

## BACHELOR of SCIENCE in COMPUTER SCIENCE – SYSTEMS/SCIENTIFIC APPLICATIONS CONCENTRATION (#629)

School of Engineering and Applied Sciences
Ogden College of Science and Engineering
Western Kentucky University

The suggested program of study shown below should be used in consultation with your advisor(s). Every student will finish with a unique plan of his/her own depending on the electives selected. To be admitted to the computer science major, students must complete CS 180, CS 290, and CS 331 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 hours of 200-level courses. Students must adhere to all University Policies as indicated in the WKU catalog section "Academic Information."

## **SAMPLE – Finish in Four Plan**

FIRST YEAR						
Fall Semester		Spring Semester				
CS180: Computer Science 1	4	CS290: Computer Science II	4			
World History (F-SB)	3	MATH136: Calculus I (F-QR)	4			
ENG100: Freshman English (F-W1)	3	COMM 145: Public Speaking (F-OC)	3			
World Language (if needed) or general elective	3	Arts & Humanities Elective (E-AH)	3			
Free Elective	3					
TOTAL CREDIT HOURS	16	TOTAL CREDIT HOURS	14			

SECOND YEAR						
Fall Semester		Spring Semester				
CS 331: Data Structures	3	CS351: Intro to Database Systems	3			
STAT301: Prob/Applied Stats	3	CS 339: Discrete Structures	3			
Literary Studies (F-AH)	3	CS325: Computer Organization and Architecture	3			
Natural and Physical Science & Lab (E-NS, LS)	4	ENG307: Technical Writing	3			
		Natural and Physical Science & Lab (E-NS)	4			
TOTAL CREDIT HOURS	13	TOTAL CREDIT HOURS	16			

THIRD YEAR						
Fall Semester		Spring Semester				
Math Elective	3	CS382: Programming Languages	3			
CS396: Intermediate Software Project	3	General Elective	3			
CS 360: Software Engineering	3	CS elective (CS 372 or CS 381 or CS 446)	3			
CS elective (CS 443, CS 450, or CS 456)	3	Math Elective	3			
ENG300: Writing in the Disciplines (F-W2)	3	Social & Behavioral Sciences (E-SB)	3			
TOTAL CREDIT HOURS	16	TOTAL CREDIT HOURS	15			

FOURTH YEAR						
Fall Semester		Spring Semester				
CS425: Operating Systems I	3	CS496: CS Project and Professional Practice	3			
General Elective	3	CS elective (CS 445 or CS 446)	3			
Connections Systems (K-SY)	3	General Elective	3			
CS421: Data Structures and Algorithm Analysis	3	Connections Local to Global (K-LG)	3			
CS Elective (CS 443 or CS 456)	3	Connections Social & Cultural (K-SC)	3			
TOTAL CREDIT HOURS	15	TOTAL CREDIT HOURS	15			

Total Credit Hours: 120

For more details and courses offered in the Colonnade General Education program visit the website.

**World Language Requirement**: Language Proficiency of novice-high before completing 60 credit hours is required (or completion of 2nd level of a language). Two credits (or equivalent) of a single world language in High School satisfies this WKU requirement.

For more Information: School of Engineering & Applied Sciences

Website: www.wku.edu/seas

**Phone:** 270-745-3251

Email: seas@wku.edu

Course Descriptions: http://www.wku.edu/undergraduatecatalog/