

## Electrical Engineering Degree Plan (2026/27 catalog)

| First Year                                                                  |     |                                                                             |                             |
|-----------------------------------------------------------------------------|-----|-----------------------------------------------------------------------------|-----------------------------|
| Fall                                                                        |     | Spring                                                                      |                             |
| ENGR 101: Introduction to Engineering                                       | 3   | ENGR 102: Intro to Electromech Systems or<br>ENGR 103: User-Centered Design | 3                           |
| MATH 150: Calculus I                                                        | 4   | PHYS 270/270L: Mechanics & Lab                                              | 4                           |
| COMP 110: Computational Problem Solving                                     | 3.5 | MATH 151: Calculus II                                                       | 4                           |
| Core Curriculum                                                             | 3   | CHEM 151/151L: General Chemistry I & Lab                                    | 4                           |
| Core Curriculum                                                             | 3   | Core Curriculum                                                             | 3                           |
| Total Semester Units                                                        |     | 16.5                                                                        | Total Semester Units 18     |
| Second Year                                                                 |     |                                                                             |                             |
| Fall                                                                        |     | Spring                                                                      |                             |
| ENGR 102: Intro to Electromech Systems or<br>ENGR 103: User-Centered Design | 3   | PHYS 272: Intro to Modern Physics or<br>MENG 260: Intro to Thermal Science  | 3                           |
| PHYS 271/271L: Intro to Elec. and Magnet. & Lab                             | 4   | MATH 250: Calculus III                                                      | 4                           |
| MATH 310: Applied Math for Sci and Engr I                                   | 3   | ELEC 201/201L: Electrical Circuits & Lab                                    | 4                           |
| Core Curriculum                                                             | 3   | MENG 210: Statics                                                           | 3                           |
| Core Curriculum                                                             | 3   | Life Science Elective                                                       | 3                           |
| Total Semester Units                                                        |     | 16                                                                          | Total Semester Units 17     |
| Third Year                                                                  |     |                                                                             |                             |
| Fall                                                                        |     | Spring                                                                      |                             |
| ELEC 301: Electronics I                                                     | 4   | ELEC 302: Electronics II                                                    | 4                           |
| ELEC 311: Semiconductor Elec. Dev.                                          | 3   | ELEC 310: Embedded Systems Design                                           | 4                           |
| ELEC 340: Digital Design                                                    | 4   | ELEC 350: Signals and Systems                                               | 3                           |
| MATH 410: Applied Math for Sci and Engr II                                  | 3   | ISYE 330: Engineering Probability and Statistics                            | 3                           |
| COMM 103: Public Speaking                                                   | 3   | PHIL 342: Engineering Ethics                                                | 3                           |
| Total Semester Units                                                        |     | 17                                                                          | Total Semester Units 17     |
| Fourth Year                                                                 |     |                                                                             |                             |
| Fall                                                                        |     | Spring                                                                      |                             |
| ELEC 320: Principles of Electrical Power                                    | 3   | ELEC 460: Control Systems Engineering                                       | 4                           |
| ELEC 430: Applied Electromagnetics                                          | 4   | ELEC 492: Electrical Eng. Design & Practice II                              | 3                           |
| ELEC 470: Communication Princ. & Circuits                                   | 4   | ELEC Program Elective I                                                     | 3                           |
| ELEC 491W: Electrical Eng. Design & Practice I                              | 4   | Core Curriculum                                                             | 3                           |
|                                                                             |     | Core Curriculum                                                             | 3                           |
| Total Semester Units                                                        |     | 15                                                                          | Total Semester Units 16     |
| Final Semester                                                              |     |                                                                             |                             |
| Fall                                                                        |     |                                                                             |                             |
| ELEC Program Elective II                                                    | 3   | <b>ELEC Life Science Elective</b>                                           |                             |
| Core Curriculum                                                             | 3   | EOSC 121: Life in the Ocean                                                 | 4                           |
| Core Curriculum                                                             | 3   | BIOL - any course numbered between 101 and 225                              | 3-4                         |
| Core Curriculum                                                             | 3   |                                                                             |                             |
| Core Curriculum                                                             | 3   |                                                                             |                             |
| Total Semester Units                                                        |     | 15                                                                          | Total ELEC Degree Units 147 |