

**Department of Electrical Engineering and Computer Science  
Computer Engineering Catalog 2019**

Fall 15 hours	<b>Math 141 or 147 (4) FA, SP, SU</b> Prereq- Math 130 or Math ACT 28 or Math SAT 630	<b>EF 151 or 157 (4) FA, SP</b> Coreq- Math 141 or 147 and EF 105 or CS 102	<b>CS 102 (4) FA, SP, SU*</b> Coreq- Math 141 or 147	<b>English 101/118 or 198 or 131 (3) FA, SP, SU</b> 101 Regular; 118 Honors; 198 Chancellor Honors Only; 131 English as Second Language		
Spring 15 hours	<b>Math 142 or 148 (4) FA, SP, SU</b> Prereq- Math 141 or 147	<b>EF 152 or 158 (4) FA, SP, SU</b> Prereq- EF 151 or 157	<b>CS 130 (4) FA, SP, SU</b> (formerly CS 160) Prereq- CS 102	<b>English 102 or 290 or 298 or 132 (3) FA, SP, SU</b> 102 Prereq 101 or 118; 290 Prereq AP 101 credit 298 Prereq Chancellor Honors only & 198; 132 Prereq 131 ESL		
Fall 16 hours	<b>Math 231 or 237 (3) FA, SP, SU</b> Prereq- Math 142 or 148	<b>ECE 201 (3) FA, SP, SU</b> Prereq- EF 152/158 and Math 142/148 grades C or better; Coreq- Math 231/237	<b>CS 140 (4) FA, SP</b> Prereq- CS 130 (formerly CS 160)	<b>Physics 231 (3) FA, SP, SU</b> Prereq- Phys 135 or EF 151 and 152 Coreq- Math 142 or 148	<b>ECE 255 (3) FA, SP</b> Prereq- CS 130 (formerly CS 160)	
Spring 17 hours	<b>Math 241 or 247 (4) FA, SP, SU</b> Prereq- Math 142 or 148	<b>ECE 202 (3) FA, SP, SU</b> Prereq- ECE 201	<b>Math 251 or 257 (3) FA, SP, SU</b> Prereq- Math 142 or 148	<b>ECE 256 (3) FA, SP</b> Prereq- ECE 255	<b>Chem 120 or 128 (4) FA, SP, SU</b> Prereq- Math 119; recommended background Math 130	
Fall 17 hours	<b>ECE 351 or 357 (3) FA, SP</b> Prereq- ECE 255	<b>ECE 335 (3) FA, SP</b> Prereq- ECE 202	<b>CS 302 or 307 (4) FA, SP</b> Prereq- CS 140	<b>ECE 313 or 317 (3) FA, SP</b> Prereq- Math 142 or 148	<b>ECE 395 (1) FA, SP</b> Prereq- ECE 202	<b>Gen. Ed. (3) FA, SP, SU</b> Cultures and Civilizations
Spring 15 hours	<b>ECE 315 (3) FA, SP</b> Prereq- ECE 202	<b>CS 311 or 317 (3) FA, SP</b> Prereq- CS 140 and Math 142 or 148	<b>CS 360 or 367 (3) FA, SP</b> Prereq- CS 130 and 302 or 307	<b>ECE 356 or 358 (3) FA, SP</b> Prereq- 256 or 336 or COSC 360/367	<b>Gen. Ed. (3) FA, SP, SU</b> Arts and Humanities	
Fall 17 hours	<b>ECE 401 (2) FA</b> Prereq- ECE 315 or 351	<b>Core Elective (3) FA, SP**</b>	<b>Senior Elective (3) FA, SP***</b>	<b>Senior Elective (3) FA, SP</b>	<b>Gen. Ed. (3) FA, SP, SU</b> Arts and Humanities	<b>Gen. Ed. (3) FA, SP, SU</b> Social Science
Spring 15 hours	<b>ECE 402 (OC and WC) (3) SP</b> Prereq- ECE 401; ENGL 102, 132, 290, 298	<b>Core Elective (3) FA, SP, SU **</b>	<b>Senior Elective (3) FA, SP, SU ***</b>	<b>Gen. Ed. (3) FA, SP, SU</b> Cultures and Civilizations	<b>Gen. Ed. (3) FA, SP, SU</b> Social Science	

\*Beginning students who have had high school computer science and/or who have had significant programming experience (e.g. summer institute study, special research projects, home laboratory) are invited to apply during the summer to the head of the EECS department for permission to take a proficiency exam for COSC 102. The EECS department also gives credit in COSC 102 to students who receive a score of 5 on the computer science AP Exam.

\*\* Core electives, you must choose 2 courses from within the following list: COSC 340, COSC 361, COSC 366, ECE 433, ECE 453, ECE 455. 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 9 credit hours of computer engineering senior electives with your advisor's consent. Acceptable senior electives are ECE 4XX and COSC 4XX 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.

**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 curricula 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.