

# B.S. Computer Science, Artificial Intelligence

Fall 2023

|                           | Fall                              |           | Spring  |              |              |
|---------------------------|-----------------------------------|-----------|---|--------------|--------------|
| <b>Freshman</b>           | 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            |              |
|                           |                                   | <b>14</b> |   | <b>14</b>    | <b>28</b>    |
| <b>Sophomore</b>          | 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: PSY 101                                 | 3            |              |
|                           | Lab Science I ****                | 4         | Lab Science II ****                               | 3/4          |              |
|                           |                                   | <b>15</b> |   | <b>14/15</b> | <b>57/58</b> |
| <b>Junior (Even AY)*</b>  | MAT 318 Elementary Linear Algebra | 3         | MAT 217 Statistics ***                            | 4            |              |
|                           | Gen Ed 3                          | 3         | CSC 498 Sr. Research 1                            | 2            |              |
|                           | CSC/SWE/CMPE/EE 300+ Elective     | 3/4       | CSC 403 Machine Learning                          | 4            |              |
|                           | Free Elective 1                   | 4/3       | Gen Ed 5  | 3            |              |
|                           | Gen Ed 4                          | 3         | Gen Ed 6  | 3            |              |
|                           |                                   | <b>16</b> |   | <b>16</b>    | <b>89/90</b> |
| <b>Senior (Odd AY)**</b>  | CSC 462 Artificial Intelligence   | 4         | CSC 402 Big Data Analytics                        | 4            |              |
|                           | CSC 410 Theory of Computing       | 3         | Interdisciplinary Elective                        | 3            |              |
|                           | CSC 499 Sr. Research II           | 2         | Free Elective 3                                   | 4/3          |              |
|                           | Free Elective 2                   | 4         | Free Elective 4*****                              | 4            |              |
|                           | Gen Ed 7                          | 3         |   |              |              |
|                           |                                   | <b>16</b> |   | <b>15/14</b> | <b>120</b>   |
| <b>Junior (Odd AY)*</b>   | CSC 462 Artificial Intelligence   | 4         | CSC 402 Big Data Analytics                        | 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            |              |
|                           |                                   | <b>17</b> |   | <b>15</b>    | <b>89/90</b> |
| <b>Senior (Even AY)**</b> | CSC/SWE/CMPE/EE 300+ Elective     | 3/4       | CSC 403 Machine Learning                          | 4            |              |
|                           | CSC 499 Sr. Research II           | 2         | Interdisciplinary Elective                        | 3            |              |
|                           | CSC 410 Theory of Computing       | 3         | Free Elective 3                                   | 4/3          |              |
|                           | Free Elective 1                   | 4         | Free Elective 4*****                              | 4            |              |
|                           | Free Elective 2                   | 4/3       |   |              |              |
|                           |                                   | <b>16</b> |   | <b>15/14</b> | <b>120</b>   |

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

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

\*\*\* 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 205/124, or PHY 206/126.

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

<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.