

2024-2025 Degree Map-Bachelor of Science in Computer Science

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 ___ MATH 1914 ___

Possible Careers: Programming, Coding, Software Development, Computer Systems & Design, Database Administration, Technical Support

Sample Schedule
Milestones/Notes

Semester 1	Hrs.	Grade	Semester 1
ENGL 1013- Comp I (ACTS=ENGL 1013)	3	#	
CSEC 1003- Introduction to Cybersecurity	3		
COMS 1333- Web and Mobile Technologies	3		
TECH 1001-Orientation to the University	1		
MATH 2914- Calculus I (ACTS= MATH 2405)	4	#	Prereq: MATH ACT >26, or # in MATH 1203 or MATH 1914
Total hours	14	GPA	

Sample Schedule
Milestones/Notes

Semester 5	Hrs.	Grade	Semester 5
Fine Arts & Humanities	3		
COMS 3703- Advanced Operating Systems	3		Fall Only Prereq: COMS 2213 & COMS 2223
COMS 3213- Algorithm Design & Analysis	3		Fall Only - Prereq: COMS 2213
COMS 2323- Programming in Python	3		Prereq: COMS 2203
Approved Elective (3000-4000)	3		
Total hours	15	GPA	

Semester 2	Hrs.	Grade	Semester 2
ENGL 1023- Comp II (ACTS= ENGL 1023)	3	#	
CSEC 1113- Introduction to Networking	3		
COMS 1013- Programming Foundations I	3	#	Prereq: MATH 1113 or higher
COMS 1011- Programming Foundations I Lab	1	#	PASS/FAIL - Coreq: COMS 1013
MATH 2924- Calculus II (ACTS= MATH 2505)	4		(# for some upper-div courses in math minor)
Total hours	14	GPA	

Semester 6	Hrs.	Grade	Semester 6
Science with Lab	4		
COMS 3053- Ethical Issues in Technology	3		Prereq: Junior standing in COMS
COMS 3233- Data Design and Implementation	3		Prereq: COMS 2203
COMS 3313- Software Engineering	3		Spring Only - Prereq: COMS 3213
Approved Elective (3000-4000)	3		
Total hours	16	GPA	APPLY FOR GRADUATION

Semester 3	Hrs.	Grade	Semester 3
COMS 2203- Programming Foundations II	3	#	Prereq: # COMS 1013 & # MATH 1113 or higher
MATH 2703-Discrete Mathematics	3		Prereq: # MATH 1113 or higher
COMS 2703- Computer Hardware & Architecture	3		
COMM 2173- Business and Professional Speaking	3		COMM 2003 Public Speaking may sub
Social Sciences	3		
Total hours	15	GPA	

Semester 7	Hrs.	Grade	Semester 7
US History/Government	3		
Fine Arts & Humanities	3		
STAT 3153- Applied Statistics	3		Prereq: MATH 2924
COMS 4913- Capstone I	3		Fall Only
COMS 4103- Organization of Programming Languages	3		Fall Only - Prereq: COMS 2213 & 2223
Total hours	15	GPA	

Semester 4	Hrs.	Grade	Semester 4
COMS 2213- Data Structures	3		Prereq: MATH 2703 and # in COMS 2203
COMS 2223- Computer Organization and Prog.	3		Prereq: COMS 2203 & MATH 2703
COMS 2163- Scripting Languages	3		Prereq: COMS 1333 & COMS 2203
Science with Lab	4		
ENGL 2053-Technical Writing (ACTS=ENGL 2023)	3		Prereq: ENGL 1023
Total hours	16	GPA	COMS ADVISOR ASSIGNED

Semester 8	Hrs.	Grade	Semester 8
Social Sciences	3		Graduation Requirements: Min. hours 3000-4000 level courses: 40 No more than 4 PE activity hours Min. hours required:120 2.00+ GPA
MATH 4003- Linear Algebra I	3		
COMS 4413- Parallel and Distributed Computing	3		
COMS 4923- Capstone II	3		
Approved Elective (3000-4000)	3		
Total hours	15	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/>

Shaded classes indicate classes toward AAS-Information Technology

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=SOC11013) 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)	

Approved Electives: 3000-4000 Level, 9 hours

indicates a "C" or higher is required

Students should consider the following: AAS-Information Technology, CP-Computer Programing, minor in mathematics. See catalog for details.