## B.S. Computer Science, Graphics Concentration

Fall 2019

|  | Fall |  | Spring |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Freshman | CSC 110 Computer Science I | 4 | CSC 111 Computer Science II | 4 |  |
|  | MAT 211 Calculus $1^{\text {a }}$ | 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/SWE/CMPE/EE 300+ Elective | 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 451 Computer Graphics Algorithms | 4 |  |
|  | CSC 410 Theory of Computing | 4 | Interdisciplinary Elective | 3 |  |
|  | CSC 499 Sr. Research II | 2 | Free Elective 3 | 4/3 |  |
|  | Free Elective 1 | 3 | Free Elective $4^{* * * * *}$ | 4 |  |
|  | Free Elective 2 | 3 |  |  |  |
|  |  | 16 |  | 15/14 | 120 |
|  |  |  |  |  |  |
| Junior (Odd AY)* | CSC 350 Intro. to Computer Graphics | 4 | CSC 451 Computer Graphics Algorithms | 4 |  |
|  | MAT 318 Elementary Linear Algebra | 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 | Gen Ed 7 | 3 |  |
|  |  | 17 |  | 15 | 89/90 |
| Senior (Even AY)** | CSC 361 Video Game Programming | 4 | CSC/SWE/CMPE/EE Elective | 4 |  |
|  | CSC 499 Sr. Research II | 2 | Interdisciplinary Elective | 3 |  |
|  | CSC 410 Theory of Computing | 4 | Free Elective 3 | 4/3 |  |
|  | Free Elective 1 | 3 | Free Elective 4***** | 4 |  |
|  | Free Elective 2 | 3 |  |  |  |
|  |  | 16 |  | 15/14 | 120 |

* (Even AY) Academic years that have an even fall: 2018-2019, 2020-2021, 2022-2023
** (Odd AY): Academic years that have an odd fall: 2017-2018, 2019-2020, 2021-2022
*** You also have the option to take MAT 375 which is taught only in the spring.
**** Options: BIO 161, BIO 162, CHM 121/125, CHM 122/126, ESS 110, PHY 205/123, or PHY 206/125.
*****Number of Free Electives dependent on major requirements that also count under General Education.
${ }^{a}$ 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.

