



BACHELOR OF SCIENCE (#629)

Major in Computer Science: Systems/Scientific Applications Concentration
 Department of Computer Science
 Ogden College of Science and Engineering
 Western Kentucky University

The following four-year plan is an example of how to map your program in consultation with your faculty advisor. Every student will finish with a unique plan of his/her own depending on the electives selected.

Success Markers

FIRST YEAR	FALL SEMESTER		SPRING SEMESTER	
	CS 180 Computer Science I	4	CS 221 Computer Science II <i>Prerequisite: CS 180 C or higher</i>	4
HIST 101 World History I OR HIST 102 World History II (F-SB)	3	MATH 136 Calculus I	4	
PHIL 215 Symbolic Logic (F-QR)	3	COMM 145 Fund of Public Speaking & Communications (F-OC)	3	
ENG 100 Intro to College Writing (F-W1)	3	Social & Behavioral Studies (E-SB)	3	
Free Elective	1			
TOTAL CREDIT HOURS	14	TOTAL CREDIT HOURS	14	

SECOND YEAR	FALL SEMESTER		SPRING SEMESTER	
	CS 325 Computer Organization & Architecture (<i>Prerequisite: CS 221</i>)	3	CS 351 Database Management Systems (<i>Prerequisite; SC 221</i>)	3
CS 339 Computer Science III (<i>CS 221, PHIL 225, MATH 136</i>)	3	STAT 301 Introductory Probability and Applied Statistics	3	
CS Elective ¹	3	CS 360 Software Engineering (<i>Prerequisite: CS 221</i>)	3	
Natural and Physical Science & Lab ³ (E-NS, LS)	4	Natural and Physical Science & Lab ³	4	
World Language, if needed, or General Elective	3	ENG 307 Technical Writing	3	
TOTAL CREDIT HOURS	16	TOTAL CREDIT HOURS	16	

World Language Proficiency: All students entering in Fall 2014 or later must demonstrate proficiency in a world language at the Novice High level before completing 60 credit hours. Novice high is the ability to communicate in writing and speaking on familiar topics in simple sentences. To meet this requirement, students may take college language courses or take a proficiency test. For more information go to www.wku.edu/modernlanguages/placement/.

Colonnade Program: All students entering in fall 2014 or later must complete 39 hours in 13 specific Colonnade areas. Colonnade areas are listed in parentheses marked in blue after the corresponding classes. Some areas may have specific course requirements while others can be chosen from selected lists of options. For more details and to see lists of options, go to [Colonnade Requirements](#).

THIRD YEAR	FALL SEMESTER		SPRING SEMESTER	
	Arts & Humanities (E-AH)	3	Natural & Physical Science ⁴ (E-NS)	3
CS 382 Programming Languages (Prerequisite: CS221)	3	Math Elective ²	3	
Math Elective ²	3	CS 396 Intermediate Software Project (Prerequisite: CS 351, ENG 300, COMM 145)	3	
CS Elective ¹	3	ENG 200 Intro to Literature (F-AH)	3	
One course from math list ² , or one lab science class designed for science and engineering majors ⁴	3	Connections – Social & Cultural (K-SC)	3	
TOTAL CREDIT HOURS	15	TOTAL CREDIT HOURS	15	

FOURTH YEAR	FALL SEMESTER		SPRING SEMESTER	
	CS Elective ¹	3	CS Elective ¹	3
CS 421 Data Structures and Algorithm Analysis (Prerequisite: CS 339, STAT 301)	3	MathElective ²	3	
CS 425 Operating Systems I (Prerequisite: CS 325, CS 382)	3	ENG 300 Writing in the Disciplines (F-W2)	3	
Connections - Systems (K-SY)	3	CS 496 Senior Project & Professional Practice (Prerequisite: CS 360, CS 396)	3	
General Elective	3	Connections – Local to Global (K-LG)	3	
TOTAL CREDIT HOURS	15	TOTAL CREDIT HOURS	15	

Total Credit Hours: 120

All CS courses must be completed with a grade of 'C' or better

1 – 12 hours of CS electives chosen from CS 370, 381, 443, 445, 446, 450, and 456

2 – Math electives: Chose two courses from MATH 127, 137, 305, 307, 331, 405, 406, 470, and 473

3 – Lab Sciences: Choose one year (2 semester sequence) of a laboratory science and one additional science course from another discipline. All science courses must be designed for science or engineering majors

4 – Math/Science elective may be Math chosen from list in (2) above, or additional science class designed for science or engineering majors.

PLEASE NOTE: Prerequisites, Course Numbers, and Course Titles are subject to change.

Consult your advisor each semester.

Course Descriptions may be viewed at <http://www.wku.edu/catalog>

FOR ADDITIONAL INFORMATION, PLEASE CONTACT:

Department:	Computer Science
Phone:	270-745-4642
Website:	http://www.wku.edu/cs