# Computer Science

Grand Valley State University 2020-21 Catalog MTH 124 Placement – 4 year program

### Secondary Admission Criteria

- 1) Overall GPA of 2.5 or above in all Grand Valley State University coursework.
- 2) Completion of each course in the Computer Science foundation with a grade of C (2.0) or above. Foundation courses are designated by an asterisk (\*) on this guide.
- 3) GPA of 2.5 or above in the Computer Science foundation.

#### 1st Semester Fall: 16 credits

MTH 124 Precalculus: Functions & Models

WRT 150 Writing Strategies

OR WRT 120/WRT 130 (may change timeline)

\*CIS 162 Computer Science 1

\*STA 215 Introductory Applied Statistics

## 2nd Semester Winter: 16 credits

\*CIS 163 Computer Science 2

\*COM 201 Speech

\*MTH 225 Discrete Structures: Computer Science

General Education Courses (Select 2)

### 3rd Semester Fall: 13 credits

MTH 201 Calculus 1

MTH 325 Discrete Structures: Computer Science 2

CIS 241 System-level Programming and Utilities

**General Education Course** 

### 4th Semester Winter: 13 - 14 credits

MTH or STA Elective (See options in "Major Notes")
CIS 263 Data Structures and Algorithms
CIS 351 Computer Organization and

Assembly Language

CIS 290 Professional Responsibilities and

Practices

### 5th Semester Fall: 13-14 credits

CIS 350 Introduction to Software Engineering

CIS 353 Database

Sci. Cognate (See options in "Major Notes")

**General Education Course** 

#### 6th Semester Winter: 15-16 credits

CIS 343 Structure of Programming Languages

CIS 457 Data Communications

Sci. Cognate (See options in "Major Notes")

**CIS Elective** 

### Spring/Summer Semester: 8-11 credits

CIS 490 Internship

General Education Courses (Select 2)

#### 7th Semester Fall: 13-14 credits

CIS 452 Operating Systems Concepts

**CIS Elective** 

General Education Courses (Select 2)

## 8th Semester Winter: 15-16 credits

CIS 467 Computer Science Project WRT 350 Business Communications

**CIS Elective** 

General Education Courses (Select 2)

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#### 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.

### **General Education**

Category	Completed?	Category	Completed?	Category	Completed?
Physical Sciences		Mathematical Sciences		Global Perspectives	
		(MTH 124)			
Life Sciences		Social & Behavioral Sciences		U.S. Diversity	
Arts		Social & Behavioral Sciences		Issues	
Philosophy & Literature		Historical Perspectives		Issues	

- 1) Consider taking a course that fulfills the U.S. Diversity category and one Social and Behavioral Science course
- 2) Consider taking a course that fulfills the Global Perspectives category and one Issues course
- 3) 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.
- 4) 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.

#### Recommendations

It is strongly encouraged that students do not begin or break curriculum thread by taking courses at other institutions.

## For example:

Taking MTH 201 equivalent elsewhere, then return to Grand Valley and continuing in the math thread with MTH 202.