### Department of Electrical Engineering and Computer Science
### Electrical Engineering Catalog 2016

#### Fall
<table>
<thead>
<tr>
<th>Hours</th>
<th>Courses</th>
<th>Prerequisites</th>
</tr>
</thead>
</table>
| 15     | Math 141 or 147 (4) FA, SP, SU  
Prereq- Math 130 or Math 28 ACT or Math 630 SAT  
Coreq- Math 141 or 147 and EF 105 or CS 102 |  
EF 151 or 157 (4) FA, SP  
Coreq- Math 141 or 147 |  
CS 102 (4) FA, SP  
Coreq- CS 102 |  
English 101 or 118 (3) FA, SP, SU  
Prereq- Math 130 or Math 28 ACT  
Coreq- Math 141 or 147 |  
English 102 (4) FA, SP, SU  
Prereq- EF 151 or 157 |  
CS 102 (4) FA, SP  
Coreq- CS 102 |  
English 101 or 118 |  
Prereq- 15 hours  
Prereq- EF 105 or CS 102 |

#### Spring
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| 15     | Math 142 or 147 (4) FA, SP, SU  
Prereq- Math 141 or 147 |  
EF 152 or 158 (4) FA, SP  
Prereq- EF 151 or 157 |  
CS 130 (4) FA, SP (formerly CS 150)  
Prereq- CS 102 |  
English 102 (3) FA, SP, SU  
Prereq- EF 152 or CS 102  
Prereq- Math 140 or Math 142 |  
English 101 or 118 |  
Prereq- 15 hours  
Prereq- EF 151 or 157 |

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| 16     | Math 231 (3) FA, SP, SU  
Prereq- Math 142 or 148 |  
ECE 205 (3) FA, SP, SU  
Prereq- CS 130 |  
Physics 231 (3) FA, SP, SU  
Prereq- Math 142 or 148 |  
Chem 120 or 128 (4) FA, SP, SU  
Prereq- Math 130 |  
ECE 201 (3) FA, SP, SU  
Prereq- EF 152/158 and Math 142/148  
Coreq- Math 231, access FORM |  
English 102 (3) FA, SP, SU  
Prereq- Math 142 or 148 |

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| 17     | Math 241 or 247 (4) FA, SP, SU  
Prereq- Math 142 or 148 |  
Math 251 or 257 (3) FA, SP, SU  
Prereq- Math 142 or 148 |  
Physics 232 (4) FA, SP, SU  
Prereq- Physics 231  
Prereq- Math 241 or 247 |  
ECE 313 or 317 (3) FA, SP  
Prereq- Math 142 or 148 |  
ECE 202 (3) FA, SP, SU  
Prereq- Math 201 |

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| 16     | ECE 315 (3) FA, SU  
Prereq- ECE 202 |  
ECE 325 (3) FA, SP  
Prereq- ECE 202 |  
ECE 335 (3) FA, SP  
Prereq- ECE 202 |  
ECE 341 or 347 (3) FA, SP  
Prereq- ECE 202, Math 241 or 247 and Physics 232 |  
ECE 395 (1) FA, SP  
Prereq- ECE 203  
Gen. Ed. (3) FA, SP, SU  
Social Science |  
Gen. Ed. (3) FA, SP, SU  
Arts & Humanities |

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| 15     | ECE 316 (3) SP, SU  
Prereq- ECE 315 |  
ECE 336 (3) FA, SP  
Prereq- ECE 335  
Coreq- ECE 335 |  
ECE 342 (3) FA, SP  
Prereq- ECE 313, 315 |  
Gen. Ed. (3) FA, SP, SU  
Social Science  
Gen. Ed. (3) FA, SP, SU  
Arts & Humanities  
Gen. Ed. (3) FA, SP, SU  
Cultures and Civilizations |

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| 17     | ECE Sr. Elective *(3) FA, SP, SU  
Senior Elective |  
ECE Sr. Elective *(3) FA, SP, SU  
Senior Elective |  
ECE Sr. Elective *(3) FA, SP, SU  
Senior Elective |  
ECE 401 (2) FA  
Prereq- ECE 315 or 351 |  
Gen. Ed. (3) FA, SP, SU  
Arts and Humanities  
Gen. Ed. (3) FA, SP, SU  
Cultures and Civilizations |

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</table>
| 15     | ECE Sr. Elective *(3) FA, SP, SU  
Senior Elective |  
Tech. Elective** *(3) FA, SP, SU  
Petition required in advance |  
Tech. Elective ** *(3) FA, SP, SU  
Petition required in advance |  
ECE 402 (OC&W) (3) SP  
Prereq- ECE 401 |  
Gen. Ed. (3) FA, SP, SU  
Arts and Humanities  
Gen. Ed. (3) FA, SP, SU  
Cultures and Civilizations |

*Acceptable Senior Electrical and Computer Engineering courses: Choose 12 credit hours of ECE senior electives with Faculty 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: Computer Science 140, 311 or Math 350, CS 370, Chemistry 130 or 138, Industrial 400, Materials Science and Engineering 201 or 207, 410; Mechanical Engineering 231, 321, 331, 344; Nuclear Engineering 342 or 347.

**Progression**

The department requires at least a C in every computer engineering, computer science, electrical engineering, and mathematics course used for the undergraduate degrees. Students taking ECE 201 must also have a C or better in EF 152 or 158.

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.

**UTRACK Milestones:**

<table>
<thead>
<tr>
<th>Term 1</th>
<th>Term 2</th>
<th>Term 3</th>
<th>Term 4</th>
<th>Term 5</th>
<th>Term 6 through 8</th>
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</thead>
<tbody>
<tr>
<td>Math 130 or higher or one SS or one AH or one CC</td>
<td>Math 130 or higher</td>
<td>EF 151/157 or Physics 135/137</td>
<td>EF 152/158 or Physics 136/138</td>
<td>ME 202 or CS 102 or MSE 201 or CBE 201</td>
<td>No Milestones</td>
</tr>
</tbody>
</table>