



2019 - 2020
Computer Science –
Concentration in Computer Programming
Bachelor of Science Degree

Fall Year 1		Courses	Credit Hours	
CIS 1110	Computer Operating Systems and Maintenance I and II		3	15
CS 1110	Introduction to Programming		3	
ENG 1010	College Composition I		3	
MTH 1110	College Algebra I		3	
NET 1010	Networking Essentials		3	
Spring Year 1		Courses	Credit Hours	
CIS 2210	Database Management and Design		3	15
CS 1010	Principles of Computer Science		3	
ENG 1020	College Composition II		3	
MTH 1120	College Algebra II		3	
ITS 2310	LINUX I		3	
Fall Year 2		Courses	Credit Hours	
CIS 2510	Systems Development Methods		3	15
CS 2010	Net-centric Computing		3	
CS 2410	Java Programming		3	
MTH 1210	Trigonometry		3	
ELECTIVE	Science Elective		3	
Spring Year 2		Courses	Credit Hours	
CS 2150	C++ Programming		3	15
CS 2420	Advanced Java Programming		3	
MTH 1410	Introduction to Discrete Mathematics		3	
SPK 2010	Oral Communications		3	
WRKIT 2010	Work Experience		3	

Fall Year 3		Courses	Credit Hours	
CIS 3010	Computer Architecture		3	16
CS 3110	C# Programming		3	
CS 3210	Data Structures and Algorithms I		3	
CS 3410	Programming for Mobile Device		3	
MTH 1510	Calculus I		4	
Spring Year 3		Courses	Credit Hours	
CIS 4010	Advanced Computer Architecture		3	15
CS 3220	Data Structures and Algorithms II		3	
CS 3650	Python Programming		3	
CS 3910	Emerging Programming Languages		3	
CS 3950	Big Data Analytics		3	
Fall Year 4		Courses	Credit Hours	
CS 3610	Report Builder Analytics - Cognos		3	15
CS 4110	Artificial Intelligence		3	
CS 4510	Unit Testing and Interfaces		3	
ITS 3210	Legal and Ethical Issues in Information Technology		3	
Select 1 of the following courses:				
PSY 1010	Human Relations		3	
PSY 1110	General Psychology		3	
Spring Year 4		Courses	Credit Hours	
CIS 4810	Systems Development Project		3	15
CS 4810	Trends in Computer Science		3	
ELECTIVE	General Education Elective		3	
SOC 3210	Cultural Diversity		3	
WKRIT 4010	Work Experience		3	
Program Total				121