B.S. in Computer Science 2018-2019: Option 1 - CWILT

| First Year |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Fall | Credits | Interim | Credits | Spring | Credits |
| COS 100 or 205 Introduction to Programming or Scientific Computing | 3 | GES 160 Inquiry Seminar | 3 | COS 105 Computer Science 1 | 4 |
| MAT 124M Calculus 1 | 4 |  |  | MAT 125 Calculus 2 | 4 |
| GES 130 Christianity Western Culture | 4 |  |  | BIB 101 Introduction to the Bible | 3 |
| GES 140 Introduction to Wellbeing | 3 |  |  | Second Language (S) course*1 | 4 |
|  | 14 |  | 3 |  | 15 |
| Second Year |  |  |  |  |  |
| Fall | Credits | Interim | Credits | Spring | Credits |
| COS 212 Computer Science 2 | 4 | THE 201 Christian Theology | 3 | COS 214 Computer Architecture | 4 |
| MAT 241 Discrete Mathematics | 3 |  |  | COS 216 Data Structures and Algorithms | 3 |
| GES 125 Introduction to the Creative Arts | 4 |  |  | MAT 211 Linear Algebra | 3 |
| Laboratory Science (D) course | 4 | + |  | Contemporary Western Life and Thought (L) course | 3 |
|  |  |  |  | Elective | 3 |
|  | 15 |  | 3 |  | 16 |
| Third Year |  |  |  |  |  |
| Fall | Credits |  | Interim | Credits | Spring | Credits |
| COS 301 Operating Systems | 4 | Interim Off |  | COS 386 Data Communications and Computer Networks | 3 |
| COS 313 Database Systems | 3 |  |  | COS 389 Artificial Intelligence | 3 |
| COS 318 Web Programming | 3 |  |  | Interpreting Biblical Themes (J) course | 3 |
| MAT 330 Probability and Statistics | 3 |  |  | Cross-Cultural Experience (Z) course | 0-3 |
| World Cultures (U) course | 3 |  |  | Elective | 3 |
|  | 16 |  | 0 |  | 12-15 |
| Fourth Year |  |  |  |  |  |
| Fall | Credits | Interim | Credits | Spring | Credits |
| COS 320 (fall, odd years) Computer Graphics Programming | 3 | COS 450 Humans and Computers |  | COS 371 (spring, even years) Organization of Programming Languages | 3 |
| COS 477 Software Engineering | 3 |  |  | Science, Technology, and Society (K) course | 3 |
| Comparative Systems (G) course | 3 |  |  | Contemporary Christian Issues (P) course | 3 |
| Leisure and Lifetime Sports (Q) course | 1 |  |  | Artistic Experience (A) course | 0-3 |
| Elective*2 | 3-4 |  |  | Elective*2 | 3 |
|  | 13-14 |  | 3 |  | 12-15 |

1. Students must complete through the second semester of a first year language course or equivalent (Check the catalog for details of this option.)
2. Choose one of: MAT 344, MAT 376, or PHY 352/PHY 353 (Note: PHY 352/PHY 353 will require consent of instructor unless prerequisites are satisfied. Please see catalog for details.)

This program assumes a student will use MAT 124M and GES 334K to meet the general education Mathematics and Science, Technology, and Society requirements.
Most financial aid packages stipulate 12 credits/semester; Minnesota state grants are reduced when credit load falls below 15 credits/semester. (Interim credits may be split between fall and spring for state grant purposes only.)
B.S. in Computer Science 2018-2019: Option 2 - Humanities


