

## 2019 - 2020 Computer Science – Concentration in Database Technology Bachelor of Science Degree

Fall Year 1	Courses	Credit Hours	
CIS 1110	Computer Operating Systems and Maintenance I and II	3	
CS 1110	Introduction to Programming	3	
ENG 1010	College Composition I	3	15
MTH 1110	College Algebra I	3	10
NET 1010	Networking Essentials	3	
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Spring Year 1	Courses	Credit Hours	
CIS 2210	Database Management and Design	3	
CS 1010	Principles of Computer Science	3	
ENG 1020	College Composition II	3	15
MTH 1120	College Algebra II	3	10
ITS 2310	LINUX I	3	

Fall Year 2	Courses	Credit Hours	
CIS 2510	Systems Development Methods	3	
CS 2010	Net-centric Computing	3	
CS 2410	Java Programming	3	15
MTH 1210	Trigonometry	3	
ELECTIVE	Science Elective	3	

Spring Year 2	Courses	Credit Hours	
CS 2150	C++ Programming	3	
CS 2420	Advanced Java Programming	3	
MTH 1410	Introduction to Discrete Mathematics	3	15
SPK 2010	Oral Communication	3	
WRKIT 2010	Work Experience	3	

Fall Year 3	Course	s Credit Hours	
CIS 3010	Computer Architecture	3	
CS 3110	C# Programming	3	
CS 3210	Data Structures and Algorithms I	3	16
CIS 4210	Database Administration I	3	
MTH 1510	Calculus I	4	
Spring Year 3	Course	s Credit Hours	
CIS 4220	Database Administration II	3	
CS 3220	Data Structures and Algorithms II	3	
CS 3950	Big Data Analytics	3	
CS 4210	Database Programming I	3	15
Select 1 Course	from the Following:	·	
PSY 1010	Human Relations	3	
PSY 1110	General Psychology	3	
Fall Year 4	Course	s Credit Hours	
CS 3610	Report Builder Analytics - Cognos	3	
CS 4220	Database Programming II	3	
CS 4510	Unit Testing And Interfaces	3	
ITS 3210	Legal and Ethical Issues in Information Technology	3	15
SOC 3210	Cultural Diversity	3	
Spring Year 4	Course	s Credit Hours	
	Systems Development Project	3	
CIS 4810			
	Advanced Database Topics	3	
CIS 4810			15
CIS 4810 CS 4650	Advanced Database Topics	3	15
CIS 4810 CS 4650 CS 4810	Advanced Database Topics Trends in Computer Science	3 3	15