



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

144–147^①
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			12
Natural Science (at least 3 credits)			
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 ^②	Data Communications and Networking	Project Management	
Computer Systems Architecture ^②	Web Design and Development	System Administration	
Operating Systems ^②	Human-Computer Interaction	IT 495 Integrated Technology Assessment (capstone) ^③	
Database Concepts	Overview of Computer Security		
▶ 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			9
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
▶ CYS 560 Information Assurance			3
TOTAL CREDITS FOR BRIDGE COMPONENT			3
GRADUATE COURSE COMPONENT			CREDIT HOURS
CYS 503 Communications and Network Security	CYS 575 IT Risk Analysis and Management		
CYS 522 Advanced Networking	CYS 585 Digital Crime Prevention and Investigation		
CYS 526 Cyber Attacks and Defenses	BUS 530 Project Management Principles and Application		
CYS 541 Ethics, Legal and Compliance Issues	CYS 595 Capstone in Cybersecurity ^③		
TOTAL CREDITS FOR GRADUATE COURSE COMPONENT			
TOTAL CREDITS FOR GRADUATE PHASE			30
TOTAL DEGREE CREDITS REQUIRED			144–147

① Total will vary depending on concentration selected and selection of graduate courses used to apply to BSIT concentration requirement.

② The core requirements should be completed in the order listed.

③ IT 495 Integrated Technology Assessment and CYS 595 Capstone in Cybersecurity are the required capstone courses and must be taken through Excelsior College. They cannot be transferred in.