

Bachelor of Science (B.S.) Information Systems

MTH 122 Start

**2026 – 2027
Catalog Year**

1st Year					
Fall		Winter		Summer	
CIS 162: Computer Science 1	4	CIS 260: Application Dev in Visual Basic	4		
MTH 122: College Algebra	3	CIS 230: Hardware and Software	3		
WRT 150: Strategies in Writing	4	CIS 231: Excel Concepts and Applications	3		
or WRT 120 <u>and</u> WRT 130		CIS 100: Computing Exploration Seminar	1		
COM 201: Speech	3	General Education	3		
Total	14	Total	14		
2nd Year					
Fall		Winter		Summer	
CIS 250: Principles of Information Systems	3	CIS 333: Database Mgt and Implementation	3		
CIS 238: Internet Media and Programming	3	CIS 290: Professional Responsibilities & Practices	3		
STA 215: Intro to Applied Statistics	3	CIS 337: Network Systems Management	3		
ACC 201: Acct for Non-Business Majors 1	1.5	ACC 202: Acct for Non-Business Majors 2	1.5		
General Education	3	General Education	3		
Total	13.5	Total	13.5		
3rd Year					
Fall		Winter		Summer	
CIS 330: Systems Analysis and Design	3	CIS 360: Info Management and Science	3	CIS 490: Internship	2-5
CIS 358: Information Assurance	3	CIS 450: IS Project Management	3		
MKT 300: Fund. of Mkt for Non-Bus Majors	3	Track Elective	3		
WRT 350: Business Communication (SWS)	3	ECO 201: Intro to Microeconomics	3		
MGT 300: Fund. of Mgt for Non-Bus Majors	3	General Education	3		
Total	15	Total	15	Total	2-5
4th Year					
Fall		Winter		Summer	
CIS 460: Management of Info Systems	3	CIS 463: Information Systems Project	3		
CIS 437: Cloud Computing	3	FIN 300: Fund. of Finance for Non-Bus Majors	3		
Track Elective	3	Track Elective	3		
General Education	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 Sciences	Philosophy and Literature
Arts	Mathematical Sciences (MTH 122)
Social Behavioral Sciences (COM 201)	Social Behavioral Sciences (ECO 201)
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 358)	

Major Notes:

- 1.) In order to complete the IS major on this timeline, students must take the critical sequence for the IS degree as follows:
 - a. **CIS 250** and **CIS 162** must be taken before **CIS 330** and **CIS 333**.
 - b. **CIS 330** and **CIS 333** must be taken before **CIS 450**.
 - c. **CIS 450** must be completed before **CIS 463**.
- 2.) CIS 490 can be taken as 2-5 credits. Students will work with CIS Internship Coordinator to determine the best number 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.

Complete 1 of the following Tracks (3 courses, 9 credits total):

Track: Software Development:

Required:

CIS 443: Software Development Tools

Choose 2 of the following:

CIS 241: System-level Programming and Utilities

CIS 253: COBOL

CIS 371: Web App Programming

CIS 163: Computer Science 2

Network Management and Security:

Required:

CIS 338: Wide Area Network Engineering

CIS 375: Wireless Networks and Security

CIS 458: System Security

Data Analysis:

Required:

CIS 320: Visualization of Data and Information

CIS 331: Data Analysis Tools and Techniques

CIS 335: Data Mining

Artificial Intelligence:

Required:

AI 201: Intro to AI

AI 402: Generative AI

Choose 1 of the following:

AI 411: AI Ethics and Bias

CYB 430: Trustworthy AI

Note: If this track is selected, students need to successfully complete 3 of these classes to complete the IS Major requirements. If students complete all 4, they will earn the Artificial Intelligence Foundations Undergraduate Certificate

Enterprise Systems:

Required:

MGT 268: Business Processes & MIS

MGT 351: Enterprise Information Systems

BUS 410 – SAP Certification Preparation

Note: Successfully completing these courses will earn the Badge in ERP for Non-Business Majors

IS Specialization:

A list of nine-credit hours to customize a concentration in specialized areas to complement the student's program goals. The selection of this option and a list of three courses must be approved prior to courses being taken in the track. Courses in the core cannot be counted again in this IS specialization track.