## **B.S.** Computer Science, Graphics and Gaming Concentration

## Fall 2023

|                    | Fall                                |    | Spring  |       |       |
|--------------------|-------------------------------------|----|---|-------|-------|
| Freshman           | CSC 110 Computer Science I          | 4  | CSC 111 Computer Science II                       | 4     |       |
|                    | MAT 211 Calculus 1 <sup>a</sup>     | 4  | MAT 225 Discrete Math                             | 4     |       |
|                    | ENG114 WIFYS                        | 3  | HCS 100 Intro to Human Communications             | 3     |       |
|                    | UNIV 101                            | 3  | HIS 105 Historical Foundations of Global Cultures | 3     |       |
|                    |                                     | 14 |   | 14    | 28    |
| Sophomore          | SWE 200 Design Patterns             | 4  | CSC 310 Design & Analysis of Algorithms           | 4     |       |
|                    | CMPE 220 Computer Organization      | 4  | CMPE 320 Operating Systems                        | 4     |       |
|                    | Gen Ed 1                            | 3  | Gen Ed 2  | 3     |       |
|                    | Lab Science I ****                  | 4  | Lab Science II ****                               | 3/4   |       |
|                    |                                     | 15 |   | 14/15 | 57/58 |
| Junior (Even AY)*  | MAT 318 Elementary Linear Algebra   | 3  | MAT 217 Statistics ***                            | 4     |       |
|                    | CSC 361 Video Game Programming      | 4  | CSC 498 Sr. Research 1                            | 2     |       |
|                    | CSC 431 Computer Networks           | 4  | Gen Ed 5  | 3     |       |
|                    | Gen Ed 3                            | 3  | Gen Ed 6  | 3     |       |
|                    | Gen Ed 4                            | 3  | Gen Ed 7  | 3     |       |
|                    |                                     | 17 |   | 15    | 89/90 |
| Senior (Odd AY)**  | CSC 350 Intro. to Computer Graphics | 4  | CSC/SWE/CMPE/EE 300+ Elective                     | 4/3   |       |
|                    | CSC 410 Theory of Computing         | 3  | Interdisciplinary Elective                        | 3     |       |
|                    | CSC 499 Sr. Research II             | 2  | Free Elective 3                                   | 4     |       |
|                    | Free Elective 1                     | 4  | Free Elective 4****                               | 4     |       |
|                    | Free Elective 2                     | 3  |   |       |       |
|                    |                                     | 16 |   | 15/14 | 120   |
|                    |                                     |    |   |       |       |
| Junior (Odd AY)*   | CSC 350 Intro. to Computer Graphics | 4  | MAT 318 Elementary Linear Algebra                 | 3     | -     |
|                    | CSC 410 Theory of Computing         | 3  | CSC 498 Sr. Research I                            | 2     |       |
|                    | MAT 217 Statistics ***              | 4  | Gen Ed 5  | 3     |       |
|                    | Gen Ed 3                            | 3  | Gen Ed 6  | 3     |       |
|                    | Gen Ed 4                            | 3  | Free Elective 1                                   | 4     |       |
|                    |                                     | 17 |   | 15    | 89/90 |
| Senior (Even AY)** | CSC 361 Video Game Programming      | 4  | CSC/SWE/CMPE/EE Elective 300+                     | 4/3   |       |
|                    | CSC 499 Sr. Research II             | 2  | Interdisciplinary Elective                        | 3     |       |
|                    | CSC 431 Computer Networks           | 4  | Free Elective 3                                   | 4     |       |
|                    | Gen Ed 7                            | 3  | Free Elective 4****                               | 4     |       |
|                    | Free Elective 2                     | 3  |   |       |       |
|                    |                                     | 16 |   | 15/14 | 120   |

<sup>\* (</sup>Even AY) Academic years that have an even fall: 2022-2023, 2024-2025, 2026-2027

<sup>\*\* (</sup>Odd AY): Academic years that have an odd fall: 2021-2022, 2023-2024, 2025-2026

<sup>\*\*\*</sup> You also have the option to take MAT 375 which is taught only in the spring.

<sup>\*\*\*\*</sup> Options: BIO 161, BIO 162, CHM 121/125, CHM 122/126, ESS 110, PHY 205/124, or PHY 206/126.

<sup>\*\*\*\*\*</sup>Number of Free Electives dependent on major requirements that also count under General Education.

<sup>&</sup>lt;sup>a</sup> Students starting with MAT 140B or MAT 175 take MAT 225 in their second or third semester before CSC 310. These math classes replace Free Electives.