

## 2023-2024 Degree Map-Associate of Applied Science in Cybersecurity

This map is a term-by-term sample course schedule. The milestones listed to the right of each term are designed to keep you on course to graduate in two years. The Sample Schedule serves as a general guideline to help you build a full schedule each term. See course descriptions and prerequisites at <http://www.atu.edu/catalog/>

**Employment Information:** Security Analyst, Security Engineer, Security Administrator, Security Software Developer, Cryptographer, Cryptanalyst, Chief Information Security Officer, Security Specialist, Vulnerability Assessor, Security Manager, Security Auditor, Security Director, Forensic Expert, Penetration Tester, Source Code Auditor

#Prerequisite Courses: ENGL 0303 \_\_\_\_\_ MATH 0803 \_\_\_\_\_ MATH 1003 \_\_\_\_\_ MATH 0903 \_\_\_\_\_ MATH 1113 \_\_\_\_\_ MATH 1110 \_\_\_\_\_

### Sample Schedule

| Semester 1  | Hrs.      | Grade      | Milestones/Notes   |
|---|-----------|------------|--|
| ENGL 1013-Comp I (ACTS=ENGL 1013)                         | 3         | #          |  |
| Fine Arts & Humanities                                    | 3         |            |  |
| MATH 2243- Calculus for Business & Econ. (ACTS=MATH 2203) | 3         | #          | Prereq: 22 or higher on math ACT or # in MATH 1113 or higher |
| TECH 1001- Orientation to the University                  | 1         |            |  |
| CSEC 1113- Introduction to Networking                     | 3         |            | Milestone  |
| CSEC 1003- Introduction to Cybersecurity                  | 3         |            |  |
| <b>Total hours</b>  | <b>16</b> | <b>GPA</b> |  |

| Semester 2                                | Hrs.      | Grade      | Semester 2                   |
|---|-----------|------------|------------------------------|
| ENGL 1023- Comp II (ACTS= ENGL 1023)      | 3         | #          |                              |
| Science with Lab                          | 4         |            |                              |
| COMS 1013- Programming Foundations I      | 3         | #          | Prereq: MATH 1113 or higher  |
| COMS 1011- Programming Foundations I Lab  | 1         | #          | PASS/FAIL - Coreq: COMS 1013 |
| CSEC 1213- Wireless and Cellular Security | 3         |            | Prereq: CSEC 1113            |
| <b>Total hours</b>                        | <b>14</b> | <b>GPA</b> |                              |

The Arkansas Course Transfer System (ACTS) is designed to assist in planning the academic progress of students. This system contains information about the transferability of courses within Arkansas public colleges and universities. The Arkansas Course Transfer System can be accessed by searching keyword "ACTS" at <https://adhe.edu/>

**Shading indicates courses that would directly apply to the BS-CSEC degree.**

# indicates a "C" or higher is required

| Fine Arts and Humanities                                     | U.S. History & Government                                |
|--|--|
| ART 2123 Experiencing Art (ACTS=ARTA1003)                    | HIST 1903 Survey of American History                     |
| MUS 2003 Introduction to Music (ACTS=MUSC1003)               | HIST 2003 U.S. History to 1877 (ACTS=HIST2113)           |
| TH 2273 Introduction to Theatre (ACTS=DRAM 1003)             | HIST 2013 U.S. History since 1877 (ACTS=HIST2123)        |
| ENGL/JOUR 2173 Introduction to Film                          | POLS 2003 American Government (ACTS=PLSC2003)            |
| ENGL 2003 Introduction to World Literature (ACTS=ENGL2113)   |  |
| ENGL 2013 Intro. to American Literature (ACTS=ENGL2653)      | <b>Science with Lab</b>                                  |
| PHIL 2003 Introduction to Philosophy (ACTS=PHIL1103)         | BIOL 1014- Intro. to Biological Science (ACTS= BIOL1004) |
| PHIL 2053 Introduction to Critical Thinking (ACTS=PHIL 1003) | BIOL/PHSC 1004- Principles of Environmental Science      |
| 1013 from SPAN, FR, GER, JPN, CHIN, or LAT                   | GEOL 1014- Physical Geology (ACTS= GEOL 1114)            |
| 1023 from SPAN, FR, GER, JPN, CHIN, or LAT                   | PHSC 1013/1021- Physical Sci/Lab (ACTS= PHSC 1004)       |

*University Honors students should consult Course Catalog for appropriate Fine Arts/Humanities, US History/Government and Social Science options for University Honors Curriculum.*

### Sample Schedule

| Semester 3   | Hrs.      | Grade      | Milestones/Notes  |
|--|-----------|------------|---|
| Social Sciences                                    | 3         |            |   |
| COMS 2203- Programming Foundations II              | 3         | #          | Milestone - Prereq: # COMS 1013 & # MATH 1113 or higher |
| MATH 2703-Discrete Mathematics                     | 3         |            | Milestone - Prereq: # MATH 1113 or higher               |
| CSEC 2213- Network Forensics and Incident Response | 3         |            | Prereq: CSEC 1113                                       |
| CSEC 2223- Virtualization                          | 3         |            | (Fall Only) Prereq: CSEC 1113                           |
| <b>Total hours</b>                                 | <b>15</b> | <b>GPA</b> |   |

| Semester 4                                    | Hrs.      | Grade      | Semester 4                                       |
|---|-----------|------------|--|
| COMM 2173- Business and Professional Speaking | 3         |            | COMM 2003 Public Speaking may sub                |
| COMS 2213- Data Structures                    | 3         |            | Milestone - Prereq: MATH 2703 and # in COMS 2203 |
| COMS 2323- Programming in Python              | 3         |            | Prereq: COMS 2203                                |
| *General Elective                             | 3         |            |  |
| *General Elective                             | 3         |            |  |
| <b>Total hours</b>                            | <b>15</b> | <b>GPA</b> |  |

**Graduation Requirements:**

No more than 4 PE activity hours  
Min hours required 60. 2.00+ GPA

General Electives: 6 hours (1000-4000 level)

\*Students interested in possibly obtaining a BS degree in CSEC should chose electives that count toward BS-CSEC degree.

**Students should consider CP in Computer Programming and CP in Computer Networking. See Catalog.**

| Social Sciences   |
|---|
| HIST 1503 World History to 1500 (ACTS=HIST1113)           |
| HIST 1513 World History since 1500 (ACTS=HIST1123)        |
| HIST 2003 U.S. History to 1877 (ACTS=HIST2113)            |
| HIST 2013 U.S. History since 1877 (ACTS=HIST2123)         |
| HIST 1903 Survey of American History                      |
| POLS 2003 American Government (ACTS=PLSC2003)             |
| ECON 2003 Principles of Macroeconomics (ACTS=ECON2103)    |
| ECON 2013 Principles of Microeconomics (ACTS=ECON2203)    |
| SOC 1003 Introductory Sociology (ACTS=SOCI1013)           |
| PSY 2003 General Psychology (ACTS=PSYC1103)               |
| ANTH 1213 Intro. to Anthropology (ACTS=ANTH1013)          |
| ANTH 2003 Cultural Anthropology (ACTS=ANTH2013)           |
| GEOG 2013 Regional Geography of the World (ACTS=GEOG2103) |
| AMST 2003 American Studies                                |
| FIN 2013 Personal Finance                                 |
| LEAD 1003 Introduction to Leadership                      |