

## COLLEGE OF HEALTH, SCIENCE, AND TECHNOLOGY SCHOOL OF COMPUTER SCIENCE AND MATHEMATICS BACHELOR OF SCIENCE DEGREE COMPUTER SCIENCE

SOFTWARE DEVELOPMENT OPTION

Catalog year 2016-2017

	COMPUTER SCIEI	NCE CORE REQUIREMENTS (39 credits)			
COURSE NO	UCM COURSE TITLE	JCCC Equivalent	CR	SEM	CSC
CS 1100	Computer Programming I	CS 205 Concepts of Programming Algorithms using Java	3	*	
CS 1110	Computer Programming II	CIS 240 Advanced Topics in Java	3	*	
CS 2200	Intro. to Computer Organization	N/A	3	S	yes
CS 2300	Data Structures	CS 255 Basic Data Structures Using Java	3	F	yes
CS 2400	Discrete Structures	CS 210 Discrete Structures I	3	F	yes
CS 3100	Programming Languages	N/A	3	S	yes
CS 3200	Computer Architecture	N/A	3	F	yes
CS 3500	C & UNIX Environment	N/A	3	F	yes
CS 4300	Algorithm Design & Analysis	N/A	3	S	yes
CS 4500	Operating Systems	N/A	3	S	yes
CS 4600	Database Theory & Applications	CIS 260 Database Management	3	S	yes
CS 4910	Software Engineering	N/A	3	F	yes
CC 4020	Caniar Draiget	NI/A	2	C	1400

COMPUTER SCIENCE OPTION 1 ELECTIVES REQUIREMENTS (27 credits) Electives from the following 9-18 credits						
CS 3110	Applications Prog. in C# & .NET	CS 236 Object-Oriented Programming Using C#	3	*		
CS 3130	Secure Programming	N/A	3	F	yes	
CS 3800	Applications Dev. with VB.NET	N/A	3	*		
CS 4110	Mobile App. Prog. with Android	CIS 208 Mobile Application Development	3	S	yes	
CS 4120	Adv. Applications Prog. in Java	N/A	3	F	yes	
CS 4930	Software Testing	N/A	3	S	yes	
Electives from	the following 9-18 credits	•		-		
COURSE NO	UCM COURSE TITLE	JCCC Equivalent	CR	SEM	CSC	
CS 3120	Client Side Web Programming	N/A	3	*		
CS 3300	Introduction to Cryptography	N/A	3	S	yes	
CS 3810	Introduction to Game Design	N/A	3	*		
CS 4000	Special Problems CS	N/A	3	*		
CS 4020	Internship in CS	N/A	3	SU	yes	
CS 4130	Server Side Web Programming	CIS 275 Web-Enabled Database Programming	3	F	yes	
CS 4140	Web Applications Security	N/A	3	S	yes	
CS 4510	Intro. to Distributed Systems	N/A	3	*		
CS 4610	Intro. to Cloud Computing	N/A	3	*		
CS 4620	Big Data Systems	N/A	3	*		
CS 4630	Data Mining	N/A	3	*		
CS 4700	Artificial Intelligence	N/A	3	*		
CS 4800	Computer Networking	N/A	3	S	yes	
CS 4810	Computer Graphics	N/A	3	*		
CS 4820	Intro. to Information Assurance	N/A	3	F	yes	
CS 4830	Game Development	N/A	3	*		

CS 4840 Ethical Hacking	N/A	3	F	yes	Ī
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COMPUTER SCIENCE OPTION 1 GENERAL EDUCATION REQUIREMENTS (42 credits)					
COURSE NO	UCM COURSE TITLE	JCCC Equivalent	CR	SEM	CSC
COMM 1000	Public Speaking	SPD 121 Public Speaking	3	*	
CS 1000	Computers and Modern Society	N/A	3	SU	yes
ACST 1300	Basic Statistics	MATH 181 Statistics	3	*	
CS 1030 <b>or</b>	Intro. to Computer Programming	CIS 142 Beginning Programming using Python	3	F	yes
MATH 1131	or Applied Calculus or	or MATH 231 Business and Applied Calculus I	3		
or MATH	Calculus I	or MATH 241 Calculus I	5		
1151					

NOTE: for the remaining 30 CR in general education, students should consult with Dana Chaffin 660-543-4554, dchaffin@ucmo.edu. Most of the rest general education courses can be completed at JCCC. Please refer to the UCM-JCCC articulation.

FREE ELECTIVES: 12 credits MINIMUM TOTAL: 120 credits

Note: \*Course currently not offered at CSC