

COMPUTER 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 2023-24 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 (*Note: the archive only contains suggested academic plans beginning with the 2018-19 edition of the Undergraduate Bulletin*).

Computer 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
CMPSC 121 [†]	3	CHEM 110 ^{*#†}	3
ENGL 15 or 30H ^{††}	3	CHEM 111 ^{*#†}	1
MATH 140 ^{*#††}	4	CMPSC 122 [*]	3
PHYS 211 ^{*#†}	4	MATH 141 ^{*#††}	4
PSU 7	1	PHYS 212 [†]	4
General Education Course (GHW)	1.5		
	16.5		15

Second Year

Fall	Credits	Spring	Credits
MATH 250 [*]	3	CMPSC 360 ^{*1}	3
CMPEN 270 or 271 <i>and</i> 275 ^{*1}	4	EE 210 ^{*1}	4
MATH 220 ^{*†}	2	ENGL 202C ^{††}	3
ECON 102 or 104 [†]	3	MATH 230 [*]	4
CAS 100 ^{††}	3	PHYS 214 [†]	2
General Education Course (GA/GH/GS)	3		
	18		16

Third Year

Fall	Credits	Spring	Credits
CMPEN 351 [*]	3	CMPEN 352W ^{*2}	3
CMPEN 371 [*]	3	CMPEN 411 [*]	3
CMPSC 465 [*]	3	CMPEN 431 [*]	3
EE 310 [*]	4	EE 352 [*]	4
STAT 318 [*]	3	General Education Course (GA/GH/GS)	3
	16		16

Fourth Year

Fall	Credits	Spring	Credits
CMPEN 441 [*]	3	CMPEN 481 [*]	3
CMPEN 461 [*]	3	Technical Elective (300, 400-level) [*]	3
CMPEN 480 [*]	3	Technical Elective (300, 400-level) [*]	3
Computer Engineering Technical Elective [*]	3	General Education Course (GA/GH/GS)	3
Technical Elective (300, 400-level) [*]	3	General Education Course (GA/GH/GS)	3
General Education Course (GA/GH/GS)	1.5		
	16.5		15

Total Credits 129

* 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

¹ Must be completed prior to the third year to ensure that all fall semester third-year prerequisites are met.

² 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 Computer 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 Computer Engineering major, which are not required for the Computer Engineering degree. Secondary technical electives are offered outside your home department and give you a broader latitude. **Students must 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 Handbook.*

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:

- CMPEN 395 - Internship
- CMPEN 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
- MATH 456 - Introduction to Numerical Analysis
- IE 302 - Engineering Economy