SU  
  Arts and Humanities  
  Gen. Ed. (3) FA, SP, SU  
  Social Science

**Spring 17 hours**

- **ECE 402 (OC and WC) (3) SP**  
  Prereq- ECE 401 or ENGL 102, 132, 290, 296 with grades of C or better  
  Core Elective (3) FA, SP, SU**  
  Senior Elective (3) FA, SP, SU***  
  Gen. Ed. (3) FA, SP, SU  
  Cultures and Civilizations  
  Gen. Ed. (3) FA, SP, SU  
  Social Science

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**Core electives, you must choose 2 courses from within the following list:**

- COSC 340, COSC 361, COSC 386, ECE 433, ECE 493, ECE 456
- Other courses not currently listed may count as core electives only with departmental approval.

500 level courses are mentioned as suggestions to students admitted into the Five Year BA/MS program. Up to 2 (two) COSC 5XX or ECE 5XX courses may count as core and/or senior electives.

**Senior Electives, you choose 3 credit hours of computer engineering senior electives with your advisor’s consent. Acceptable senior electives are ECE 400 and COSC 400 courses that are not otherwise required.**

500 level courses are mentioned as suggestions to students admitted into the Five Year BA/MS program. Up to 2 (two) COSC 5XX or ECE 5XX courses may count as core and/or senior electives.

**Cultures and Civilizations**

**Arts and Humanities**

**Social Science**

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**Prerequisites:**

- Math ACT 28 or Math SAT 660
- English 101 or 102 or 198 or 131
- English as Second Language

**Recommended background:**

- Math 142 or 148
- CS 130
- EF 152/158 and Math 142/148 grades C or better
- CS 130
- Math 142 or 148

**Course electives you must choose 2 courses from within the following list:**

- COSC 340, COSC 361, COSC 386, ECE 433, ECE 456, ECE 493

**Other courses not currently listed may count as core electives only with departmental approval.**

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**Progression**

The department requires at least a C in every computer engineering, computer science, electrical engineering, and mathematics course used for the undergraduate degrees. ECE 201 requires a C or better in EF 152/158 and Math 142/148.

Progression of departmental undergraduate students to the upper-division programs of the department is competitive and is based on the space available in the department. Factors considered in the decision include overall grade point average, grades earned in courses required in the lower-division curriculum of the department and College of Engineering, and seriousness of purpose and interest in departmental programs as exemplified by regular and orderly progress through the prescribed curriculum without abuse of withdrawal and course repeat privileges.

Students who take ECE 300 (ECE 201-202) will be evaluated during the semester they are registered for it. Transfer students for whom ECE 300 (ECE 201-202) transfer credit is given may take 9 semester hours in departmental courses before progression evaluation. All students, whether or not they transfer in, who are not accepted into the upper-division program of the department will be put in either a temporary probationary status or a non-progressed status and will not be permitted to register for any upper-division courses within the department.

Students also have opportunities for an Honors Concentration and/or a five year BS/MS program. See the Undergraduate Catalog for details and requirements.