

# Bachelor of Science in Software Engineering

Catalog Year: 2025

Total Degree Credit Hours: 125

|     |                          |   |  |
|-----|--------------------------|---|--|
| A-1 | ENGL 1100 Composition I  | 3 |  |
|     | ENGL 1102 Composition II | 3 |  |
| A-2 | MATH 1190 Calculus I     | 4 |  |

Area A: Essential Skills (10 credit hours)  
All Area A courses must be completed within the first 30 credit hours with a grade of C or higher.

|     |  |   |  |
|-----|--|---|--|
| B-1 | ECON 1000 Contemporary Economic Issues | 2 |  |
| B-2 | COM 1100 Human Communication           | 3 |  |

Area B: Institutional Options (5 credit hours)  
COM 1100 is essential for Software Engineering major

|     |   |   |  |
|-----|---|---|--|
| C-1 | ENGL 2110, 2111, 2112, 2120, 2121, 2122, 2130, 2131, 2132 or 2300 | 3 |  |
| C-2 | ART 1107, MUSI 1107, DANC 1107, PS 1107                           | 3 |  |

Area C: Humanities, Fine Arts, and Ethics (6 cr hrs)  
Choose one course from each area.

|     |                       |   |  |
|-----|-----------------------|---|--|
| D-1 | MATH 2202 Calculus II | 4 |  |
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| E-1 | POLS 1100 American Government | 3 |  |
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Prerequisites

CSE 1321/L and CSE 1322/L must have a minimum grade of 'B.'

CSE 1303 is highly recommended for students who are new to programming. MATH 1111, PHYS 111K and PHYS 1112K cannot be used as a free elective.

Prerequisites

|   |                                 |   |  |
|---|---------------------------------|---|--|
| Math/Science Electives<br>Make an appointment with a CCSE Academic Advisor to discuss course options for this requirement | Varies                          | 6 |  |
| PHYS 2211/Principles of Physics I   | MATH 1190                       | 4 |  |
| CSE 315 Database Systems  | CSE 1322/L                      | 3 |  |
| CSE 380 Professional Practices and Ethics   | CSE 1322/L                      | 2 |  |
| CS 3305/Data Structures   | CSE 1322/L (MATH 2345/CSE 2300) | 4 |  |
| CS 3503/Computer Organization & Architecture  | CSE 1322/L                      | 4 |  |
| CS 3502/Operating Systems   | CS 3503/L & CS 3305/L           | 3 |  |
| SWE 331 Intro to Software Engineering   | CSE 1322/L                      | 3 |  |
| SWE 362 Software Systems Requirements   | SWE 3313 & MATH 2345/CSE 2300   | 3 |  |
| SWE 363 Software Architecture and Design  | SWE 3313                        | 3 |  |
| SWE 364 Software Testing & Quality Assurance  | SWE 3313                        | 3 |  |

All major courses must have a minimum grade of 'C,' except for CSE 1321/L and CSE 1322/L, which must have a minimum grade of 'B.'

Prerequisites