



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)	
Discrete Math	12
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
Computer Systems Architecture ^①	Web Design and Development
Operating Systems ^①	Human-Computer Interaction
Database Concepts	Overview of Computer Security
	Project Management
	System Administration
	IT 495 Integrated Technology 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
► Free electives	5
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
► Project Management	3
► Foundations of Cybersecurity	3
TOTAL CREDITS FOR BRIDGE COMPONENT	6
GRADUATE COURSE COMPONENT	CREDIT HOURS
Network and Communications Security	Information Assurance
Ethics, Legal and Compliance Issues	Electives (9 elective or concentration course credits)
Leadership and Communications in Cybersecurity	CYS 596 Capstone Project in Cybersecurity ^②
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 Capstone in Cybersecurity are the required capstone courses and must be taken through Excelsior College. They cannot be transferred in.