

**Department of Electrical and Computer Engineering**  
**Bachelor of Science in Computer Engineering**  
**Major Code: CPEN**  
**Effective 2019-2020**

**Curriculum Guide**

| <b>Course</b>                         | <b>CR</b> | <b>Course</b>                                     | <b>CR</b> |
|---------------------------------------|-----------|---|-----------|
| <b>Freshman Year: First Semester</b>  |           | <b>Freshman Year: Second Semester</b>             |           |
| ENGL 100                              | 3         | ENGL 101  | 3         |
| ECEN 101                              | 3         | PHYS 241  | 3         |
| MATH 131                              | 4         | PHYS 251  | 1         |
| GEEN 100                              | 2         | MATH 132  | 4         |
| GEEN 111                              | 1         | CHEM 106  | 3         |
| COMP 163                              | 3         | CHEM 116  | 1         |
| <b>Semester Total Hours</b>           | <b>16</b> | <b>Semester Total Hours</b>                       | <b>15</b> |
| <b>Sophomore Year: First Semester</b> |           | <b>Sophomore Year: Second Semester</b>            |           |
| PHYS 242                              | 3         | MATH 231  | 4         |
| PHYS 252                              | 1         | COMP 280  | 3         |
| MATH 341                              | 3         | ECEN 200  | 3         |
| COMP 167                              | 3         | ECEN 206  | 1         |
| ECEN 212                              | 3         | ECEN 323  | 3         |
| ECEN 218                              | 1         | ECEN 329  | 1         |
| ECEN 227                              | 3         | <b>Semester Total Hours</b>                       | <b>15</b> |
| <b>Semester Total Hours</b>           | <b>17</b> |   |           |
| <b>Junior Year: First Semester</b>    |           | <b>Junior Year: Second Semester</b>               |           |
| COMP 285                              | 3         | Knowledge of African-American Culture and History | 3         |
| ECEN 300                              | 3         | ECEN 320  | 3         |
| ECEN 306                              | 1         | ECEN 326  | 1         |
| ECEN 351                              | 3         | ECEN 356  | 3         |
| ECEN 357                              | 1         | ECEN 375  | 3         |
| Social/Behavioral Science             | 3         | ECEN 400  | 3         |
| <b>Semester Total Hours</b>           | <b>14</b> | <b>Semester Total Hours</b>                       | <b>16</b> |
| <b>Senior Year: First Semester</b>    |           | <b>Senior Year: Second Semester</b>               |           |
| ECEN 478 <sup>a</sup>                 | 3         | ECEN 479 <sup>a</sup>                             | 3         |
| Technical Elective <sup>b</sup>       | 3         | Technical Elective <sup>b</sup>                   | 3         |
| Technical Elective <sup>b or c</sup>  | 3         | Technical Elective <sup>b or c</sup>              | 3         |
| ECEN 421                              | 3         | COMP 350  | 3         |
| SPCH 250 <sup>d</sup>                 | 3         | Global Awareness                                  | 3         |
| <b>Semester Total Hours</b>           | <b>15</b> | <b>Semester Total Hours</b>                       | <b>15</b> |

**Total Credit Hours: 123**

<sup>a</sup>Capstone Design Courses

<sup>b</sup>Must choose from these courses: ECEN 424, ECEN 441, ECEN 447, ECEN 457, ECEN 459, or ECEN 485 (approved case-by-case)

<sup>c</sup>Must choose from these courses: COMP 322, COMP 360, COMP 4xx, or ECEN 4xx

<sup>d</sup>This course satisfies the Humanities/Fine Arts Elective requirement

## MAJOR PROGRAM REQUIREMENTS

*Students must earn a C or better in the following courses:*

|          |                         |
|----------|-------------------------|
| ECEN 101 | ECEN 351                |
| ECEN 200 | ECEN 356                |
| ECEN 206 | ECEN 357                |
| ECEN 212 | ECEN 375                |
| ECEN 218 | ECEN 400                |
| ECEN 227 | ECEN 421                |
| ECEN 300 | ECEN 478                |
| ECEN 306 | ECEN 479                |
| ECEN 320 | COMP 163                |
| ECEN 323 | COMP 167                |
| ECEN 326 | COMP 280                |
| ECEN 329 | All Technical Electives |