

BS-Computer Information Systems Rotation

Course	Title	Spring 2027		Summer 2027		Fall 2027		Spring 2028		Summer 2028		Fall 2028	
		F2F	Online	F2F	Online	F2F	Online	F2F	Online	F2F	Online	F2F	Online
CIS 3300	Computer Technology and Impact		X		X		X		X		X		X
CIS 3303	Programming Logic and Design		X		X	X			X		X	X	
CIS 3315	Web Site Development and Design	X			X		X		X		X		X
Programming Requirement (choose one)	CIS 3330 - C++ Programming		X					X					
	CIS 3331 - Visual Basic Programming				X						X		
	CIS 3332 - Java Programming					X	X		X				X
CIS 3347	Data Communications and Infrastructure		X		X		X		X		X	X	X
CIS 3360	Ethics in Computing		X		X	X	X		X		X	X	X
CIS 3365	System Analysis and Design		X		X		X		X		X		X
CIS 4301	Database Theory and Practices	X	X		X		X	X	X		X		X
CIS 4341	Information Technology Security and Risk Management	X	X		X		X	X			X		X
CIS 4350	Management Information Systems		X		X	X	X		X		X	X	X
CIS 4351	IS Project Management		X				X		X				
CIS 4360	Strategic Information Systems		X		X		X		X		X	X	

Data Analytics Concentration Rotation

Course	Title	Spring 2027		Summer 2027		Fall 2027		Spring 2028		Summer 2028		Fall 2028	
		F2F	Online	F2F	Online	F2F	Online	F2F	Online	F2F	Online	F2F	Online
CIS 3302	Introduction to Business Analytics				X		X				X		X
CIS 3306	Data Visualization		X						X				X
CIS 4302	Web & Social Analytics		X					X					
CIS 4303	Data Mining	X							X				X
CIS 4352	Structured Query Language		X				X		X			X	

Cybersecurity Concentration Rotation

Course	Title	Spring 2027		Summer 2027		Fall 2027		Spring 2028		Summer 2028		Fall 2028	
		F2F	Online	F2F	Online	F2F	Online	F2F	Online	F2F	Online	F2F	Online
CIS 3361	Introduction to Computer Forensics	X					X	X					X
CIS 4342	Computer Security Principles and Practices		X		X				X		X		
CIS 4345	Network and Systems Security	X					X	X					X
CIS 4346	Applied Security					X						X	
CIS 4348	Security Trends and Malware Analysis	X	X					X	X				

Management and Networking Concentration Rotation

Course	Title	Spring 2027		Summer 2027		Fall 2027		Spring 2028		Summer 2028		Fall 2028	
		F2F	Online	F2F	Online	F2F	Online	F2F	Online	F2F	Online	F2F	Online
CIS 3305	Operating Systems Theory and Practice	X					X	X					X
CIS 4335	UNIX Systems Administration		X						X				
CIS 4345	Network and Systems Security	X					X	X					X
CIS 4376	Network Administration						X						X
CIS 4378	Comprehensive Networking		X			X			X				

Software and Database Design Concentration Rotation

Course	Title	Spring 2027		Summer 2027		Fall 2027		Spring 2028		Summer 2028		Fall 2028	
		F2F	Online	F2F	Online	F2F	Online	F2F	Online	F2F	Online	F2F	Online
Advanced Programming Requirement (pick one)	CIS 3340 - Advanced C++ Programming				X						X		
	CIS 3342 - Advanced Java Programming	X							X		X		
	CIS 3343 - C# Programming for Windows and the Web					X							X
CIS 3351	Data Structures		X			X			X			X	
CIS 4340	Algorithm Design and Analysis	X	X				X	X	X				X
CIS 4352	Structured Query Language		X				X		X			X	
CIS 4379	Software Engineering for E-Business		X			X	X		X			X	X

Artificial Intelligence (AI) Concentration Rotation

Course	Title	Spring 2027		Summer 2027		Fall 2027		Spring 2028		Summer 2028		Fall 2028	
		F2F	Online	F2F	Online	F2F	Online	F2F	Online	F2F	Online	F2F	Online
CIS 3310	Python Programming Fundamentals						X					X	
CIS 4303	Data Mining	X							X				X
CIS 4310	Artificial Intelligence				X						X		
CIS 4315	Introduction to Data Science	X							X				
CIS 4320	Advanced Topics in Artificial Intelligence					X							X

Without Concentration - Requires Advanced CIS Electives. May use CIS courses from other concentrations as electives.