

Cybersecurity

Cyber-Defense Technology Emphasis

Honors College: MTH 122 Start

1st Year				
Fall		Winter		Summer
MTH 122: College Algebra	3	CYB 201: Intro to Cybersecurity	3	
CIS 162: Computer Science 1	4	COM 201: Speech	3	
CIS 100: Computing Exploration Seminar	1	MTH 225: Discrete Structures: CS	3	
HNR 151: Interdisciplinary Sequence 1	3	HNR 153: Interdisciplinary Sequence 3	3	
HNR 152: Interdisciplinary Sequence 2	3	HNR 154: Interdisciplinary Sequence 4	3	
Total	14	Total	15	
2nd Year				
Fall		Winter		Summer
CIS 163: Computer Science 2	3	CYB 241: Linux and Python for Cybersecurity	3	
CIS 337: Network Systems Management	3	CIS 350: Intro to Software Engineering	3	
STA 215: Intro Applied Statistics	3	CIS 375: Wireless Network and Security	3	
AI 201: Intro to Artificial Intelligence	3	CIS 290: Professional Resp & Practices	3	
HNR Elective: HNR 250 or 351	3	Free Elective	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: Distributed Computing	3	
CIS 458: System Security	3	CIS 456: Reverse EGR and Malware Analysis	3	
CYB 361: Cybersecurity Risk Mgt	3	HNR 300: Campus and Community Engagement	3	
CJ 315: Principles of Security	3	Free Elective	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	HNR 350: Integrative Seminar	3	
Free Elective	3	Free Elective	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

Honors Requirements	
HNR 151	HNR 152
HNR 153	HNR 154
HNR 300	HNR Elective: HNR 250 or 351
HNR 251 (fulfilled via CIS 331)	HNR 350
HNR 401/499 (fulfilled via CIS 468)	

Major Notes:

- 1) 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.

Honors:

The Frederik Meijer Honors College and the College of Computing have approved the following substitutions for the honors curriculum:

- 1) CIS 331 fulfills the HNR 251 requirement.
- 2) CIS 468 fulfills the HNR 401 and HNR 499 requirements.
- 3) All GVSU students must earn credit for two Supplemental Writing Skills (SWS) courses. Honors students can earn credit for one SWS course by completing HNR 154 (the winter semester of a first-year sequence) with a grade of C or better. They must earn their second SWS course credit outside of the Honors requirements.

Students are encouraged to plan ahead and submit a proposal for how they plan to fulfill the HNR 200 requirement. All students must complete 3 credits of HNR 200 before graduation. It can be taken as a 1-credit, 2-credit, or 3-credit course. There are three options for fulfilling this honors requirement: **pre-approved activity**, **pre-approved course substitution**, or **an activity or course**. Please work with an honors advisor to determine the best fit for you.