



Bachelor of Science in Information Technology to Master of Science in Cybersecurity (Dual Degree Track)

**144
CREDITS**

ARTS AND SCIENCES COMPONENT		CREDIT HOURS
▶ Communications (Must include 6 credits in the Written English Requirement)		9
▶ Humanities		3
▶ Ethics		3
▶ Social Sciences/History		9
▶ Mathematics and Natural Sciences		
Natural Science (at least 3 credits)		12
Discrete Math		
One course from the following: Calculus I, Statistics and Probability, Quantitative Methods (prerequisite is Statistics and Probability), Finite Math or Mathematical Logic		
▶ Arts and Sciences Electives		24
TOTAL CREDITS FOR ARTS AND SCIENCES COMPONENT		60
INFORMATION TECHNOLOGY COMPONENT		CREDIT HOURS
▶ Core Requirements		
Object-Oriented Programming ^①	Data Communications and Networking	Project Management
Computer Systems Architecture ^①	Web Design and Development	System Administration
Operating Systems ^①	Human-Computer Interaction	IT 495 Integrated Technology
Database Concepts	Overview of Computer Security	Assessment (capstone) ^②
▶ Concentration Requirements		
One of the following concentrations must be declared (see page 45 for requirements)		
Cybersecurity Technology	General Option	Information Security
		Network Operations
TOTAL CREDITS FOR INFORMATION TECHNOLOGY COMPONENT (15 Credits must be upper level)		48
FREE ELECTIVE COMPONENT		CREDIT HOURS
▶ Information Literacy		1
TOTAL CREDITS FOR FREE ELECTIVE COMPONENT		6
GRADUATE PHASE: (30 total graduate credits required)		
Students achieve graduate status upon completion of the bridge component and all other undergraduate requirements.		
BRIDGE COMPONENT (MCY requirements; credits apply toward the BS)		CREDIT HOURS
▶ Foundations of Cybersecurity	▶ Project Management	3 each
TOTAL CREDITS FOR BRIDGE COMPONENT		6
GRADUATE COURSE COMPONENT		CREDIT HOURS
Network and Communication Security	Ethics, Legal, and Compliance Issues in Cybersecurity	
Leadership and Communication in Cybersecurity	CYS 596 Cybersecurity Capstone ^②	
Information Assurance		
▶ Concentration Requirements (9 credits)		
One of the following concentrations must be declared (see page 78 for requirements)		
General	Information Assurance	Medical Data Security
		Policy Administration
TOTAL CREDITS FOR GRADUATE COURSE COMPONENT		24
TOTAL CREDITS FOR GRADUATE PHASE		30
TOTAL DEGREE CREDITS REQUIRED		144

^① The core requirements should be completed in the order listed.

^② IT 495 Integrated Technology Assessment and CYS 596 Cybersecurity Capstone are the required capstone courses and must be taken through Excelsior College. They cannot be transferred in.