COMPUTER SCIENCE, 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 Science, 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	CMPSC 122[*#]	3
ENGL 15 or 30H[†‡]	3	MATH 141[*‡#†]	4
MATH 140[*‡#†]	4	Science Sequence Course[†3]	4
PSU 7	1	General Education Course	3
Science Sequence Course (GN)[#†3]	4	General Education Course (GHW)	1.5
	15		**15.5**

Second Year

Fall	Credits	Spring	Credits
CAS 100[‡†]	3	CMPSC 360[*]	3
CMPSC 221	3	ENGL 202C[‡†]	3
MATH 220	2	STAT 318[*]	3
Science Sequence Course[†3]	2-3	Computer Science and Science Elective	3
General Education Course	3	General Education Course	3
General Education Course (GHW)	1.5		
	14.5-15.5		**15**

Third Year

Fall	Credits	Spring	Credits
CMPSC 312[*1]	3	CMPSC 421[*2]	3
CMPSC 335[*1]	3	CMPSC 431W[2]	3
CMPSC 465[*]	3	CMPSC 474[*]	3
SWENG 411 (Computing Elective)[*]	3	Computer Science and Science Elective	3
Computer Science and Science Elective	3	Supporting and Related Area	3
	15		**15**

Fourth Year

Fall	Credits	Spring	Credits
CMPSC 461[*1]	3	CMPSC 485W[*2]	3
CMPSC 484[*1]	2	Computing Elective	3
Computing Elective or Computer Science and Science Elective	3	Computer Science and Science Elective	3
General Education Selection (GA/GH/GS)	3	General Education Course	3
Computer Science and Science Elective	3	General Education Course	3
Supporting and Related Area	3		
	17		**15**

Total Credits 122-123

* 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] This course is only offered in the **FALL SEMESTER**
[2] This course is only offered in the **SPRING SEMESTER**
[3] Students need to complete one of the following three semester science (GN) course sequences, which will also count toward their general education.
- Biology: CHEM 110, BIOL 110S, and BIOL 220W or BIOL 230W or BIOL 240W
- Chemistry: CHEM 110, CHEM 111, CHEM 112, CHEM 113, and CHEM 210
- Physics: PHYS 211, PHYS 212, and PHYS 213 or PHYS 214

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.

School-Approved Electives for Computer Science and Science Electives (15 credits):

Students may choose one of the below options in Computer Science (9 credits):

- Cyber Security – CMPSC 440, CMPSC 443 and SWENG 455
- Artificial Intelligence and Data Science – CMPSC 440, CMPSC 441 and CMPSC 445
- Web Services and Applications – CMPEN 461, CMPSC 475 and SWENG 465

Students may choose from the following courses in Natural Science, MATH, STAT or other CMPSC courses (6 credits):

- 300 and 400-level courses in CMPSC
- ASTRO 291 or higher; BIOL 110 or higher; CHEM 110 or higher
- GEOG 160 or higher, MATH 200-level or higher (Not MATH 311), METEO 101 or higher
- PHYS 211 or higher, except PHYS 250 or PHYS 251
- STAT 300-level or higher

NOTE: Students who take the Chemistry Science Sequence will need to include one course with Natural Science (GN) credit.

School-Approved Computing Electives (9 credits):

Students may choose any courses from:

- Software Engineering: SWENG 411 or higher
- Computer Engineering: CMPEN 270 or higher (except CMPEN 441)
- IE 418
- Other CMPSC 400-level courses

School-Approved Supporting and Related Area Courses (6 credits):

Students may choose from the following:

- 300- and 400-level courses in GAME, MIS, ACCTG, ECON, FIN, PSYCH and ROTC (except MIS 336)
- CMPSC 494 – Research, CMPSC 495 – Internship, and/or CMPSC 496 – Independent Study
- 300 and 400-level courses in CMPSC, CMPEN (except for CMPEN 441), and SWENG (except SWENG 311)