ATU ARKANSAS TECH UNIVERSITY

NAME:_____   T#:_____   DATE:_____

2025-2026 Degree Map-Bachelor of 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 four years. The Sample Schedule serves as a general guideline to help you build a full schedule each term. See course descriptions and prerequisites at https://catalog.atu.edu/

#Prerequisite Courses: ENGL 0303____ MATH 0803___ MATH 1003____ MATH 0903____ MATH 1113___ MATH 1110____ MATH 1203 ____

Possible Careers: Private and Government Sectors, Information Security Management, IT Security Consulting, Protecting Systems from Cyberattacks

Sample Schedule — Milestones/Notes

Semester 1	Hrs.	Grade	Semester 1
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 C> in MATH 1113 or higher
TECH 1001- Orientation to the University	1		
CSEC 1113- Introduction to Networking	3		
CSEC 1003- Introduction to Cybersecurity	3		
Total hours	16	GPA	Create a LinkedIn profile

Semester 2	Hrs.		Semester 2
ENGL 1023- Comp II (ACTS= ENGL 1023)	3	#	Attend a career fair and explore part-time or volunteer options
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		Spring Only Prereq: CSEC 1113
Total hours	14	GPA	

Semester 3	Hrs.		Semester 3
Social Sciences	3		
COMS 2203- Programming Foundations II	3		Prereq: C> COMS 1013 and C> MATH 1113 or higher
MATH 2703- Discrete Mathematics	3		Prereq: C> MATH 1113 or higher
CSEC 2213- Network Forensics and Incident Response	3		Fall Only Prereq: CSEC 1113
COMS 2223- Computer Organization and Prog.	3		Prereq: COMS 2203 and MATH 2703
Total hours	15	GPA	

Semester 4	Hrs.		Semester 4
COMM 2173- Business and Professional Speaking	3		COMM 2003 Public Speaking may sub
COMS 2213- Data Structures	3		Prereq: MATH 2703 and C> in COMS 2203
COMS 2323- Programming in Python	3		Prereq: COMS 2203
CSEC 2223- Virtualization	3		Prereq: COMS 2203 and MATH 2703
General Elective	3		
Total hours	15	GPA	COMS ADVISOR ASSIGNED

Semester 5	Hrs.	Grade	Semester 5
Science with Lab	4		Do a mock interview utilizing Career Services
STAT 2163- Intro to Statistical Methods	3		
CSEC 3123- Cyber Defense I	3		Fall Only Prereq: CSEC 2213 and CSEC 2223
CSEC 3243- Computer Architecture	3		Fall Only Prereq: COMS 2223
CSEC 4133- Large Scale Distributed Systems	3		Fall Only Prereq: CSEC 2223 and junior standing in CSEC
Total hours	16	GPA	

Semester 6	Hrs.		Semester 6
Fine Arts & Humanities	3		
COMS 3233- Data Design and Implementation	3		Prereq: COMS 2203
CSEC 3223- Programming Embedded Systems	3		Spring Only Prereq: COMS 2213 and CSEC 2223
CSEC 3233- Cyber Defense II	3		Spring Only Prereq: CSEC 3123
COMS 3703- Advanced Operating Systems	3		Prereq: COMS 2213 and COMS 2223
Total hours	15	GPA	APPLY FOR GRADUATION

Semester 7	Hrs.		Semester 7
Social Sciences	3		Finalize résumé, cover letter, and references
CSEC 4123- Applied Cryptography	3		Fall Only Prereq: CSEC 3243
CSEC 4143- Building Secure Software	3		Fall Only Prereq: CSEC 3243
CSEC 4153- Human Factors in Cybersecurity	3		Fall Only Prereq: CSEC 3223
CSEC 4233- Legal Issues in Cybersecurity	3		Fall Only Prereq: Jr Standing
Total hours	15	GPA	Complete check-in with Career Services

Semester 8	Hrs.		Semester 8
CSEC 4213- Information Systems Risk Management	3		Prereq: CSEC 2113 and 3233
CSEC 4243- Software Security Analysis & Reverse Engineering	3		**Graduation Requirements:**
CSEC 4293- Cybersecurity Capstone Project	3		Min. hours 3000-4000 level courses: 40
U.S. History/Government	3		No more than 4 PE activity hours
General Elective	2		Min. hours required:120
Total Hours	14	GPA	2.00+ GPA

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/

General Electives: 5 hours (1000-4000 level)

\# indicates a "C" or higher is required

Shading indicates courses that would directly apply to the AAS-CSEC degree

Fine Arts and Humanities
ART 2123 Experiencing Art (ACTS=ARTA1003)
MUS 2003 Survey of Music History (ACTS=MUSC1003)
TH 2273 Introduction to Theatre (ACTS=DRAM 1003)
ENGL/JOUR 2173 Introduction to Film
ENGL 2003 Introduction to World Literature (ACTS=ENGL2113)
ENGL 2013 Intro. to American Literature (ACTS=ENGL2653)
PHIL 2003 Introduction to Philosophy (ACTS=PHIL1103)
PHIL 2053 Introduction to Critical Thinking (ACTS=PHIL 1003)
1013 from SPAN, FR, GER, JPN, CHIN, or LAT
1023 from SPAN, FR, GER, JPN, CHIN, or LAT
LEAD 2003 Ethics in Leadership

U.S. History & Government
HIST 1903 Survey of American History
HIST 2003 U.S. History to 1877 (ACTS=HIST2113)
HIST 2013 U.S. History since 1877 (ACTS=HIST2123)
POLS 2003 American Government (ACTS=PLSC2003)

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

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

Science with Lab
BIOL 1014- Intro. to Biological Science (ACTS= BIOL1004)
BIOL/PHSC 1004- Principles of Environmental Science
GEOL 1014- Physical Geology (ACTS= GEOL 1114)

Consider adding CP in Computer Programming and CP in Computer Networking, see catalog