



College of Engineering and Computing  
 SAMPLE 16 MONTH CURRICULUM | 2017-2018 CATALOG  
 Master of Science — Computer Science  
 Data Science Concentration

First Year								
Fall			Winter			Summer		
Course	Credits	Frequency	Course	Credits	Frequency	Course	Credits	Frequency
CISC 640 Operating Systems	3	FS	CISC 610 Programming Languages	3	FW	CISC 615 Design and Analysis of Algorithms	3	S
CISC 680 Software Engineering	3	FS	CISC 660 Database Management Systems	3	W	CISC 662 Data Mining and Knowledge	3	FS
Elective Course	3		CISC 672 Data Visualization	3	W	Discovery in Databases		
						Elective Course	3	
<b>Total Credits</b>	<b>9</b>		<b>Total Credits</b>	<b>9</b>		<b>Total Credits</b>	<b>9</b>	

Second Year								
Fall								
Course	Credits	Frequency						
MMIS 671 Fundamentals of Analytics and Business Intelligence	3	FW						
CISC 664 Information Retrieval and Web Search Engine Technology	3	F						
Elective Course	3							
<b>Total Credits</b>	<b>9</b>							

TOTAL CREDITS: 36

Elective Options								
Course	Credits	Frequency	Course	Credits	Frequency	Course	Credits	Frequency
CISC 631 Theory of Computation	3	W	CISC 684 Software Testing and Verification	3	W	CISC 682 Software Requirements Engineering	3	F
ISEC 620 Applied Cryptography	3	F	CISC 685 Interaction Design	3	F	CISC 670 Artificial Intelligence	3	F
CISC 681 Computer Graphics	3	W	CISC 665 Distributed Systems	3	W	ISEC 660 Advanced Network Security	3	W
CISC 630 Compilers	3	S	CISC 683 Object-Oriented Design	3	F	ISEC 600 Secure Computer Systems	3	FS
ISEC 640 Database Security	3	FS	ISEC 650 Computr and Network Forensics	3	FW			
CISC 650 Computer Networks	3	FW	CISC 647 Computer Architecture	3	S			

\*This sample plan is subject to change.