Bachelor of Science in Computer Science -- 120 Credits

Applied Track

JCSCI-BS/JACS-TR

Effective August 2017

GENERAL EDUCATION REQUIREMENTS

REQUIRED COURSES (RG 7257)

Foundational Courses		CR	Satisfied/Term	
Engcmp 0003 **or** 0005		3		
Engcmp 0004 **or** 0006		3		
CommRc 0052	Public Speaking	3		
Basic Algebra or Placement Test				
Math 0001	Algebra 1	3		
Quantitative Reasoning (QR) - 1 Course				
Note - a student cannot test out of their QR requirement.				
		3		

FREE ELECTIVES

Free electives are the balance of credits required for graduation (120) that are not used to satisfy competencies, knowledge areas, major requirements, electives, or any related area required by the department.

	CR	Satisfied/Term	

WORLDS OF KNOWLEDGE (RG 7256)

Aesthetic and Creative Expression (RQ 3148)					
Subject	Number	Course Title	CR	Satisfied/Term	
			3		
			3		

Global History & Culture (RQ 3149)					
Subject	Number	Course Title	CR	Satisfied/Term	
			3		
			3		

Societies & Civics (RQ 3150)					
Subject	Number	Course Title	CR	Satisfied/Term	
			3		
			3		

Science & Nature (RQ 3153)					
Subject	Number	Course Title	CR	Satisfied/Term	
Math	0221	Analytic Geom & Calc 1	4		
			3		

Follow-Up Courses (RQ 3154)					
Subject	Number	Course Title	CR	Satisfied/Term	
Math	0401	Discrete Math Structures	3		
			3		

Each student must take 2 courses in each World of Knowledge. The two courses taken within each World must be from different subjects. A student must take two additional "Follow-Up" courses from any World.

>The minimum number of courses taken in the Worlds must be 10.

>The Follow-Up courses may repeat a subject previously taken in a World.

>A student cannot use a major required Subject course in one of the Worlds.

>For example: A Biology student cannot use BIOL 0110 to fulfill a requirement in the Science and Nature World.

>Students cannot use a course to count both in their QR requirement and one of the Worlds.

>Students can choose QR and Worlds of Knowledge courses from published course lists.

MAJOR REQUIREMENTS (RG 7269)

First Term (RQ 3395)				
Complete the following Courses		CR	Satisfied/Term	
Math 0401	Discrete Math Structures	3		
CS 0100	Perspectives in Comp Science	3		
Requirement Satisfied		**6**		

Second Term (RQ 3396)				
Complete the following Courses		CR	Satisfied/Term	
CS 0406	Discrete Math 2 and Statistics	3		
CS 0410	Intro to CS Prog Applications	1		
CS 0411	Intro to CS Programming	3		
Requirement Satisfied		**7**		

Third Term (RQ 3397)				
Complete the following Courses		CR	Satisfied/Term	
CS 0045	Algos & Info Structure Apps	1		
CS 0046	Comp Sys Architecture Apps	1		
CS 0455	Algos & Info Structure	3		
CS 0456	Computer System Architecture	3		
Requirement Satisfied		**8**		

Fourth Term (RQ 3398)				
Complete the following Courses		CR	Satisfied/Term	
CS 0047	Adv Program Concepts Apps	1		
CS 0048	Data Structures & Files Apps	1		
CS 0457	Adv Programming Concepts	3		
CS 0458	Data Structures & Files	3		
Requirement Satisfied		**8**		

Required Upper Level (RQ 3408)				
Complete the following Courses		CR	Satisfied/Term	
Math 0221	Analytic Geom & Calculus 1	4		
CS 1165	Directed Project	3		
CS 1735	Software Design Methods	3		
CS 1736	Software Engineering	3		
CS 1760	Adv Object-Oriented Programming	3		
CS 1765	Database Mgmt Systems	3		
Requirement Satisfied		**19**		

Upper Level CS Electives (RQ 3409)				
Select 15 credits from the following courses		CR	Satisfied/Term	
CS 1163	Advanced Topics in CS	3		
CS 1164	Advanced CS Topics and Apps	3		
CS 1713	Algorithm Design	3		
CS 1720	Programming Languages	3		
CS 1761	Mobile Application Development	3		
CS 1762	Web Programming	3		
CS 1766	Intro to Computer Graphics	3		
CS 1783	Artificial Intelligence Programming	3		
CS 1792	Operating Systems	3		
Requirement Satisfied		**15**		

IMPORTANT INFORMATION:

This sheet is an unofficial representation of the major requirements and the information is subject to change. It is not an official record of academic progress and should not be treated as such. Official degree information can only be obtained through the Division Office or the Office of the Registrar.

Reviewed 4/1/2026