# Bachelor of Science in Electrical Engineering- Sample Plan

This plan is suggested for students entering Academic Year 2023-2024 who are ready for calculus.

**Semester 1:**

| Course: | Title: | CR. |
|---|---|---|
| MA 1160/61 | Calculus I w/Technology | 4 |
| ENG 1101 | Engineering Analysis & Prob. Solving | 3 |
| CH 1150 | University Chemistry 1 | 3 |
| CH 1151 | University Chemistry 1 Lab | 1 |
| CH 1153 | Optional Chem. Recitation (1 cr.) | |
| UN 1015 | Composition (1) | 3 |
| | Total: | **14** |

**Semester 2:**

| Course: | Title: | CR. |
|---|---|---|
| MA 2160 | Calculus II w/Technology | 4 |
| ENG 1102 | Engineering Modeling and Design | 3 |
| PH 1100 | Physics by Inquiry I | 1 |
| PH 2100 | University Physics I – Mechanics | 3 |
| UN 1025 | Global Issues (1) | 3 |
| | CORE Social Responsibility/Ethical Reas.(1) | 3 |
| | Total: | **17** |

**Semester 3:**

| Course: | Title: | CR. |
|---|---|---|
| MA 2321 (2) | Elementary Linear Algebra | 2 |
| MA 3521 (2) | Elementary Differential Equations | 2 |
| EE 2111 | Electric Circuits 1 | 3 |
| CS 1111 | Intro. to Programming in C / C++ | 3 |
| PH 1200 | Physics by Inquiry II | 1 |
| PH 2200 | University Physics II – Elec. & Magnetism | 3 |
| | CORE Critical/Creative Thinking (1) | 3 |
| | Total: | **17** |

**Semester 4:**

| Course: | Title: | CR. |
|---|---|---|
| MA 3160 | Multivariable Calculus w/Technology | 4 |
| EE 2112 | Circuits 2 w/Lab | 4 |
| EE 2174 | Digital Logic w/Lab | 4 |
| EE 3120 (3) | Electric Energy Systems | 3 |
| | or choose an EE Sophomore Elective | |
| | | |
| | | |
| | Total: | **15** |

**Semester 5:**

| Course: | Title: | CR. |
|---|---|---|
| EE 3131 | Electronics and Lab | 4 |
| EE 3160 | Signals and Systems | 3 |
| EE 3140 | Electromagnetics | 3 |
| | SELECT Approved Elective (4) | 3 |
| | HASS Humanities/Fine Arts (1) | 3 |
| | *Take ENT3950 if choosing Enterprise* | |
| | Total: | **16** |

**Semester 6:**

| Course: | Title: | CR. |
|---|---|---|
| EE 3901 | Design Fundamentals | 2 |
| EE 3180 | Intro. Probability & Random Signal Anal. | 3 |
| EE 3171 | Microcontroller Applications for CPS | 4 |
| | EE Technical Elective (6) | 3 |
| | HASS Social & Behavioral Science (1) | 3 |
| | *Take ENT 3960 if choosing Enterprise* | |
| | Total: | **15** |

**Semester 7:**

| Course: | Title: | CR. |
|---|---|---|
| EE 4901 (5) | ECE Senior Design Project I | 2 |
| | *or take ENT 4950 if Enterprise* | |
| | EE Technical Elective (6) | 3 |
| | EE Technical Elective (6) | 3 |
| | EE Technical Elective (6) | 3 |
| | Approved Electives (7) | 3 |
| | HASS Communication/Composition (1) | 3 |
| | Total: | **17** |

**Semester 8:**

| Course: | Title: | CR. |
|---|---|---|
| EE 4910 (5) | ECE Senior Design Project II | 2 |
| | *or take ENT 4960 if Enterprise* | |
| | EE Technical Elective (6) | 3 |
| | EE Technical Elective (6) | 3 |
| | EE Technical Elective (6) | 3 |
| | HASS Elective (1) | 3 |
| | Free Electives | 3 |
| | Total: | **17** |

Total credits: 128 + 3 units co-curricular activities

This is a suggested plan which can vary by individual student, and which shows a path through the program that avoids time conflicts. Students are responsible for monitoring degree progress and meeting degree requirements. Refer to the degree audit.

(1) Follow university General Education CORE and HASS requirements. All students must add 3 units of co-curricular activities.
(2) May substitute MA2320 for MA2321 and/or MA3520 for MA3521. MA2320 and MA3520 are taken in separate semesters. MA2521 or MA3520 is a prerequisite for EE 2112.
(3) EE 3120 may be postponed to 3rd year to take a sophomore EE Elective course.
(4) Choose one course from the list of SELECT Approved Electives, courses recommended by industry advisors to broaden knowledge. (Refer to the degree audit)
(5) Approved Engineering Design courses: (EE 4901 & EE 4910) or (MEEM 4901 & MEEM 4911) or Enterprise (ENT3950 & ENT3960 & ENT 4950 & ENT 4960). Recommended enterprises include: BMSE, OSHE, WCE, RSE and Aerospace.
(6) Choose EE courses offered among various areas of specialization (focus areas). Mix and match as the student likes.
(7) Choose from a wide-ranging list of math, science, and engineering courses. Refer to the degree audit for details.

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