

Bachelor of Science (B.S.)
Artificial Intelligence:
 AI Systems Emphasis
Honors College: MTH 124 Start

2026 – 2027
 Catalog Year

1st Year				
Fall		Winter		Summer
MTH 124: Precalculus	5	CIS 162: Computer Science 1	4	
AI 201: Introduction to Artificial Intelligence	3	MTH 225: Discrete Structures: CS	3	
HNR 151: Interdisciplinary Sequence 1	3	COM 201: Speech	3	
HNR 152: Interdisciplinary Sequence 2	3	HNR 153: Interdisciplinary Sequence 3	3	
CIS 100: Computing Exploration Seminar	1	HNR 154: Interdisciplinary Sequence 4	3	
Total	15	Total	16	
2nd Year				
Fall		Winter		Summer
MTH 204: Linear Algebra 1	3	CIS 241: System Level Programming & Utilities	3	
CIS 163: Computer Science 2	4	MTH 205: Linear Algebra 2	3	
STA 215: Intro Applied Statistics	3	CIS 263: Data Structures and Algorithms	3	
CIS 290: Prof Responsibilities & Practices	3	CIS 350: Introduction to Software Engineering	3	
		HNR Elective: HNR 250 or 351	3	
Total	13	Total	15	
3rd Year				
Fall		Winter		Summer
AI Track Course	3	AI 421: Applied Computer Vision	3	CIS 490: Internship 2-5
CIS 457: Data Communications	3	CIS 335: Data Mining	3	
HNR 300: Campus/Community Engagement	3	CIS 352: Operating Systems Essentials	3	
Free Elective	3	AI 411: AI Ethics and Bias	3	
PHI 102: Ethics	3	CIS 378: Applied Machine Learning	3	
or PHI 204: Knowledge, Politics and Social Media				
Total	15	Total	15	Total 2-5
4th Year				
Fall		Winter		Summer
AI 431: Natural Language Processing	3	AI 495: Artificial Intelligence Project	3	
AI 441: Edge AI	3	AI Track Course	3	
AI Track Course	3	AI Track Course	3	
HNR 350: Integrative Seminar	3	WRT 350: Business Communications (SWS)	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
- 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: 250 or 351
HNR 251 (fulfilled via CIS 378)	HNR 350
HNR 401/499 (fulfilled via AI 495)	

Honors Notes:

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

- 1) CIS 378 fulfills the HNR 251 requirement.
- 2) AI 495 fulfills the HNR 401 and HNR 499 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.) Students must select one track to complete. See below for options.
- 2.) 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.
- 3.) Two Supplemental Writing Skills (SWS) courses are required for graduation.

Complete one of the following AI Tracks (4 courses, 12 credits):

Track: AI Deployment and Operations

Required:

AI 445: Machine Learning Operations

Choose 3 of the following:

AI 402: Generative Artificial Intelligence
 AI 451: Reinforcement Learning
 CIS 163: Computer Science II
 CIS 350: Introduction to Software Engineering
 CIS 360: Information Management and Science
 CIS 418: Secure Software Engineering
 SE 413: Software Testing
 SE 422: Software Architecture and Design
 SE 430: Software Construction and Delivery

Track: AI and Cybersecurity

Required:

CIS 258: Introduction to Cybersecurity

Choose 3 of the following:

CIS 337: Network Systems Management
 CIS 358: Information Assurance
 CIS 418: Secure Software Engineering
 CIS 458: System Security
 CYB 420: Trustworthy AI
 CYB 453: Ethical Hacking

Track: Edge and Cloud AI

Required:

CIS 230: Hardware and Software

CIS 373: Pervasive Computing

Choose 2 of the following:

CIS 337: Network Systems Management
 AI 445: Machine Learning Operations
 CIS 458: System Security
 SE 431: Software Virtualization

Track: AI and Business

Required:

CIS 331: Data Analysis Tools and Techniques or

CIS 335: Data Mining

Choose 3 of the following:

ACC 201 and ACC 202: Accounting for Non-Business Majors 1 & 2
 FIN 300: Fundamentals of Finance for Non-Business Majors
 MGT 300: Fundamentals of Management for Non-Business Majors
 MKT 300: Fundamentals of Marketing for Nonbusiness Majors

Track: AI and Healthcare

Required:

AI 489: Artificial Intelligence in Medical Imaging Informatics

Choose 3 of the following:

AHS 310: Equity in Health Care
 AHS 321: Ethical and Legal Responsibilities in Health Care
 AHS 330: Health Care- A Global Perspective
 AHS 340: Health Care Management
 AHS 352: Introduction to Holistic Health Care

Track: AI Design

Choose 4 of the following:

AI 489: Artificial Intelligence in Medical Imaging Informatics
 HCC 304: Usability Design and Evaluation
 HCC 311: User Experience Design
 HCC 403: User Experience Design
 HCC 452: AR/VR Design and Research