

Computer Science Typical Schedule – General Option

The following table shows a typical class schedule for students starting at Penn State Harrisburg.

Semester 1		Semester 2	
CMPSC 121: Intro. to Programming Techniques or CMPSC 131: Programming and Computation I	3	CMPSC 122: Intermediate Programming or CMPSC 132: Programming and Computation II	3
MATH 140: Calculus I	4	MATH 141: Calculus II	4
ENGL 015S or 030S: Composition	3	PHYS 211: General Physics: Mechanics	4
Humanities GH	3	CAS 100: Effective Speech	3
Health and Wellness GHW	1.5	Arts GA	3
14.5		17	
Semester 3		Semester 4	
CMPSC 221: OOP with Web-Based Applications	3	CMPSC 330: Advanced Programming in C++	3
MATH 220: Matrices	2	CMPSC 360: Discrete Mathematics	3
Sciences GN (PHYS 212 recommended)	3-4	ENGL 202C: Technical Writing GWS	3
Social and Behavioral Science GS	3	Sciences GN	2-3
Humanities GH	3	Arts GA	3
14-15		Health and Wellness GHW	1.5
		15.5-16.5	
Semester 5		Semester 6	
CMPSC 312: Computer Org. and Architecture	3	CMPSC 430: Database Design	3
MATH/STAT 318: Elementary Probability, or STAT 414: Introduction to Probability Theory	3	CMPSC 462: Data Structures	3
Social and Behavioral Science GS	3	CMPSC 469: Formal Languages with Applications	3
Additional Course in CS/MATH: Select from: CMPSC 313, 412, 413, 438, 441, 444, 445, 446, 455, 457, 475, 496, 497	3*	Additional Course in CS/MATH: Select from: CMPSC 313, 412, 413, 438, 441, 444, 445, 446, 455, 457, 475, 496, 497	3*
MATH 401, 411, 412, 425, 430, 431, 435, 445, 449, 450, 455, 465, 468, 496, 497		MATH 401, 411, 412, 425, 430, 431, 435, 445, 449, 450, 455, 465, 468, 496, 497	
STAT 401, 415, 462, 463		STAT 401, 415, 462, 463	
Open Electives 100-400 level	3	Open Electives 300-400 level	3
15		15	
Semester 7		Semester 8	
CMPSC 463: Design and Analysis of Algorithms	3	CMPSC 460: Principles of Programming Languages	3
CMPSC 472: Operating System Concepts	3	CMPSC 470: Compiler Construction	3
CMPSC 487W: Software Engineering and Design	3	CMPSC 488: Computer Science Project	3
Additional Courses in CS/MATH: Select from: CMPSC 313, 412, 413, 438, 441, 444, 445, 446, 455, 457, 475, 496, 497	6*	Additional Course in CS/MATH: Select from: CMPSC 313, 412, 413, 438, 441, 444, 445, 446, 455, 457, 475, 496, 497	3*
MATH 401, 411, 412, 425, 430, 431, 435, 445, 449, 450, 455, 465, 468, 496, 497		MATH 401, 411, 412, 425, 430, 431, 435, 445, 449, 450, 455, 465, 468, 496, 497	
STAT 401, 415, 462, 463		STAT 401, 415, 462, 463	
15		Open Electives 100-400 level	0-2
		12-14	

Notes:

1. **Bold typed courses** require a grade of C or better.
2. 9 credits for courses marked with an asterisk (*) should be in CMPSC.
3. 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.
4. 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.