

Bachelor of Science (B.S.)
Cybersecurity
Cyber-Defense Technology Emphasis
MTH 122 Start

2026 – 2027
Catalog Year

1st Year				
Fall		Winter		Summer
MTH 122: College Algebra	3	COM 201: Speech	3	
CIS 162: Computer Science 1	4	CIS 163: Computer Science 2	4	
WRT 120: Strategies in Writing - Stretch 1 or General Education	3	WRT 130: Strategies in Writing - Stretch 2 or WRT 150: Strategies in Writing	4	
CYB 201: Intro to Cybersecurity	3	AI 201: Intro to Artificial Intelligence	3	
CIS 100: Computing Exploration Seminar	1			
Total	14	Total	14	
2nd Year				
Fall		Winter		Summer
CYB 241: Linux and Python for Cyber	3	STA 215: Intro Applied Statistics	3	
CIS 337: Network Systems Management	3	CIS 350: Intro to Software Engineering	3	
CIS 290: Professional Resp & Practices	3	CIS 375: Wireless Network and Security	3	
MTH 225: Discrete Structures: CS	3	General Education	3	
General Education	3	General Education	3	
Total	15	Total	15	
3rd Year				
Fall		Winter		Summer
CIS 331: Data Analysis Tools & Technology	3	CJ 335: Digital Crime, Media and Culture	3	CIS 490: Internship 2-5
CIS 353: Database	3	CIS 437: Cloud Computing	3	
CIS 458: System Security	3	CIS 456: Reverse EGR and Malware Analysis	3	
CYB 361: Cybersecurity Risk Mgt	3	General Education Course	3	
CJ 315: Principles of Security	3	General Education Course	3	
Total	15	Total	15	Total 2-5
4th Year				
Fall		Winter		Summer
CIS 418: Secure Software Engineering	3	CYB 495: Cybersecurity Project	3	
CIS 430: Computer and Cyber Forensics	3	CIS 455: Applied Cryptography	3	
Cybersecurity Elective	3	Cybersecurity Elective	3	
WRT 350: Business Communication (SWS)	3	General Education	3	
General Education	3	General Education	3	
Total	15	Total	15	

- This is a suggested curriculum guide that might not be applicable to every student
- This suggested course sequence is intended as a general guide and may need to be adjusted based on course availability
- Student must have a **minimum of 120 credits** to graduate, with **58 of the 120 credits** being from a senior level institution and **18 of the last 30 credits** completed at GVSU

General Education Requirements	
WRT 150: Strategies in Writing (grade of "C" or higher required) or WRT 120 and WRT 130 (grade of "C" or higher required in both)	Life Sciences
Physical	Philosophy and Literature
Arts	Mathematical Sciences (MTH 122)
Social Behavioral Sciences (COM 201)	Social Behavioral Sciences
Historical Analysis	U.S. Diversity
Global Perspectives	2 Supplemental Writing Skills Courses (prerequisite: WRT 130 or WRT 150)
2 Issues Courses (prerequisite: must have 55+ credits, CIS 331 and CJ 335)	

Major Notes:

- 1) CIS 331, CIS 358 and CJ 335 also fulfill Issues requirements in general education.
- 2) CIS 490 can be taken as 2-5 credits. Students will work with the Computing Internship Coordinator to determine the best amount of credits for them.
- 3) It is highly encouraged for students to "double dip" their general education requirements when possible.
 - a. Consider taking a course that fulfills the U.S. Diversity category and one Social and Behavioral Science course.
 - b. Consider taking a course that fulfills the Global Perspectives category and Historical Analysis category.
- 4) Two Supplemental Writing Skills (SWS) courses are required for graduation. WRT 350 will fulfill one SWS requirement. The remaining SWS requirement can be fulfilled via a general education category.