### Department of Electrical Engineering and Computer Science
#### Electrical- Power & Energy Systems Concentration Catalog 2024

<table>
<thead>
<tr>
<th>Fall</th>
<th>Math 132 or 147 or 147 (3-4) (QR) FA,SP,SU</th>
<th>EF 142 or 151 or 157 (4) (EI) FA, SP</th>
<th>ECE 315 or 351 with C or better and Math 131</th>
<th>COGC 107 (3) FA, SP</th>
<th>English 101 or 131 (3) FA, SP, SU</th>
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</thead>
<tbody>
<tr>
<td>14 hours</td>
<td>Math 132 Prely Math 131</td>
<td>EF 142 Prely. EF 151 with C or better and Math 131</td>
<td>EF 140 Coreq Math 132</td>
<td>EF 140 Coreq Math 132</td>
<td>EF 151/157 or higher and EF 105 or COGC 101 or CS 102</td>
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<tr>
<td>Spring</td>
<td>Math 142 or 148 (4) (EI) FA, SP, SU</td>
<td>EF 142 or 151 or 157 (4) (EI) FA, SP</td>
<td>Math 231 or 237 (3) FA, SP, SU</td>
<td>English 101 or 131 (3) FA, SP, SU</td>
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<tr>
<td>15 hours</td>
<td>Math 142 Prely Math 131</td>
<td>EF 142 Prely. EF 151 with C or better and Math 131</td>
<td>EF 140 Coreq Math 132</td>
<td>EF 140 Coreq Math 132</td>
<td>EF 151/157 or higher and EF 105 or COGC 101 or CS 102</td>
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</tbody>
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**Prerequisites:**
- Math 142 or 148 with C or better
- English 101 or 131 (3) FA, SP, SU
- Math 231 or 237 (3) FA, SP, SU
- Vol Core (3) FA, SP, SU

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**Fall**

| 16 hours | Math 201 or 237 (4) FA, SP, SU | ECE 202 (3) FA, SP | Math 142 Prely Math 142 or 148 with a grade of C or better | Math 251 or 257 (3) FA, SP, SU | EF 151 Coreq- Math 141/147 or higher and EF 105 or COSC 101 with C or better |
| 17 hours | Math 241 or 247 (4) FA, SP, SU | Physics 251 (4) FA, SP | Math 251 or 257 (3) FA, SP, SU |

**Spring**

| 16 hours | Math 241 or 247 (4) FA, SP, SU | ECE 252 (3) FA, SP | Math 251 or 257 (3) FA, SP, SU |
| 17 hours | Math 241 or 247 (4) FA, SP, SU | Physics 251 (4) FA, SP | Math 251 or 257 (3) FA, SP, SU |

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**Fall**

| 16 hours | ECE 315 (5 FA, SP) | ECE 320 (5 FA, SP) | Math 251 or 257 with a grade of C or better | Math 251 or 257 with a grade of C or better | ECE 341 or 347 (4) FA, SP |

**Spring**

| 15 hours | ECE 315 (5 FA, SP) | ECE 320 (5 FA, SP) | Math 251 or 257 with a grade of C or better |

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**Fall**

| 17 hours | ECE Sr. Elective (5 FA, SP) | ECE Sr. Elective (5 FA, SP) | Power Elective(s) (3 FA, SP) | Vol Core (3) FA, SP, SU |
| 17 hours | Senior Elective | Senior Elective | Global Citizenship United States (GCUS) |

**Spring**

| 17 hours | Economic, Entrepreneurship, Innovation Elective(s) (5 FA, SP) | Tech. Elective(s) (3 FA, SP) | Power Elective(s) (3 FA, SP) | Vol Core (3) FA, SP, SU |

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**Unlocking the University Honors Program**
- See the Undergraduate Catalog for details and requirements.

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**Volunteer Core courses highlighted in light orange.**

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**Electrical- Power & Energy Systems Concentration**
- 16 hours
- 17 hours
- 17 hours
- 17 hours

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**Classes Marked with an (*)**
- Courses used in the major.

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**Grading for Undergraduate Courses**
- Grades of C or better are required for all courses used for the undergraduate degrees.

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**Recent Changes**
- General Education: Core Requirements
- Program Requirements
- Transfer Credit
- Grade Requirements
- Expanded Perspectives
- Global Citizenship
- Economic, Entrepreneurship, and Innovation Electives
- Honors Concentration
- Five Year BS/MS Program

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**Provision**
- The department requires at least a C in every computer engineering, computer science, electrical engineering, and mathematics course used for the undergraduate degrees. ECE 301 requires a C or better in EF 152/158 and Math 142/148.

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**Course Descriptions**
- Additional related courses...

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**Course Requirements**
- General Education: Core Requirements
- Program Requirements
- Transfer Credit
- Grade Requirements
- Expanded Perspectives
- Global Citizenship
- Economic, Entrepreneurship, and Innovation Electives
- Honors Concentration
- Five Year BS/MS Program

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