ATU™ ARKANSAS TECH UNIVERSITY

NAME:_____ T#:_____ DATE:_____

2024-2025 Degree Map-Bachelor of Science in Information Technology, Track 2: Network and Security

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____

Possible Careers: Design, Implementation, and Securing of Networks and Systems. Network Administration, Network Engineering, Security Analysis and Consulting, Penetration Testing, Network Architecture

Sample Schedule — **Milestones/Notes**

Semester 1	Hrs.	Grade	Semester 1
ENGL 1013- Comp I (ACTS=ENGL 1013)	3	#	
MATH 1113- College Algebra (ACTS= MATH 1103)	3	#	If ACT math 22 or higher, use as General Elective
TECH 1001- Orientation to the University	1		
CSEC 1003- Introduction to Cybersecurity	3		
CSEC 1113- Introduction to Networking	3		
COMS 1333- Web and Mobile Technologies	3		
Total hours	16	GPA	

Semester 2	Hrs.		Semester 2
ENGL 1023- Comp II (ACTS= ENGL 1023)	3	#	
MATH 2243- Calculus for Business & Econ. (ACTS=MATH 2203)	3		MATH 2914 subs for MATH 2243
Social Sciences	3		
COMS 1013- Programming Foundations I	3	#	Prereq: MATH 1113 or higher
COMS 1011- Programming Foundations I Lab	1	#	PASS/FAIL - Coreq: COMS 1013
COMS 2703- Computer Hardware & Architecture	3		
Total hours	16	GPA	

Semester 3	Hrs.		Semester 3
Science with Lab	4		
COMS 2203- Programming Foundations II	3	#	Prereq: # COMS 1013 & # MATH 1113 or higher
MATH 2703-Discrete Mathematics	3		Prereq: # MATH 1113 or higher
CSEC 2213- Network Forensics and Incident Response	3		Fall Only Prereq: CSEC 1113
CSEC 2223- Virtualization	3		Fall Only Prereq: CSEC 1113
Total hours	16	GPA	

Semester 4	Hrs.		Semester 4
ENGL 2053-Technical Writing (ACTS=ENGL 2023)	3		Prereq: ENGL 1023
COMM 2173- Business and Professional Speaking	3		COMM 2003 Public Speaking may sub
COMS 2163- Script Lang OR COMS 2323- Program in	3		Prereq: COMS 1333 and COMS 2203
COMS 2213- Data Structures	3		Prereq: MATH 2703 and # in COMS 2203
STAT 2163 Intro to Statistical Methods	3		
Total hours	15	GPA	**COMS ADVISOR ASSIGNED**

Semester 5	Hrs.	Grade	Semester 5
Fine Arts & Humanities	3		
COMS 3233- Data Design and Implementation	3		Prereq: COMS 2203
COMS 3363- Server Administration	3		Fall Only -Prereq: COMS 2703 and 2713
CSEC 3123- Cyber Defense I	3		Fall Only-Prereq: CSEC 2213 and CSEC 2223
Approved Elective (3000-4000)	3		
Total hours	15	GPA	

Semester 6	Hrs.		Semester 6
Science with Lab	4		
COMS 3053- Ethical Issues in Technology	3		Prereq: Junior standing in COMS
COMS 3733- Data Center Operations	3		Spring Only
CSEC 3233- Cyber Defense II	3		Spring Only - Prereq: CSEC 3123
Approved Elective (3000-4000)	2		
Total hours	15	GPA	**APPLY FOR GRADUATION**

Semester 7	Hrs.		Semester 7
Social Sciences	3		
US History/Government	3		
COMS 3523- Human Factors in IT	3		Prereq: Jr standing
COMS 4913- Capstone I	3		
Approved Elective (3000-4000)	3		
Total hours	15	GPA	

Semester 8	Hrs.		Semester 8
Fine Arts & Humanities	3		**Graduation Requirements:**
COMS 4713- Networking Practicum	3		Min. hours 3000-4000 level courses: 40
COMS 4923- Capstone II	3		No more than 4 PE activity hours
Approved Elective (3000-4000)	3		Min. hours required:120
			2.00+ GPA
Total Hours	12	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: 0 hours. Approved 3000-4000 Electives: 11 hours.

# indicates a "C" or higher is required

Shading indicates courses that would directly apply the AAS-ITAS 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)

*Students interested in obtaining a BS-IT should choose electives that count toward BS-IT. Also consider CP in Computer Programming, see catalog