

COLLEGE OF HEALTH, SCIENCE, AND TECHNOLOGY SCHOOL OF COMPUTER SCIENCE AND MATHEMATCS BACHELOR OF SCIENCE DEGREE COMPUTER SCIENCE

Catalog year 2016-2017

SOFTWARE	DEVEI	OPMENT	OPTION
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COMPUTER SCIENCE CORE REQUIREMENTS (39 credits)						
COURSE NO	UCM COURSE TITLE	MCC Equivalent	CR	SEM	CSC	
CS 1100	Computer Programming I	CSIS 123 Programming Fundamentals	3	*		
CS 1110	Computer Programming II	CSIS 222 Object Oriented Programming with Java	3	*		
CS 2200	Intro. to Computer Organization	CSIS 250 Assembler Programming	3	S	yes	
CS 2300	Data Structures	CSIS 271 Data Structures and Alg. Analysis	3	F	yes	
CS 2400	Discrete Structures	CSIS 141 Discrete Structures for CS or MATH 141 Discrete Structures for Science	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	CSIS 152 Linux Operating Systems and CSIS	3	F		
		223 Object-Oriented Programming			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	CSIS 143 Database Design & Mgt	3	S	yes	
CS 4910	Software Engineering	N/A	3	F	yes	
CS 4920	Senior Project	N/A	3	S	yes	

COMPUTER SCIENCE OPTION 1 ELECTIVES REQUIREMENTS (27 credits)							
Electives from the following 9-18 credits							
COURSE NO	UCM COURSE TITLE	MCC Equivalent	CR	SEM	CSC		
CS 3110	Applications Prog. in C# & .NET	CSIS 265 .NET Web Programming with 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	N/A	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	Electives from the following 9-18 credits						
COURSE NO	UCM COURSE TITLE	MCC Equivalent	CR	SEM	CSC		
CS 3120	Client Side Web Programming	CSIS 228 Advanced Web Development	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	N/A	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

COMPUTER SCIENCE OPTION 1 GENERAL EDUCATION REQUIREMENTS (42 credits)						
COURSE NO	UCM COURSE TITLE	MCC Equivalent	CR	SEM	CSC	
COMM 1000	Public Speaking	COMM 100 Fundamentals of Speech	3	*		
CS 1000	Computers and Modern Society	N/A	3	SU	yes	
ACST 1300	Basic Statistics	MATH 115 Statistics	3	*		
CS 1030 or	Intro. to Computer Programming	N/A or MATH 175 Calculus for Business and	3	F	yes	
MATH 1131	or Applied Calculus or	Social Sciences or MATH 180 Analytic	3			
or MATH	Calculus I	Geometry and 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 MCC. Please refer to the UCM-MCC articulation.

FREE ELECTIVES: 12 credits MINIMUM TOTAL: 120 credits

Note: CSIS 223 is a C based class. Java is used in many of the UCM courses, CSIS 222 is recommended.

*Course currently not offered at CSC