

COMPUTER SCIENCE, BACHELOR OF SCIENCE (629)

General Option

Program Coordinator

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Computer Science Program Educational Objectives

The program achieves its mission by focusing on specific educational objectives. Within three to five years after graduation, WKU CS graduates are expected to be:

Objective 1: Attain, contribute to, and advance in a fulfilling professional computing career, utilizing and continuously improving technical skills and non-technical communication, while demonstrating a commitment to ethical computing and social responsibility.

Objective 2: Effectively manage and lead complex computing initiatives, projects, and teams using adaptable leadership skills.

The CS student outcomes are listed on the program website at <https://www.wku.edu/cs>

Admission Requirements

The major in computer science requires a minimum of 53 semester hours. To be admitted to the computer science major, students must complete CS 290 (<https://catalog.wku.edu/search/?P=CS%20290>) or CS 221 (<https://catalog.wku.edu/search/?P=CS%20221>) with grades of "C" or better. In addition, all CS courses counting toward the CS program major must be completed with a grade of "C" or better. Computer Science electives may include from 0-3 hour of 200-level courses. Students must adhere to all University Policies as indicated in the WKU catalog section, "Academic Information."

Program Requirements (53 hours)

A baccalaureate degree requires a minimum of 120 unduplicated semester hours. More information can be found at www.wku.edu/registrar/degree_certification.php. (https://www.wku.edu/registrar/degree_certification.php)

Students who began WKU in the Fall 2014 and thereafter should review the Colonnade requirements located at: <https://www.wku.edu/colonnade/colonnaderequirements.php>. (<https://www.wku.edu/colonnade/colonnaderequirements.php>)

Code	Title	Hours
Core Courses		
CS 180	Computer Science I	4
CS 290	Computer Science II	4
CS 331	Data Structures	3
CS 325	Computer Organization and Architecture	3
CS 339	Discrete Structures	3
CS 351	Database Management Systems I	3
CS 360	Software Engineering I	3
CS 382	Programming Languages	3
CS 396	Intermediate Software Project	3
CS 421	Data Structures and Algorithm Analysis	3
CS 425	Operating Systems I	3
CS 496	CS Senior Project and Professional Practice	3
STAT 301	Introductory Probability and Applied Statistics	3
Electives		
Select 12 hours CS electives including: 3 hours at the 200-level or above (excluding CS 226 and CS 257), 6 hours at the 300-level or above and another 3 hours at the 400-level or above ¹		12
Total Hours		53

Code	Title	Hours
Additional Requirements for the General Option:		
MATH 136	Calculus I	4
Total Hours		4

¹ At most 1.5 hours of credit for CS 239 may count towards the major. At most 3 hours of credit for CS 239 and CS 245 (only for languages for which credit is not received through another course) may count towards the major.

Finish in Four Plans

First Year

Fall	Hours	Spring	Hours
CS 180		4 CS 290	4
ENG 100		3 MATH 136	4
Colonnade - Arts & Humanities		3 COMM 145	3
General Elective		2 General Elective	3
Colonnade - Natural & Physical Science w/ lab		4	
		16	14

Second Year

Fall	Hours	Spring	Hours
CS 331		3 CS 351	3
Colonnade - Literary Studies		3 HIST 101 or HIST 102	3
CS 2XX Elective		3 CS 339	3
General elective		3 General Elective	3
CS 325		3 STAT 301	3
		15	15

Third Year

Fall	Hours	Spring	Hours
Colonnade - Natural & Physical Science w/ no lab		3 CS 382	3
CS 360		3 CS 3XX Elective	3
CS 3XX Elective		3 Colonnade - Social & Behavioral	3
ENG 300		3 General elective	3
Colonnade - System		3 World Language Requirement or General Elective	3
		15	15

Fourth Year

Fall	Hours	Spring	Hours
CS 396		3 CS 496	3
CS 425		3 CS 4XX Elective	3
CS 421		3 Colonnade - Local to Global	3
General Elective		3 General Elective	3
Colonnade - Social & Cultural		3 General Elective	3
		15	15

Total Hours 120