

Bachelor of Science (B.S.)
Human Centered Computing
 Honors College: MTH 122 Start

1st Year		
Fall	Winter	Summer
MTH 122: College Algebra 3	HCC 201: Intro to HCC 3	
CIS 162: Computer Science 1 4	CIS 260: App Dev in Visual Basic 4	
CIS 100: Computing Exploration Seminar 1	PSY 101: Intro to Psychology 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 16	
2nd Year		
Fall	Winter	Summer
MTH 225: Discrete Structures: CS 3	CIS 290: Prof Responsibilities & Practices 3	
STA 215: Intro Applied Statistics 3	CIS 357: Mobile App Development 3	
COM 201: Speech 3	STA 301: Questionnaire Design & Execution 3	
HCC 304: Usability Design & Evaluation 3	HCC 311: User Interaction & Accessibility 3	
Free Elective 3	HNR 300: Campus/Community Engagement 3	
Total 15	Total 15	
3rd Year		
Fall	Winter	Summer
HCC 402: User Experience Research 3	CIS 320: Visualization of Data & Info 3	CIS 490: Internship 2-5
WRT 350: Business Communication (SWS) 3	Track Elective 3	
Track Elective 3	HCC Elective 3	
Track Elective 3	HNR 350: Integrative Seminar 3	
HNR Elective: HNR 250 or 351 3	Free Elective 3	
Total 15	Total 15	Total 2-5
4th Year		
Fall	Winter	Summer
HCC 495: HCC Project 1 3	HCC 496: HCC Project 2 3	
HCC 403: User Experience Design 3	HCC Elective 3	
Track Elective 3	HCC Elective 3	
Track Elective 3	Track Elective 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 HCC 304)	HNR 350
HNR 401/499 (fulfilled via HCC 495)	

Honors:

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

- 1) HCC 304 fulfills the HNR 251 requirement.
- 2) HCC 495 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 300 requirement. All students must complete 3 credits of HNR 300 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.

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.

Complete TWO of the following HCC Tracks (18 credits total):

Track: Human-Centered AI

Required:

- AI 201: Introduction to AI
- HCC 431: Human-AI Interaction

Choose 1 of the following:

- AI 402: Introduction to Generative AI
- AI 411: AI Ethics and Bias

Track: Augmented & Virtual Reality

Required:

- HCC 452: AR/VR Design and Research
- HCC 453: AR/VR Development
- HCC 454: Application of Mixed Reality in Health

Track: Human-Centered Game Design

Required:

- HCC 321: Video Games and interaction
- DS 330: Game Culture

Choose 1 of the following:

- DS 201: Digital Identities and Communities
- DS 202: Digital Data and Design
- CIS 376: Game Programming Techniques and Algorithm

Track: Health and Wellness

Required:

- HCC 454: Applications of Mixed Reality in Health
- HCC 461: Brain Computer Interfaces
- HCC 473: Human-Computer Interaction in Healthcare

HCC Major Elective Options – Select 3 courses (9 credits total):

Choose 3 courses from the following list. Make sure to select courses that you did not complete as part of your chosen track:

- AI 201: Introduction to AI
- ART 209: Graphic Design Basics
- CIS 263: Data Structure and Algorithms
- STA 315: Design of Experiments
- INT 323: Design Thinking to Meet Real-World Needs
- HCC 321: Video Games and Interaction
- FVP 324: 3D Computer Animation
- PSY 361: Perception
- CIS 378: Applied Machine Learning
- AI 402: Introduction to Generative AI
- AI 411: AI Ethics and Bias
- AI 421: Applied Computer Vision
- AI 431: Natural Language Processing
- HCC 431: Human-AI Interaction
- AI 451: Reinforcement Learning
- HCC 454: Applications of Mixed Reality in Health
- HCC 461: Brain Computer Interfaces