

COMPUTER SCIENCE, B.S. (CAPITAL)

Begin Campus: Any Penn State Campus

End Campus: Harrisburg

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*).

General Option: Computer Science, B.S. at Harrisburg 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 or 131 ^{*#}	3 CMPSC 122 or 132 ^{*#}	3
MATH 140 ^{**†}	4 MATH 141 ^{**†}	4
ENGL 15, 15S, 30T, or ESL 15 [‡]	3 PHYS 211 [†]	4
General Education Course	3 CAS 100A or 100S [‡]	3
General Education Course (GHW)	1.5 General Education Course	3
	14.5	17

Second Year

Fall	Credits Spring	Credits
CMPSC 221	3 CMPSC 330 [*]	3
MATH 220	2 CMPSC 360 [*]	3
General Education Course (PHYS 212 recommended)	3-4 ENGL 202C [‡]	3
General Education Course	3 General Education Course	2-3
General Education Course	3 General Education Course	3
	General Education Course (GHW)	1.5
	14-15	15.5-16.5

Third Year

Fall	Credits Spring	Credits
CMPSC 312	3 CMPSC 430	3
MATH/STAT 318 or STAT 414	3 CMPSC 462	3
General Education Course	3 CMPSC 469	3

CMPSC/MATH/STAT elective chosen from department list ¹	3 CMPSC/MATH/STAT elective chosen from department list ¹	3
100-400 level elective	3 300-400 level elective	3
	15	15

Fourth Year

Fall	Credits Spring	Credits
CMPSC 463	3 CMPSC 460	3
CMPSC 472	3 CMPSC 470	3
CMPSC 487W	3 CMPSC 488	3
CMPSC/MATH/STAT electives chosen from department list ¹	6 CMPSC/MATH/STAT elective chosen from department list ¹	3
	Open Electives 100-400 level	0-2
	15	12-14

Total Credits 118-122

- * 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 9 credits should be in CMPSC.

² Students must earn a 2.5 or higher grade point average in the following courses: CMPSC 221, 312, 330, 360, 430, 460, 462, 463, 469, 470, 472, 487W, and 488.

³ Students in the Computer Science (COMP_BS) major are required to complete 21 of the 27 credits of 400-level prescribed courses for the major, including the senior capstone course, at Penn State Harrisburg. This is in compliance with Faculty Senate Policy 83-80.5.

⁴ CMPSC/MATH/STAT electives should be chosen from the following lists:

- CMPSC 313, 412, 413, 438, 441, 444, 445, 446, 455, 457, 475, 496, 497
- MATH 401, 411, 412, 425, 430, 431, 435, 445, 449, 450, 455, 465, 468, 496, 497
- STAT 401, 415, 462, 463

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.

Data science Option: Computer Science, B.S. at Harrisburg Campus

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First Year

Fall	Credits Spring	Credits
CMPSC 131 ^{*#}	3 CMPSC 132 ^{*#}	3
MATH 140 ^{*#†}	4 MATH 141 ^{*#†}	4
ENGL 15, 15S, 30T, or ESL 15 [†]	3 PHYS 211 [†]	4
General Education Course	3 CAS 100A or 100S [†]	3
General Education Course (GHW)	1.5 General Education Course	3
14.5		17

Second Year

Fall	Credits Spring	Credits
CMPSC 221	3 CMPSC 360 [*]	3
MATH 220	2 STAT 401	3
General Education Course (PHYS 212 recommended)	3-4 ENGL 202C [†]	3
General Education Course	3 General Education Course	3
General Education Course	3 General Education Course	2-3
	General Education Course (GHW)	1.5
14-15		15.5-16.5

Third Year

Fall	Credits Spring	Credits
CMPSC 312	3 CMPSC 430	3
CMPSC 330 [*]	3 CMPSC 445	3
CMPSC 441	3 CMPSC 462	3
MATH/STAT 318 or STAT 414	3 CMPSC 469	3
General Education Course	3 100-400 level elective	3
15		15

Fourth Year

Fall	Credits Spring	Credits
CMPSC 463	3 CMPSC 446	3
CMPSC 472	3 CMPSC 460	3
CMPSC 487W	3 CMPSC 488	3
STAT 462	3 CMPSC/MATH/STAT elective chosen from department list	3
CMPSC/MATH/STAT elective chosen from department list	3 Open Electives 100-400 level	0-2
15		12-14

Total Credits 118-122

‡ 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 Students must earn a 2.5 or higher grade point average in the following courses: DS 220, CMPSC 312, 330, 360, 430, 441, 460, 445, 446, 462, 463, 469, 472, 487W, and 488.

² Students in the Computer Science (COMP_BS) major are required to complete 27 of the 33 credits of 400-level prescribed courses for the major, including the senior capstone course, at Penn State Harrisburg. This is in compliance with Faculty Senate Policy 83-80.5.

³ CMPSC/MATH/STAT electives should be chosen from the following lists:

- CMPSC 313, 412, 413, 438, 444, 455, 457, 470, 475, 496, 497
- MATH 401, 411, 412, 425, 430, 431, 435, 445, 449, 450, 455, 465, 468, 496, 497
- STAT 415, 463

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