

# Bachelor of Science (B.S.)

## Computer Science

### MTH 124 Start

**2026 – 2027**  
**Catalog Year**

| 1st Year                                                           |           |                                                    |           |                         |
|--------------------------------------------------------------------|-----------|----------------------------------------------------|-----------|-------------------------|
| Fall                                                               |           | Winter                                             |           | Summer                  |
| MTH 124: Precalculus                                               | 5         | CIS 163: Computer Science 2                        | 4         |                         |
| CIS 162: Computer Science 1                                        | 4         | COM 201: Speech                                    | 3         |                         |
| WRT 120: Strategies in Writing – Stretch 1<br>or General Education | 3         | MTH 225: Discrete Structures: CS                   | 3         |                         |
| General Education                                                  | 3         | WRT 130: Strategies in Writing – Stretch 2         | 4         |                         |
|                                                                    |           | or WRT 150: Strategies in Writing                  |           |                         |
|                                                                    |           | CIS 100: Computing Exploration Seminar             | 1         |                         |
| <b>Total</b>                                                       | <b>15</b> | <b>Total</b>                                       | <b>15</b> |                         |
| 2nd Year                                                           |           |                                                    |           |                         |
| Fall                                                               |           | Winter                                             |           | Summer                  |
| MTH 201: Calculus 1                                                | 4         | CIS 263: Data Structures and Algorithms            | 3         |                         |
| MTH 325: Discrete Structures: CS 2                                 | 3         | STA 215: Intro Applied Statistics                  | 3         |                         |
| CIS 241: System Level Program and Utilities                        | 3         | or STA 330: Prob and Stats for Computing           |           |                         |
| Science Cognate                                                    | 4         | CIS 290: Professional Responsibilities & Practices | 3         |                         |
|                                                                    |           | CIS 351: Computer Org and Assembly Lang            | 3         |                         |
|                                                                    |           | General Education                                  | 3         |                         |
| <b>Total</b>                                                       | <b>14</b> | <b>Total</b>                                       | <b>15</b> |                         |
| 3rd Year                                                           |           |                                                    |           |                         |
| Fall                                                               |           | Winter                                             |           | Summer                  |
| CIS 350: Intro to Software Engineering                             | 3         | CIS 343: Structure of Programming Languages        | 3         | CIS 490: Internship 2-5 |
| CIS 353: Database                                                  | 3         | CIS 457: Data Communications                       | 3         |                         |
| MTA/STA Elective                                                   | 3         | CIS Elective                                       | 3         |                         |
| General Education                                                  | 3         | General Education                                  | 3         |                         |
| General Education                                                  | 3         | General Education                                  | 3         |                         |
| <b>Total</b>                                                       | <b>15</b> | <b>Total</b>                                       | <b>15</b> | <b>Total 2-5</b>        |
| 4th Year                                                           |           |                                                    |           |                         |
| Fall                                                               |           | Winter                                             |           | Spring/Summer           |
| CIS 452: Operating System Concepts                                 | 3         | CIS 467: Computer Science Project                  | 3         |                         |
| CIS Elective                                                       | 3         | WRT 350: Business Communication (SWS)              | 3         |                         |
| CIS Elective                                                       | 3         | CIS Elective                                       | 3         |                         |
| General Education                                                  | 3         | General Education                                  | 3         |                         |
| Free Elective                                                      |           | Free Elective                                      | 3         |                         |
| <b>Total</b>                                                       | <b>15</b> | <b>Total</b>                                       | <b>15</b> |                         |

- 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)<br>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 124)                                          |
| Social Behavioral Sciences (COM 201)                                                                                                 | Social Behavioral Sciences                                               |
| 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)                                                                               |                                                                          |

**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 125+126, CHM 127+128, GEO 111, PHY 220, PHY 221, PHY 230 and PHY 231.
  - a. The Physical Sciences or Life Sciences general education requirement can be met by careful selecting a CS science cognate course. For example: BIO 120 or BMS 202 would fulfill Life Sciences. GEO 111, CHM 125 + 126, PHY 220, or PHY 230 would fulfill the Physical Sciences categories.
- 3.) 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.
- 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.