

# Salem State University Advising Map

## Bunker Hill Community College Computer Science Transfer Option, A.S. transfers to Salem State University Computer Science BS as follows:

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This map is a Salem State University advising tool only. Bunker Hill Community College students should work with their advisor.

### Salem State University Notes:

*This program does not have all the required courses for the Mass Transfer STEM Gen Ed Foundation built in. SSU recommends students choose an additional Mass Transfer Humanities course beyond program requirements to qualify.*

### Mass Transfer STEM Gen Ed Foundation requirements:

| Comp I | Comp II | Beh/SS                        | Beh/SS                        | Hum/FA           | Hum/FA  | Sci- Lab | Sci    | Math   |
|--------|---------|-------------------------------|-------------------------------|------------------|---|----------|--------|--------|
| ENG111 | ENG112  | Community & Cultural Contexts | Community & Cultural Contexts | CW Creative Work | SSU recommends taking beyond program requirements | PHY251   | PHY252 | MAT281 |

### Semester 1

| Bunker Hill Course   | Credits | SSU Equivalent Course   | How course applies to SSU's Computer Science Program: |
|--|---------|---|---|
| CSC-120 Intro to Comp Sci & Object Oriented Prog                                     | 4       | CSC 110 SOFTWARE DESIGN AND PROGRAMMING I (4)   | Major Requirement                                     |
| MAT-281 Calculus I   | 4       | MAT 220 CALCULUS I (4)  | Major Support Course Requirement                      |
| ENG-111 College Writing I  | 3       | ENL 105 INTRODUCTION TO COLLEGE WRITING (3)   | Free Elective (assuming gen ed exemption)             |
| Gen Ed-CCC Community & Cultural Contexts   | 3       | Transferrable – exact equivalency depends on course chosen. Refer to Salem State University Transfer Equivalency Viewer for course equivalency information. | Free Elective (assuming gen ed exemption)             |
| Gen Ed-E General Education Elective  | 3-4     | Transferrable – exact equivalency depends on course chosen. Refer to Salem State University Transfer Equivalency Viewer for course equivalency information. | Free Elective (assuming gen ed exemption)             |
| <i>Choose one course from General Education Community and Cultural Contexts Menu</i> |         |   |   |
| Total Credits:   |         | 17-18   |   |

## Semester 2

| Bunker Hill Course         | Credits | SSU Equivalent Course                          | How course applies to SSU's Computer Science Program: |
|----------------------------|---------|--|---|
| CSC-237 C++ Programming    | 4       | CSC 279 C+C++ (4)                              | One of two required Major Electives                   |
| MAT-282 Calculus II        | 4       | MAT 221 CALCULUS II (4)                        | Major Support Course Requirement                      |
| ENG-112 College Writing II | 3       | ENL 110 FOUNDATIONS OF WRITING (3)             | Free Elective (assuming gen ed exemption)             |
| CSC-239 JAVA Programming   | 4       | CSC 115 SOFTWARE DESIGN AND PROGRAMMING II (4) | Major Requirement                                     |
| Total Credits:             | 15      |  |   |

## Semester 3

| Bunker Hill Course                              | Credits | SSU Equivalent Course   | How course applies to SSU's Computer Science Program:        |
|---|---------|---|--|
| Elective- Option Elective                       | 3-4     | BHCC MAT283= SSU MAT320   | MAT283 or MAT285 will apply as a support course requirement. |
| <u>SSU recommends choosing MAT283 or MAT285</u> |         | BHCC MAT285= SSU MAT413<br>3 credits + 1 credit of math free elective   |  |
| CSC-285 Advanced Java Programming               | 3       | BHCC CSC 285 combined with CSC242 =   | Major Requirement + Free Elective                            |
| +<br>CSC-242 Data Structures                    | 3       | 260 DATA STRUCTURES AND ALGORITHMS (4)<br>+ CSC OR ITE 2 CREDIT FREE ELECTIVE   |  |
| PHY-251 Physics I/Lab                           | 4       | PHS 221 GENERAL PHYSICS I WITH CALCULUS (4)   | Major Support Course Requirement                             |
| Gen Ed-CW Creative Work                         | 3       | Transferrable – exact equivalency depends on course chosen. Refer to Salem State University Transfer Equivalency Viewer for course equivalency information. | Free Elective (assuming gen ed exemption)                    |
| Total Credits:                                  | 16-17   |   |  |

## Semester 4

| Bunker Hill Course        | Credits   | SSU Equivalent Course                        | How course applies to SSU's Computer Science Program: |
|---------------------------|---|--|---|
| PHY-252 Physics II/Lab    | 4   | PHS 222 GENERAL PHYSICS II WITH CALCULUS (4) | Major Support Course Requirement                      |
| Elective- Option Elective | 3-4   | See course equivalency grid below.           | Free Elective (assuming gen ed exemption)             |
| Elective- Option Elective | 3-4   | See course equivalency grid below.           | Free Elective (assuming gen ed exemption)             |
| Elective- Option Elective | 3-4   | See course equivalency grid below.           | Free Elective (assuming gen ed exemption)             |
| Total Credits:            | 13-16   |  |   |
| Total Program Credits:    | 61-66   |  |   |
|                           | SSU recommends students choose an <u>additional</u> course from the <u>Gen Ed-CW Creative Work menu</u> to qualify for the Mass Transfer STEM Gen Ed Foundation, bringing the total to 64-69 credits. |  | Free Elective (assuming gen ed exemption)             |
| Total Transfer Credits:   | 64-69   |  |   |

Option Electives menu: Note – the BHCC program requires four Option Electives:

| Bunker Hill Course                              | Credits | SSU Equivalent Course                 | How course applies to SSU's Computer Science Program: |
|---|---------|---------------------------------------|---|
| CSC-244 Android Development with Kotlin         | 3       | CSC 276 TOPICS IN COMPUTER SCIENCE    | Free Elective (assuming gen ed exemption)             |
| CSC-236 SQL Programming                         | 3       | CSCT61 COMPUTER SCIENCE FREE ELECTIVE | Free Elective (assuming gen ed exemption)             |
| CSC-284 Advanced C++/OOP                        | 3       | CSCT61 COMPUTER SCIENCE FREE ELECTIVE | Free Elective (assuming gen ed exemption)             |
| CSC-287 Survey New Popular OOPL for Programmers | 3       | CSCT61 COMPUTER SCIENCE FREE ELECTIVE | Free Elective (assuming gen ed exemption)             |
| CSC-299 Computer Science Internship             | 3       | CSCT61 COMPUTER SCIENCE FREE ELECTIVE | Free Elective (assuming gen ed exemption)             |
| HON-200 Honors Seminar                          | 3       | INTERDISCIPLINARY STUDIES Elective    | Free Elective (assuming gen ed exemption)             |

|  |   |   |   |
|--|---|---|---|
| INT-299CSC Learn & Earn<br>Computer Science Intern   | 3 | SSUT61 GENERAL FREE<br>ELECTIVE CREDIT                                    | Free Elective (assuming gen<br>ed exemption)  |
| MAT-283 Calculus III<br>This (or MAT285) is the ideal<br>option elective to choose to<br>transfer to SSU for maximum<br>applicability of credit.                       | 4 | MAT 320 CALCULUS III  | Major Support Course<br>Requirement           |
| MAT-285 Ordinary<br>Differential Equations<br>This (or MAT283) is the ideal<br>option elective to choose to<br>transfer to SSU for maximum<br>applicability of credit. | 4 | MAT 413 ORDINARY<br>DIFFERENTIAL EQUATIONS<br>+<br>MAT 1 CR FREE ELECTIVE | Major Support Course<br>Requirement           |
| MAT-291 Linear Algebra   | 4 | MAT 240 LINEAR ALGEBRA I<br>+<br>MAT 1 CR FREE ELECTIVE                   | Free Elective (assuming gen<br>ed exemption)  |
| <i>Note - when all three courses<br/>are taken, they will be<br/>combined for credit as<br/>follows:</i>   |   | <i>They are combined to<br/>transfer as follows:</i>                      |   |
| CSC-236 SQL Programming<br>+   | 3 | CSC 279 C++<br>+  | Free Electives (assuming gen<br>ed exemption) |
| CSC-284 Advanced<br>C++/OOP  | 3 | CSC 278 SCRIPTING<br>TECHNIQUES   |   |
| +  | 3 | +   |   |
| CSC-287 Survey New Popular<br>OOPL for Programmers   |   | CSC 1 CREDIT ELECTIVE<br>FREE ELECTIVE                                    |   |
| <i>Note - when these two<br/>courses are taken, they will<br/>be combined for credit as<br/>follows:</i>   |   | CSC 367 INTERNSHIP IN<br>COMPUTER SCIENCE                                 | Free Electives (assuming gen<br>ed exemption) |
|  | 3 | 6 credits   |   |
| CSC-299 Computer Science<br>Internship<br>+  | 3 |   |   |
| INT-299CSC Learn & Earn<br>Computer Science Intern   |   |   |   |