Bachelor of Science (B.S.)

Computer Science

MTH 110 Start, 4 Year Plan

Secondary Admission Required

2023 – 2024 Catalog Year

1st Year						
Fall		Winter		Spring/Summer		
*COM 201: Speech	3	MTH 124: Precalculus	5			
MTH 110: Algebra	4	*CIS 162: Computer Science 1	4			
WRT 150: Strategies in Writing	4	*STA 215: Intro Applied Statistics	3			
or WRT 120 <u>and</u> WRT 130		General Education	3			
General Education	3					
			4=			
Total	14	Total	15			
2nd Year						
Fall		Winter MTH 201: Calculus 1	4	Spring/Summer		
*CIS 163: Computer Science 2	4	MTH 325: Discrete Structures: CS 2	4 3			
*MTH 225: Discrete Structures: CS	3	CIS 241: System Level Programming & Utilities	3			
Science Cognate	4		_			
General Education	3	CIS 290: Professional Responsibilities & Practices	3			
APPLY FOR SECONDARY ADMISSION AFTER GRADES ARE POSTED IN BANNER		General Education	3			
Total	14	Total	16			
3rd Year ~ Admission Required						
Fall		Winter		Spring/Summer		
MTH/STA Elective	3	CIS 343: Structure of Programming Languages	3	CIS 490: Internship 2-5		
CIS 263: Data Structures and Algorithms	3	CIS 353: Database	3			
CIS 350: Intro to Software Engineering	3	Science Cognate	4			
CIS 351: Computer Org and Assembly Lang	3	CIS Elective	3			
General Education	3	General Education	3			
Total	15	Total	16	Total 2-5		
4th Year ~ Admission Required						
Fall		Winter		Spring/Summer		
CIS 452: Operating System Concepts	3	CIS 467: Computer Science Project	3			
CIS 457: Data Communications	3	WRT 350: Business Communication	3			
CIS Elective	3	CIS Elective	3			
CIS 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
- Technical Core courses are required for secondary admission and are designated by an asterisk (*) on this guide
- 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

Computer Science Technical Core Requirements				
CIS 162	CIS 163	MTH 225		
COM 201	STA 215 (or STA 312)			

It is important to apply for secondary admission AFTER your grades for your ALL of your Technical Core Requirements are posted in Banner.

You will not be able to register for any upper division course work that requires secondary admission until you've been admitted into your major. If you delay this process, it could impact your graduation timeline.

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 125)			
Social Behavioral Sciences (COM 201)	Social Behavioral Sciences (ECO 210 or 211)			
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)				

Secondary Admission Requirements:

Detailed application and admission requirements available at https://www.gvsu.edu/computing/secondary-admission-40.htm

- ✓ Overall GPA of 2.5 or above in all Grand Valley State University course work.
- Completion of each course in the Information Systems Technical Core with a grade of C (2.0) or above. Technical Core courses are
 designated by an asterisk (*) on this guide.
- ✓ GPA of 2.5 or above in the Computer Science Technical Core course work.

Major Notes:

- 1.) MTH or STA: Please select one of the following courses: MTH 202, MTH 204, MTH 465, STA 216 or STA 418.
- 2.) Sci. Cognate: Students may choose from BIO 120, BIO 121, BMS 202, CHM 115, CHM 116, GEO 111, PHY 220, PHY 221, PHY 230 and PHY 231.
 - a. The Physical Sciences and Life Sciences categories can be met by careful selection of CS science cognate courses. For example: BIO 120 and GEO 111 will fulfill the Life Sciences and Physical Sciences categories, respectively. Together, they fulfill the CS science cognate requirement.
- 3.) CIS 490 can be taken as 2-5 credits. Students will work with CIS Internship Coordinator to determine the best amount of credits for them.
- 4.) 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.
- 5.) 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.