

**Central Connecticut State University**  
**School of Engineering, Science, and Technology**

**Degree:** Bachelor of Science  
**Program:** Computer Science  
**Concentration:** Software Engineering  
**Effective Term:** Fall 2025

Name: \_\_\_\_\_

ID#: \_\_\_\_\_

**General Education: Ways of Understanding:**

**Arts & Humanities (9 credits)**

|            | Credits | Grade |
|------------|---------|-------|
| Literature | 3       |       |
|            |         |       |
|            |         |       |

**Social & Behavioral Sciences (12 credits)**

|         | Credits | Grade |
|---------|---------|-------|
| History | 3       |       |
|         |         |       |
|         |         |       |

**Math & Natural Sciences (9-10 credits)**

|                 | Credits | Grade |
|-----------------|---------|-------|
| MATH 152        | X       |       |
| MATH 217 or 218 | X       |       |
| Lab Science     | 3-4     |       |

**General Education: Essential Skills:**

**Written & Oral Communication (6 credits)**

|                | Credits | Grade |
|----------------|---------|-------|
| WRT 105 or 110 | 3       |       |
|                |         |       |

**World Language (0-6 credits) or Gen Ed Free Elective (3 credits)**

|  | Credits | Grade |
|--|---------|-------|
| World Language course numbered 112 or 118* or Gen Ed Free Elective | 3       |       |

**Thriving in College (2-3 credits)**

|                                | Credits | Grade |
|--------------------------------|---------|-------|
| CCSU 102, 103, or FYE course** | 2-3     |       |

A maximum of 16 credits (4 courses) applied towards Ways of Understanding and Essential Skills requirements may be used to fulfill a major and/or minor requirement.

**International & Equity, Justice, & Inclusion (EJI) Requirements:**

|                                 | Credits | Grade |
|---------------------------------|---------|-------|
| International                   | 3       |       |
| International                   | 3       |       |
| Equity, Justice, & Inclusion*** | 3       |       |

Coursework applied toward International & EJI requirements may be used in any other area of general education or program requirements.

**Honors Program:** HON courses can be used to fulfill certain general education requirements. Consult the Honors Program curriculum for details.

**Residency Requirements:** A minimum of 30 credits overall must be completed in residence, with at least 15 credits in the major (at least 12 of which must be at the 300 level or above) and 9 credits in a minor at Central. In residence means attending classes conducted on campus or under supervision of Central.

\* Students with 3 years, or more, of one world language at the high school level, a passing score on a world language placement exam, or native proficiency in a language other than English will have the World Language requirement waived and can satisfy this requirement with any general education free elective course (3cr).

\*\* Transfer students with 24 or more transfer credits at the time of admission can satisfy this requirement with any general education free elective (3cr).

\*\*\* Waived for transfer students with 50 or more transfer credits at the time of admission.

**Computer Science, B.S. Major Requirements (59 credits)**

**Core requirements (47 Credits)**

|  | Credits | Grade |
|--|---------|-------|
| CS 151 Computer Science I  | 3       |       |
| CS 152 Computer Science II   | 3       |       |
| CS 253 Data and File Structures  | 3       |       |
| CS 254 Comp Org & Assembly Lang Prog   | 3       |       |
| CS 354 Digital Systems Design  | 3       |       |
| CS 355 Systems Programming   | 3       |       |
| CS 385 Computer Architecture   | 3       |       |
| CS 463 Algorithms  | 3       |       |
| CS 464 Programming Languages   | 3       |       |
| CS 483 Theory of Computation   | 3       |       |
| CS 492 Computer Security   | 3       |       |
| One of the following sequences –<br>(BIO 121 & 122) or (CHEM 161/162 & 200/201) or<br>(PHYS 125 & 126) or (GSCI 121/125 & 141/145) | 8       |       |
|  |         |       |
|  |         |       |
| CS 410 Software Engineering  | 3       |       |
| CS 498 Senior Project  | 3       |       |

**Concentration in Software Engineering (9 credits)**

|   | Credits | Grade |
|---|---------|-------|
| CS 417 Design Patterns  | 3       |       |
| Computer Science Electives, 6 credits from<br>CS 414 or 415 or 416 or 418 | 3       |       |
|   | 3       |       |

Coursework applied toward Related or Additional requirements may be used in any other area of general education or program requirements.

**Computer Science Additional Requirements (16 credits)**

|  | Credits | Grade |
|--|---------|-------|
| MATH 152 Calculus I  | 4       |       |
| MATH 217 Discrete Mathematics for CS or<br>MATH 218 Discrete Mathematics | 4       |       |
| MATH 221 Calculus II   | 4       |       |
| MATH 226 Linear Algebra and Probability for<br>Engineers                 | 4       |       |

**Is a Minor Required with this Major?**

Yes       No

Free Electives may be used, as needed, to reach the total credits required for the degree when all other degree requirements have been met.

**Total Credits Required for Degree: 120**