## Bachelor of Science (B.S.)

# **Computer Science**

## MTH 123 Start, 4 Year Plan

Secondary Admission Required

2022 - 2023 Catalog Year

1st Year							
Fall		Winter		Spring/Summer			
MTH 123: Trigonometry	3	*CIS 163: Computer Science 2	4				
*CIS 162: Computer Science I		*COM 201: Speech					
WRT 150: Strategies in Writing		*MTH 225: Discrete Structures: CS					
<b>or</b> WRT 120 <u>and</u> WRT 130		General Education					
*STA 215: Intro Applied Statistics		General Education  APPLY FOR SECONDARY ADMISSION AFTER  GRADES ARE POSTED IN BANNER					
Total	14	Total	16				
		2nd Year					
Fall		Winter		Spring/Summer			
MTH 201: Calculus I	4	MTH/STA Elective	3				
Will 525. Discrete Structures. C5 2		CIS 263: Data Structures and Algorithms	3				
CIS 241: System Level Program and Utilities 3		CIS 351: Computer Org and Assembly Lang	4				
General Education	3	CIS 290: Professional Responsibilities & Practices	3				
		General Education	3				
Total	13	Total	16				
		3rd Year ~ Admission Required					
Fall		Winter	3	Spring/Summer			
CIS 350: Intro to Software Engineering	3	CIS 343: Structure of Programming Languages		CIS 490: Internship 2-5			
CIS 353: Database		CIS 457: Data Communications					
Science Cognate	4	Science Cognate					
		CIS Elective					
General Education	3						
Total	16	Total	14	Total 2-			
		4th Year ~ Admission Required		1914			
Fall		Winter		Spring/Summer			
CIS 452: Operating System Concepts	4	CIS 467: Computer Science Project	3				
CIS Elective	3	WRT 350: Business Communication	3				
General Education	3	CIS Elective	3				
General Education	3	General Education	3				
		General Education	3				
Total	13	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

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√	Technical Core Requirements	7	General Education Requirements
	CIS 162		WRT 150: Strategies in Writing (grade of "C" or higher required)  or WRT 120 and WRT 130
	CIS 163		Life Sciences
	MTH 225		Physical Sciences
	STA 215 (or STA 312)		Philosophy and Literature
	COM 201		Arts
			Mathematical Sciences (MTH 123)
			Social Behavioral Sciences
			Social Behavioral Sciences
	is important to apply for secondary admission AFTER your grades r your ALL of your Technical Core Requirements are posted in		Historical Analysis
	Banner.		U.S. Diversity
			Global Perspectives
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			2 Supplemental Writing Skills Courses (prerequisite: WRT 130 or 150)
tin	neline.		2 Issues Courses (must have 55+ credits)

#### **Secondary Admission Requirements:**

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

- ✓ 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.
  - 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 fulfilled via a general education category.