

## Department of Electrical Engineering and Computer Science Electrical Engineering Catalog 2020

Fall 15 hours	<b>Math 141 or 147 (4) FA, SP, SU</b> Prereq- Math ACT 28 or Math SAT 660	<b>EF 151 or 157 (4) FA, SP</b> Coreq- Math 132/141/147 or higher and EF 105 or CS 101 or CS 102	<b>CS 102 (4) FA, SP, SU</b> Coreq- Math 132 or 141 or 147 Recommended background CS 101	<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 132 or 141 or 147 with grade of C or better	<b>EF 152 or 158 (4) FA, SP, SU</b> Prereq-EF 151/157 with C or higher Coreq- Math 142 or 148	<b>CS 130 (4) FA, SP, SU</b> Prereq- CS 102 with C or better	<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 with grade of C or better	<b>ECE 255 (3) FA, SP</b> Prereq- CS 130 with grade of C or better	<b>Physics 231 (3) FA, SP, SU</b> Prereq- Physics 135 or EF 151 and 152 Coreq- Math 142 or 148	<b>Chem 120 or 128 (4) FA, SP, SU</b> Prereq- Math 119; recommended background in Math 131	<b>ECE 201 (3) FA, SP</b> Prereq- EF 152/158 and Math 142/148 with C or better Coreq- Math 231/237	
Spring 17 hours	<b>Math 241 or 247 (4) FA, SP, SU</b> Prereq- Math 142 or 148 with grade of C or better	<b>Math 251 or 257 (3) FA, SP, SU</b> Prereq- Math 142 or 148 with grade of C or better	<b>Physics 232 (4) FA, SP</b> Prereq- Physics 231 Coreq- Math 241 or 247	<b>ECE 313 or 317 (3) FA, SP</b> Prereq- Math 142 or 148 with grade of C or higher	<b>ECE 202 (3) FA, SP, SU</b> Prereq- ECE 201 with grade of C or better	
Fall 16 hours	<b>ECE 315 (3) FA, SP</b> Prereq- ECE 202 with grade of C or better	<b>ECE 325 (3) FA, SP</b> Prereq- ECE 202 with grade of C or better	<b>ECE 335 (3) FA, SP</b> Prereq- ECE 202 with grade of C or better	<b>ECE 341 or 347 (3) FA, SP</b> Prereq- ECE 202, Math 241 or 247 and Physics 232: C or better grades	<b>ECE 395 (1) FA, SP</b> Prereq- ECE 202 with grades of C or better	<b>Gen. Ed. (3) FA, SP, SU</b> Social Science
Spring 15 hours	<b>ECE 316 (3) FA, SP</b> Prereq- ECE 315 with grade of C or better	<b>ECE 336 (3) FA, SP</b> Prereq- ECE 335 with C or better Coreq- ECE 315 with C or better	<b>ECE 342 (3) FA, SP</b> Prereq- ECE 313 or 317 and 315 with grades of C or better	<b>Gen. Ed. (3) FA, SP, SU</b> Social Science	<b>Gen. Ed. (3) FA, SP, SU</b> Arts & Humanities	
Fall 17 hours	<b>ECE Sr. Elective *(3) FA, SP, SU</b> Senior Elective	<b>ECE Sr. Elective *(3) FA, SP, SU</b> Senior Elective	<b>ECE Sr. Elective*(3) FA, SP, SU</b> Senior Elective	<b>Gen. Ed. (3) FA, SP, SU</b> Arts and Humanities	<b>ECE 401 (2) FA</b> Prereq- ECE 315 or 351 with C or better	<b>Gen. Ed. (3) FA, SP, SU</b> Cultures and Civilizations
Spring 15 hours	<b>ECE Sr. Elective *(3) FA, SP, SU</b> Senior Elective	<b>Tech. Elective**(3) FA, SP, SU</b> Petition required in advance	<b>Tech. Elective *(3) FA, SP, SU</b> Petition required in advance	<b>Gen. Ed. (3) FA, SP, SU</b> Cultures and Civilizations	<b>ECE 402 (OC and WC) (3) SP</b> Prereq- ECE 401 and ENGL 102, 132, 290 or 298 with C or better	

**\*Acceptable Senior Electrical and Computer Engineering courses:** Choose 12 credit hours of ECE senior electives with Advisor's consent. Up to 2 COSC 5XX or ECE 5XX courses may count as upper division electives. Acceptable ECE senior electives are ECE 4XX courses that are not otherwise required for the degree.

**\*\*Technical Electives:** Chem 130/138; COSC 140, 311, 370/377; ECE 351, 356/358; EF 203, 303, Industrial 405, 457; Materials Science 201/207, 410, 460; Math 300/307; Mechanical Engineering 231, 321, 331, 363/367; Nuclear Engineering 342/347 Physics 250.

### 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 (now ECE 201-202) will be evaluated during the semester they are registered for it. Transfer students for whom ECE 300 (now 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.