# **ELECTRICAL ENGINEERING**

Sample 4-Year Plan - Effective Fall 2019

# **FIRST YEAR**

#### **Fall Semester**

| Course        | Title                       | Cr |
|---------------|-----------------------------|----|
| CHEM135       | Gen Chemistry for Engineers | 3  |
| ENEE140       | Intro to Progr Concepts     | 2  |
| ENEE101*      | Introduction to ECE         | 3  |
| MATH140       | Calculus I (AR)             | 4  |
| ENGL101       | Academic Writing (AW)       | 3  |
| Total Credits |                             | 15 |

# **Spring Semester**

| Course        | Title                              |    | Cr |
|---------------|------------------------------------|----|----|
| ENEE150       | Intermediate Programming Concepts  |    | 3  |
| ENES100*      | Introduction to Engineering Design |    | 3  |
| MATH141       | Calculus II                        |    | 4  |
| PHYS161       | General Physics I (NS)             |    | 3  |
| Gen Ed        | Oral Communication (OC)            |    | 3  |
| Total Credits |                                    | 16 |    |

#### **SECOND YEAR**

#### **Fall Semester**

| Course        | Title                                | Cr |
|---------------|--------------------------------------|----|
| ENEE222       | Elements of Discrete Signal Analysis | 4  |
| ENEE244       | Digital Logic Design                 | 3  |
| MATH246       | Differential Equations               | 3  |
| PHYS260/1     | General Physics II (NL)              | 4  |
| ENEE200       | Engineering Ethics (HU/IS)           | 3  |
| Total Credits |                                      | 17 |

# **Spring Semester**

| Course        | Title                          | Cr |
|---------------|--------------------------------|----|
| ENEE205       | Electric Circuits              | 4  |
| ENEE245       | Digital Circuits & Systems Lab | 2  |
| MATH241       | Calculus III                   | 4  |
| PHYS270/1     | General Physics III            | 4  |
| Gen Ed        | Humanities (HU)**              | 3  |
| Total Credits |                                | 17 |

# **THIRD YEAR**

#### **Fall Semester**

| Course        | Title                        | Cr |
|---------------|------------------------------|----|
| ENEE303       | Analog & Digital Electronics | 3  |
| ENEE322       | Signals & Sytems Theory      | 3  |
| ENEE350       | Computer Organization        | 3  |
| ENEE380       | Electromagnetic Theory       | 3  |
| Gen Ed        | Hist & Social Sci (HS)**     | 3  |
|               |                              |    |
| Total Credits |                              | 15 |

#### **Spring Semester**

| Course        | Title                            | Cr |
|---------------|----------------------------------|----|
| ENEE307       | Electric Circuits Design Lab     | 2  |
| ENEE324       | Engineering Probability          | 3  |
| ENEE313       | Introduction to Device Physics   | 3  |
| ENEE381       | Electromagnetic Wave Propagation | 3  |
| Gen Ed        | Hist & Social Sci (HS)**         | 3  |
| ENGL393       | Technical Writing                | 3  |
| Total Credits |                                  | 17 |

# **FOURTH YEAR**

#### **Fall Semester**

| Course        | Title                                  | Cr |
|---------------|--|----|
| ENEE4xx       | Category A: Advanced Theory            | 3  |
| ENEE4xx       | Category B: Advanced Lab               | 2  |
| ENEE4xx       | Required Upper-level ENEE Elective     | 3  |
| Gen Tech      | Upper-level General Technical Elective | 3  |
| MATH4xx       | Upper-level Math Elective              | 3  |
| Total Credits |  | 14 |

# **Spring Semester**

| Course        | Title                                      | Cr |
|---------------|--|----|
| ENEE4xx       | Category C: Capstone Design Course         | 3  |
| ENEE4xx       | Required Upper-level ENEE Elective         | 3  |
| Gen Tech      | Upper-level General Technical Elective     | 3  |
| Gen Tech      | Upper-level General Technical Elective     | 3  |
| Gen Ed**      | Scholarship in Practice (SP - non-major)** | 3  |
| Total Credits |  | 15 |

<sup>\*</sup> ENEE101 and ENES100 cannot be taken in the same semester. Students may take these courses consecutively within their first year in the order of choice.

<sup>\*\*</sup>All students must complete two Distributive Studies courses that are approved for I-series courses. The Understanding Plural Societies and Cultural Competence courses may also fulfill Distributive Studies categories.