## Bachelor of Science in Computer Science <br> Transfer Curriculum Planning Guide and Baccalaureate Degree Plan Fayetteville State University <br> (2022-2023)

| University College Core Curriculum (General Education - 39 Credits) | Course Number ${ }^{1}$ | Cr. | FSU Equivalent |
| :--- | :---: | :---: | :---: |
| Transitional Studies - University Studies (2 Credits) <br> Select one option from (UNIV 101/102) or UNIV 110 or UNIV 111 or UNIV 112 | ACA 122 (1 cr.) | 2 | Waived with 30 credit $^{\text {hours }}$ |

## Notes

1 Courses are for the North Carolina Community College (NCCC) system. Other courses may satisfy requirement.
2 Students do not earn credit if any requirement is waived. All students must earn at least 120 credits to graduate.
3 NCCC Associate in Arts (AA), Associate in Science (AS), Associate in Applied Science (AAS), Associate in General Education (AGE). Per NC Comprehensive Articulation Agreement, NCCC graduates with AA or AS have completed FSU general education requirements. NCCC general education courses not used for core may be applied to free electives or used to reach 120 credits. AAS, AFA, and other specific degrees may be governed by articulation agreements.
4 At least one Natural Science class must include a lab.
5 Not required for students with 30 or more transfer credits from a foreign institution. Students do not earn credit if requirement is waived.

| Computer Science Program Requirements (81 Credits) | Course Number | Cr. | FSU Equivalent |
| :---: | :---: | :---: | :---: |
| Computer Science Courses ( 47 Credits): <br> CSC 120 and CSC 130 and CSC 201 and CSC 207 and CSC 220 and CSC 303 and CSC 320 and CSC 322 and CSC 351 and CSC 431 and CSC 470 and CSC 490 and 3 credits from CSC 200 or higher and 3 credits from CSC 300 or higher and 3 credits from CSC 400 or higher | $\begin{gathered} \text { CSC } 120,121,133, \\ 134,141,143, \text { or } 145 \end{gathered}$ | 4 | CSC 120 |
|  | CSC 130 or 221 | 4 | CSC 130 |
|  |  | 3 | CSC 201 |
|  |  | 3 | CSC 207 |
|  | CSC 249 | 3 | CSC 220 |
|  |  | 3 | CSC 303 |
|  |  | 3 | CSC 320 |
|  |  | 3 | CSC 322 |
|  |  | 3 | CSC 351 |
|  |  | 3 | CSC 431 |
|  |  | 3 | CSC 470 |
|  |  | 3 | CSC 490 |
|  |  | 3 | CSC 200 or higher |
|  |  | 3 | CSC 300 or higher |
|  |  | 3 | CSC 400 or higher |
| Computer Science Requirement (3 Credits) CSC 202 or CSC 204 | CSC 241, 245 or 253 | 3 | CSC 202 or CSC 204 |
| Math and Statistics Requirement ( 17 credits) MATH 142 and MATH 150 and MATH 241 and MATH 251 and STAT 270 | MAT 271 | 4 | MATH 142 |
|  | MAT 167 | 3 | MATH 150 |
|  | MAT 272 | 4 | MATH 241 |
|  | MAT 280 | 3 | MATH 251 |
|  |  | 3 | STAT 270 |
| Computer Science Elective Courses (6 Credits) <br> Select 3 credits from MATH 242 or MATH 260 or MATH 300 or higher, PHYS 200 or higher, or STAT 300 or higher <br> AND <br> Select 3 credits from CSC 300 or higher or GEOG 320 or GEOG 325 or MATH 242 or MATH 260 or MATH 300 or higher or PHYS 200 or higher or STAT 300 or higher <br> Students must enroll in the GEOINT certificate program and complete the program to be eligible to have GEOG 320 or GEOG 325 counted towards computer science major requirements | MAT 273 | 3 | MATH 242 |
|  |  | 3 |  |
| Science Elective (4 Credits) <br> Select at least four credits in addition to core requirements from the following: <br> (BIOL 150 AND BIOL 150L) or (BIOL 160 AND BIOL 160L) or BIOL 200 or (CHEM 141 AND CHEM 141L) or (CHEM 161 AND CHEM 161L) or CHEM 220 or (PHYS 125 AND PHYS 125L) or (PHYS 126 AND PHYS 126L) or PHYS 211 or PHYS 212 or BIOL 220 |  | 4 |  |
| Free Electives: (4 Credits) <br> Any 100 or 200 level AA or AAS course, C or higher |  | 4 |  |
| Waived Core Requirements <br> The credits in this area increase as requirements are waived without credit in the university core - typically 7 credits to equal 120 credits overall; add extra lines as needed. |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
| Total Credits |  | 120 |  |
| Transfer Credits |  |  |  |

## Baccalaureate Degree Plan (A.A.)

This Plan illustrates how students from North Carolina community colleges can meet degree course requirements in four years. Courses and requirements in Year 1 and Year 2 are from the NC community college catalog. Courses and requirements in Year 3 and Year 4 are from the FSU catalog. Some courses listed below may be taken in an alternate order. Courses fulfilling requirements are listed on the previous pages. For information about prerequisites and other program requirements, consult the appropriate Catalog Program of Study and an advisor. Students should work with advisor to create and update an individual plan.

| Year 1 Fall |  |  |
| :--- | :--- | :---: |
| Requirement | Course | Cr |
| Academic Transition | ACA 122 | 1 |
| English Composition | ENG 111 | 3 |
| Humanities/Fine Arts |  | 3 |
| Social/Behavioral Sciences | MAT 171 | 3 |
| Math |  | 4 |
| Additional General Education | Total: | 17 |
|  |  |  |


| Year 1 Spring |  |  |
| :--- | :--- | :---: |
| Requirement | Course | $\mathbf{C r}$ |
| Communications | COM 120 or |  |
|  | COM 231 | 3 |
| English Composition | ENGL 112 | 3 |
| Natural Sciences |  | 4 |
| Additional General Education | MAT 172 | 4 |
| Social/Behavioral Sciences |  | 3 |
| Total: |  | 17 |


| Year 2 Fall |  |  |
| :--- | :--- | :---: |
| Requirement | Course | $\mathbf{C r}$ |
| Humanities/Fine Arts |  | 3 |
| Pre-Major/Elective | MAT 271 | 4 |
| Pre-Major/Elective | CSC 120* | 4 |
| Additional General Education |  | 3 |
| Total: |  |  | 14.14


| Year 2 Spring |  |  |
| :--- | :--- | :---: |
| Requirement | Course | $\mathbf{C r}$ |
| Social/Behavioral Sciences |  | 3 |
| Pre-Major/Elective | CSC 130 | 4 |
| Pre-Major/Elective | MAT 272 | 3 |
| Additional General Education | MAT 167 | 3 |
| Total: |  | 13 |


| Year 3 Fall |  |  |
| :--- | :--- | :---: |
| Requirement | Course | Cr |
| CSC 200 or higher |  | 3 |
| Programming in C | CSC 202 | 3 |
| Basic Computer Org \& Assembly Lan | CSC 201 | 3 |
| Logic Programming | CSC 207 | 3 |
| Data Structure / Algorithms | CSC 220 | 3 |
| Total: |  |  | 15 | 15 |
| :--- |


| Year 3 Spring |  |  |
| :--- | :--- | :---: |
| Requirement | Course | $\mathbf{C r}$ |
| CSC 300 or higher |  | 3 |
| Computer Org \& Architecture | CSC 303 | 3 |
| Design and Analysis of Algorithms | CSC 320 | 3 |
| Programming Languages | CSC 322 | 3 |
| Linear Algebra | MATH 251 | 3 |
| Total: |  | 15 |


| Year 4 Fall |  | $\mathbf{C r}$ |
| :--- | :--- | :---: |
| Requirement | Course | 3 |
| Computer Ethics and Service Learning | CSC 351 | 3 |
| Principles of Operating Systems | CSC 431 | 3 |
| Software Engineering | CSC 470 | 3 |
| Probability and Statistics in Computer <br> Science | STAT 270 | 3 |
| Major elective |  | 3 |
| Total: |  | 15 |


| Year 4 Spring |  |  |
| :--- | :--- | :---: |
| Requirement | Course | $\mathbf{C r}$ |
| CSC 400 or higher |  | 3 |
| Senior Project | CSC 490 | 3 |
| Major elective |  | 3 |
| Free elective |  | 4 |
| Science elective |  | 4 |
| Total: |  | 17 |

## Notes

* Indicates a course recommended by the program. Other courses listed under the requirement may be used.


## Baccalaureate Degree Plan (A.S.)

This Plan illustrates how students from North Carolina community colleges can meet degree course requirements in four years. Courses and requirements in Year 1 and Year 2 are from the NC community college catalog. Courses and requirements in Year 3 and Year 4 are from the FSU catalog. Some courses listed below may be taken in an alternate order. Courses fulfilling requirements are listed on the previous pages. For information about prerequisites and other program requirements, consult the appropriate Catalog Program of Study and an advisor. Students should work with advisor to create and update an individual plan.

| Year 1 Fall |  |  |
| :--- | :--- | :---: |
| Requirement | Course | Cr |
| Academic Transition | ACA 122 | 1 |
| English Composition | ENG 111 | 3 |
| Natural Sciences |  | 4 |
| Social/Behavioral Sciences |  | 3 |
| Math | MAT 171 | 4 |
|  |  |  |


| Year 1 Spring |  | Cr |
| :--- | :--- | :---: |
| Requirement | Course | $\mathbf{C r}$ |
| Communications | COM 120 or <br> COM 231 | 3 |
| English Composition | ENG 112 | 3 |
| Natural Sciences |  | 4 |
| Humanities/Fine Arts |  | 3 |
| Math | MAT 172 | 4 |
| Total: |  | 17 |


| Year 2 Fall |  |  |
| :--- | :--- | :---: |
| Requirement | Course | Cr |
| Social/Behavioral Sciences |  | 3 |
| Additional General Education | MAT 271 | 4 |
| Pre-Major/Elective | MAT 167 | 3 |
| Pre-Major/Elective | CSC 120* | 4 |
| Total: |  |  | 14.


| Year 2 Spring |  |  |
| :--- | :--- | :---: |
| Requirement | Course | Cr |
| Pre-Major/Elective | CSC 130 | 4 |
| Pre-Major/Elective | MAT 280 | 3 |
| Additional General Education | MAT 272 | 4 |
| Additional General Education |  | 4 |
| Total: |  |  |


| Year 3 Fall |  |  |
| :--- | :--- | :---: |
| Requirement | Course | Cr |
| CSC 200 or higher |  | 3 |
| Programming in C | CSC 202 | 3 |
| Basic Computer Org \& Assembly Lan | CSC 201 | 3 |
| Logic Programming | CSC 207 | 3 |
| Data Structure / Algorithms | CSC 220 | 3 |
| Total: |  |  |$\quad 15$.



| Year 4 Fall |  |  |
| :--- | :--- | :---: |
| Requirement | Course | Cr |
| Computer Ethics and Service Learning | CSC 351 | 3 |
| Principles of Operating Systems | CSC 431 | 3 |
| Software Engineering | CSC 470 | 3 |
| Major elective |  | 3 |
| Free elective |  | 4 |
| Total: |  | 16 |


| Year 4 Spring |  |  |
| :--- | :--- | :---: |
| Requirement | Course | Cr |
| CSC 400 or higher | CSC 390 | 3 |
| Senior Project |  | 3 |
| Major elective |  | 4 |
| Science elective |  |  |
| Total: |  |  | 13 |  |
| :--- |

## Notes

* Indicates a course recommended by the program. Other courses listed under the requirement may be used.

