1st Year		
Fall	**Winter**	**Spring/Summer**
MTH 110: Algebra — 3	CIS 162: Computer Science 1 — 4	
AI 201: Introduction to AI — 3	MTH 122: College Algebra — 3	
HCC 201: Intro to HCC — 3	COM 201: Speech — 3	
WRT 150: Strategies in Writing — 4	PSY 101: Intro to Psychology — 3	
or WRT 120 <u>and</u> WRT 130	General Education — 3	
Total 13	**Total 16**	

2nd Year		
Fall	**Winter**	**Spring/Summer**
MTH 225: Discrete Structures: CS — 3	CIS 263: Data Structures and Algorithms — 3	
STA 215: Intro Applied Statistics — 3	STA 301: Questionnaire Design & Execution — 3	
CIS 163: Computer Science 2 — 4	HCC 304: Usability Design & Evaluation — 3	
HCC 311: User Interaction & Accessibility — 3	PSY 361: Perception — 3	
General Education — 3	or PSY 365: Cognition	
	CIS 290: Prof Responsibilities & Practices — 3	
Total 16	**Total 15**	

3rd Year		
Fall	**Winter**	**Spring/Summer**
AI 402: Intro to Generative AI — 3	HCC 402: User Experience Research — 3	CIS 490: Internship — 2-5
CIS 320: Visualization of Data & Info — 3	HCC Elective — 3	General Education — 3
WRT 350: Business Communication (SWS) — 3	Track Elective — 3	
Track Elective — 3	General Education — 3	
HCC Elective — 3	General Education — 3	
Total 15	**Total 15**	**Total 5-8**

4th Year		
Fall	**Winter**	**Spring/Summer**
AI 411: AI Ethics and Bias — 3	HCC 495: Human Centered Computing Project — 3	
HCC 403: User Experience Design — 3	HCC 431: Human-AI Interaction — 3	
HCC 452: AR/VR Design & Research — 3	Track Elective — 3	
Track Elective — 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 the **final 30 of the 120 credits** completed at GVSU

College of Computing Advising Center
B-3-241 Mackinac Hall
(616)-331-2310 or online at www.gvsu.edu/computing/advising

4/28/2025

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 Sciences	Philosophy and Literature
Arts	Mathematical Sciences (MTH 122)
Social Behavioral Sciences (COM 201)	Social Behavioral Sciences (PSY 101)
Historical Analysis	U.S. Diversity
Global Perspectives	2 Supplemental Writing Skills Courses (prerequisite: WRT 130 or WRT 150)
Issue Course (prerequisite: must have 55+ credits) (CIS 320)	Issue Course (prerequisite: must have 55+ credits)

Major Notes:
1.) CIS 490 can be taken as 2-5 credits. Students will work with the Computing Internship Coordinator to determine the best number of credits for them.
2.) 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 one Issues course.
3.) 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.

Complete one of the following HCC Tracks (12 credits):

Track: Human Centered AI
- Required:
  - o AI 402: Introduction to Generative AI (3 credits)
  - o AI 431: Natural Language Processing (3 credits)
  - o CIS 378: Applied Machine Learning (3 credits)
- Choose 1 of the following:
  - o AI 421: Applied Computer Vision (3 credits)
  - o AI 451: Reinforcement Learning (3 credits)

Track: Augmented & Virtual Reality and Game Development
- Required:
  - o CIS 357: Mobile Application Development (3 credits)
  - o CIS 376: Game Programming Techniques and Algorithms (3 credits)
  - o CIS 378: Applied Machine Learning (3 credits)
  - o HCC 453: AR/VR Development (3 credits)

Track: Human Centered Software Engineering
- Required:
  - o CIS 350: Introduction to Software Engineering (3 credits)
  - o SE 422: Software Architecture and Design (3 credits)
- Choose 2 of the following:
  - o AI 421: Applied Computer Vision (3 credits)
  - o CIS 376: Game Programming Techniques and Algorithms (3 credits)
  - o CIS 378: Applied Machine Learning (3 credits)
  - o HCC 453: AR/VR Development (3 credits)

HCC Major Elective Options:
Choose 2 courses from the following list. Make sure to select courses that you did not complete as part of your chosen track:
- AI 402: Introduction to Generative AI (3 credits)
- AI 411: AI Ethics and Bias (3 credits)
- AI 431: Natural Language Processing (3 credits)
- CIS 331: Data Analysis Tools and Techniques (3 credits)
- CIS 350: Introduction to Software Engineering (3 credits)
- CIS 376: Game Programming Techniques and Algorithms (3 credits)
- CIS 378: Applied Machine Learning (3 credits)
- HCC 453: AR/VR Development (3 credits)
- STA 315: Design of Experiments (3 credits)