

[Please refer to the Undergraduate Catalog for further program requirements and course descriptions.](#)

| First Year – 34-36 Hours | | | |
|---|------------|---|------------|
| Fall Semester: | Hrs | Spring Semester: | Hrs |
| CPSC 1000: <i>Introduction to Computing</i> | 3 | CPSC 1110: <i>Data Structures and Program Design</i> | 4 |
| CPSC 1100: <i>Fundamentals of Computer Science</i> | 4 | MATH 1960: <i>Calculus w/ Analytic Geometry II</i> | 4 |
| MATH 1950: <i>Calculus w/ Analytic Geometry I</i> (Quantitative Reasoning) | 4 | Writing and Communication (ENGL 1020) | 3 |
| Writing and Communication (ENGL 1010 or 1011) | 3-4 | Behavioral and Social Science | 3 |
| Behavioral and Social Science | 3 | Humanities and Fine Arts | 3-4 |
| | 17-18 | | 17-18 |
| Second Year – 30-32 Hours | | | |
| Fall Semester: | Hrs | Spring Semester: | Hrs |
| CPSC 2800: <i>Introduction to Operating Systems</i> | 3 | CPSC 2100: <i>Software Design and Development</i> | 3 |
| MATH 2100: <i>Introductory Statistics</i> or DATA 2130: <i>Statistics for Business</i> (Quantitative Reasoning) | 3 | CPEN 3700: <i>Digital Logic and Introduction to Computer Hardware</i> | 4 |
| Natural Science with Lab Sequence | 4 | MATH 2030: <i>Discrete Math for Computer Science</i> or MATH 3000: <i>Introduction to Logic and Proof</i> | 3 |
| Humanities and Fine Arts | 3-4 | Natural Science with Lab Sequence | 4 |
| Humanities and Fine Arts | 3-4 | | |
| | 16-18 | | 14 |
| Third Year – 31 Hours | | | |
| Fall Semester: | Hrs | Spring Semester: | Hrs |
| CPSC 3200: <i>Algorithm Analysis and Advanced Data Structures</i> | 3 | CPSC 4240: <i>Principles of Data Analytics</i> | 3 |
| CPSC 3220: <i>File and Database Processing</i> | 3 | CPSC 4430: <i>Introduction to Machine Learning</i> | 3 |
| CPSC 3610: <i>Ethical and Social Issues in Computing</i> (Humanities and Fine Arts) | 3 | Approved CPSC or Technical Elective (3000-4000 Level) | 3 |
| MATH 2200: <i>Elementary Linear Algebra</i> | 3 | DATA 3560: <i>Management Science</i> | 3 |
| DATA 2140: <i>Data Modeling for Business</i> | 3 | Natural Science with Lab | 4 |
| | 15 | | 16 |
| Fourth Year – 27-28 Hours | | | |
| Fall Semester: | Hrs | Spring Semester: | Hrs |
| CPEN 4700: <i>Computer Architecture</i> | 3 | CPSC 4100: <i>Survey of Programming Languages</i> | 3 |
| CPSC 4180: <i>Programming Languages for Advanced Data Analytics</i> | 3 | CPSC 4530: <i>Data Visualization and Exploration</i> | 3 |
| CPSC 4900: <i>Software Engineering</i> | 3 | CPSC 4910: <i>Senior Capstone Project</i> or CPSC 4995r: <i>Thesis</i> | 3 |
| Natural Science without Lab | 3 | Approved CPSC or Technical Elective (3000-4000 Level) | 3 |
| Individual and Global Citizenship | 3-4 | | |
| | 15-16 | | 12 |

| Completed: | | | |
|---|------------|--|------------|
| Graduation Requirements: | Hrs | Degree Requirements: | Hrs |
| 122 Total Hours | | 24-29 General Education Hours | |
| 39 Upper Division (3000-4000 Level) Hours | | 98 Program (Major) Hours | |
| 30 Hours at UTC | | Minor (<i>Not Required</i>) | |
| 45 Hours at 4-year Institution | | Elective Hours (<i>Not Required</i>) | |
| | | Foreign Language (<i>Not Required</i>) | |