

BS in Computer Science

Program Requirements

A minimum total of 120 credit hours is required for the computer science program and includes the 65 credit hours of major courses that must be completed with a minimum grade point average of 2.000. All courses that are prerequisites to other courses have to be completed with a grade of C- or better. In addition to meeting the requirements of the WSU General Education Program (<http://catalog.wichita.edu/undergraduate/academic-information/general-education-program/>) and the requirements of the College of Engineering, students in the computer science program must take the following courses:

Course	Title	Hours
General Education (34-35 credit hours)		
Select courses to meet General Education requirements ^{1, 2}		21
General Education courses that will also meet Program Requirements		
PHIL 125 or PHIL 105	Introductory Logic ³ Critical Reasoning	3
PHIL 354	Ethics and Computers	3
PHYS 314	Physics for Scientists II	4
PHYS 316	University Physics Lab II	1
MATH 242	Calculus I	5
Mathematical/Natural Sciences		
MATH 243	Calculus II ⁴	5
MATH/CS 321	Discrete Structures I	3
MATH/CS 322	Discrete Structures II	3
MATH 511	Linear Algebra	3
PHYS 313	Physics for Scientists I ⁴	4
IME 254	Engineering Probability and Statistics I	3
Major Courses		
ECE 194	Introduction to Digital Design	4
CS 211	Introduction to Programming	4
ECE 238	Assembly Language Programming for Engineers	3
CS 311	Object-Oriented Programming	4
ECE 394	Introduction to Computer Architecture	3
CS 400	Data Structures	4
CS 410	Programming Paradigms	3
CS 664	Computer Networks	3
CS 580	Introduction to Software Engineering	3
CS 510	Programming Language Concepts	3
CS 540	Operating Systems	3
CS 560	Design and Analysis of Algorithms	3
CS 665	Introduction to Database Systems	3
CS 356	Introduction to Computer Security	3
CS 598	Senior Design Project I	2
CS 599	Senior Design Project II	2
Technical Electives		
Select 12 credit hours. At least 9 out of the 12 credit hours must be from the School of Computing. Up to 2 credit hours of co-op can be used as nondepartmental technical electives.		12
Total Credit Hours		120

- ¹ Required major courses may also count towards General Education requirements. Students will need to select additional electives to reach 120 credit hours required for graduation with assistance from an advisor.
- ² Starting in fall 2021, first-year college students must take a First-Year Seminar (FYS) within their first two semesters at WSU. The FYS course should be completed in either fine arts or humanities or social/behavioral sciences. All other students are required to take an additional departmental technical elective.
- ³ PHIL 125 is preferred.
- ⁴ May count as a general education course.

Applied Learning

Students in the Bachelor of Science in computer science program are required to complete an applied learning or research experience to graduate from the program. The requirement can be met by completing the two capstone design experiences consisting of CS 598 and CS 599.