

# ELECTRICAL ENGINEERING, B.S. (BEHREND)

**Begin Campus:** Any Penn State Campus

**End Campus:** Erie

## Suggested Academic Plan

The suggested academic plan(s) listed on this page are the plan(s) that are in effect during the 2024-25 academic year. To access previous years' suggested academic plans, please visit the archive (<https://bulletins.psu.edu/undergraduate/archive/>) to view the appropriate Undergraduate Bulletin edition.

### Electrical Engineering, B.S. at Erie Campus

The course series listed below provides **only one** of the many possible ways to move through this curriculum. The University may make changes in policies, procedures, educational offerings, and requirements at any time. This plan should be used in conjunction with your degree audit (accessible in LionPATH as either an **Academic Requirements** or **What If** report). Please consult with a Penn State academic adviser on a regular basis to develop and refine an academic plan that is appropriate for you.

#### First Year

Fall	Credits Spring	Credits
EDSGN 100S <sup>1</sup>	3 CHEM 110 <sup>*#†</sup>	3
ENGL 15 or 30H <sup>††</sup>	3 CMPSC 201 or 121 <sup>2</sup>	3
MATH 140 <sup>*†#†</sup>	4 MATH 141 <sup>*†#†</sup>	4
PHYS 211 <sup>*#†</sup>	4 PHYS 212 <sup>†</sup>	4
General Education Course (GA/GH/GS)	3 General Education Course (GHW)	1.5
	<b>17</b>	<b>15.5</b>

#### Second Year

Fall	Credits Spring	Credits
CAS 100 <sup>††</sup>	3 CMPSC 122, EMCH 212, ME 300, or PHYS 237 <sup>3</sup>	3
CMPEN 270 or 271 <i>and</i> 275 <sup>*2</sup>	4 EE 312 <sup>*</sup>	3
EE 210 <sup>*2</sup>	4 MATH 220 <sup>*</sup>	2
EMCH 211	3 MATH 230 <sup>*</sup>	4
MATH 250 <sup>*</sup>	3 PHYS 214 <sup>†</sup>	2
	General Education Course (GA/GH/GS)	3
	<b>17</b>	<b>17</b>

#### Third Year

Fall	Credits Spring	Credits
EE 310 <sup>*</sup>	4 ECON 102 or 104	3
EE 316 <sup>*</sup>	3 EE 313W <sup>*4</sup>	4
EE 352 <sup>*</sup>	4 EE 331 <sup>*</sup>	3
ENGL 202C <sup>††</sup>	3 EE 380 <sup>*</sup>	3
STAT 301 or STAT 318 <sup>*</sup>	3 EE 383 <sup>*</sup>	1
	General Education (GHW)	1.5
	<b>17</b>	<b>15.5</b>

#### Fourth Year

Fall	Credits Spring	Credits
EE 360 <sup>*</sup>	3 EE 401 <sup>*</sup>	3
EE 387 <sup>*</sup>	3 Technical Elective (300, 400-level) <sup>*</sup>	3
EE 388 <sup>*</sup>	1 Technical Elective (300, 400-level) <sup>*</sup>	3
EE 400 <sup>*</sup>	3 General Education Course (GA/GH/GS)	3
Technical Elective (300, 400-level) <sup>*</sup>	3 General Education Course (GA/GH/GS)	3
General Education Course (GA/GH/GS)	3	
	<b>16</b>	<b>15</b>

#### Total Credits 130

\* Course requires a grade of C or better for the major

‡ Course requires a grade of C or better for General Education

# Course is an Entrance to Major requirement

† Course satisfies General Education and degree requirement

<sup>1</sup> Course will satisfy First-Year Seminar requirement.

<sup>2</sup> EE 210, CMPEN 271, CMPEN 275, and CMPSC 201/121 must be completed prior to the third-year to ensure that fall semester third-year prerequisites are met.

<sup>3</sup> Students should take one of the following courses: CMPSC 122, EMCH 212, ME 300, or PHYS 237. Student planning on taking the FE Exam are advised to take ME 300.

<sup>4</sup> Course will satisfy Writing Across the Curriculum requirement.

#### University Requirements and General Education Notes:

US and IL are abbreviations used to designate courses that satisfy Cultural Diversity Requirements (United States and International Cultures).

W, M, X, and Y are the suffixes at the end of a course number used to designate courses that satisfy University Writing Across the Curriculum requirement.

General Education includes Foundations (GWS and GQ), Knowledge Domains (GHW, GN, GA, GH, GS) and Integrative Studies (Inter-domain) requirements. N or Q (Honors) is the suffix at the end of a course number used to help identify an Inter-domain course, but the inter-domain attribute is used to fill audit requirements. Foundations courses (GWS and GQ) require a grade of 'C' or better.

#### Program Notes:

- Only students who have gone through the entrance to major (ETM) process and have been accepted into this major may register for junior and senior-level EE, CMPEN and SWENG courses.

#### School-Approved Electives for Electrical Engineering:

Technical electives allow students to choose areas of interest to explore. Technical electives come in two categories: primary and secondary. Primary technical electives are those courses offered to the Electrical Engineering major, which are not required for the Electrical Engineering degree. Secondary technical electives are offered outside your home department and give you a broader latitude. **Students much complete at least two primary technical electives and, at most, one secondary**

**technical elective.** Courses listed below as asynchronous are offered as needed when the appropriate faculty member is available.

*Exceptions to the above policy will be granted to students who **successfully** complete a minor in one of the areas listed in the Academic Minors portion of the School of Engineering Advising*

**Primary Technical Electives:**

- Any 300-400 level SWENG course
- Any 300-400 level EE course not already required for the major
- Any 300-400 level CMPEN course not already required for the major
- Any 400 level CMPSC course not already required for the major, with the exception of CMPSC 455 and CMPSC 456
- Any 300-400 level technical gaming course

**Secondary Technical Electives:**

- EE 395 - Internship
- EE 495 - Internship
- CMPSC 461 - Programming Language Concept
- CMPSC 471 - Introduction to Compiler Construction
- MGMT 409 - Project Management for Engineers
- PSYCH 444 - Engineering Psychology
- ECON 481 - Business Forecasting Techniques
- ECON 485 - Econometric Techniques
- PHYS 458 - Intermediate Optics
- MATH 455 - Introduction to Numerical Analysis I
- MATH 456 - Introduction to Numerical Analysis II
- IE 302 - Engineering Economy