Bachelor of Science in Computer Science -- 120 Credits

Standard Track
JCSCI-BS/JSTD-TR

Effective August 2017

GENERAL EDUCATION REQUIREMENTS (RG 6825)

REQUIRED COURSES

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

	CR	Satisfied/Term	
Math 0001 Algebra 1	3		

Quantitative Reasoning (QR) - 1 Course

Note - a student cannot test out of their QR requirement.

	CR	Satisfied/Term	
	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

Aesthetic and Creative Expression

Subject	Number	Course Title	CR	Satisfied/Term	
			3		
			3		

Societies & Civics

Subject	Number	Course Title	CR	Satisfied/Term	
			3		
			3		

Follow-Up Courses

Subject	Number	Course Title	CR	Satisfied/Term	
Math	0231	Analytic Geom & Calc 2	4		
Math	0241	Analytic Geom & Calc 3	4		

Global History & Culture

Subject	Number	Course Title	CR	Satisfied/Term	
			3		
			3		

Science & Nature

Subject	Number	Course Title	CR	Satisfied/Term	
Math	0221	Analytic Geom & Calc 1	4		
			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 7267)

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 Mathematics (RQ 3399)

Complete the following Courses	CR	Satisfied/Term	
Math 0221 Analytic Geom & Calculus 1	4		
Math 0231 Analytic Geom & Calculus 2	4		
Math 0241 Analytic Geom & Calculus 3	4		
Math 1181 Linear Algebra 1	3		
Requirement Satisfied	**15**		

Upper Level CS Electives (RQ 3400)

Select 15 credits from the following courses	CR	Satisfied/Term	
CS 1132 Classical Numerical Analysis			
or Math 1071 Numerical Math Analysis	3		
CS 1163 Advanced Topics in CS	3		
CS 1164 Advanced CS Topics and Apps	3		
CS 1710 Formal Structures in CS	3		
CS 1713 Algorithm Design & Analysis	3		
CS 1720 Programming Languages	3		
CS 1735 Software Design Methodology	3		
CS 1736 Software Engineering	3		
CS 1750 Systems Programming	3		
CS 1760 Adv Object-Oriented Programming	3		
CS 1761 Mobile Application Development	3		
CS 1762 Web Programming	3		
CS 1765 Data Base Mgmt Systems	3		
CS 1766 Intro to Computer Graphics	3		
CS 1783 Artificial Intelligence Programming	3		
CS 1791 Compiler Design	3		
CS 1792 Operating Systems	3		
CS 1793 Computer Architecture & Org	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.

Updated 04/11/2023