

2024-2025 Degree Map Program: Bachelor of Science Computer Engineering

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: Hardware, Software, Network, Embedded Systems, or IoT Engineering, Research & Development. Preparation for Graduate Programs in Computer Engineering.

Sample Schedule	Milestones/Notes		
Semester 1	Hrs.	Grade	Semester 1
ENGL 1013 -Comp I (ACTS=ENGL 1013)	3	#	
Fine Arts & Humanities	3		
MATH 2914- Calculus I (ACTS= MATH 2405)	4	#	Milestone
CHEM 2124/2120- General Chemistry I (ACTS= CHEM 1414)	4		
ELEG 1011- Intro. to Electrical Engineering	1		
TECH 1001- Orientation to the University	1		
Total hours	16	GPA	

Sample Schedule	Milestones/Notes		
Semester 5	Hrs.	Grade	Semester 5
Social Sciences	3		
Fine Arts & Humanities	3		
MATH 2703- Discrete Mathematics	3		
ELEG 3003 or MCEG 3003- Modeling Design	3		
ELEG 3103- Electronics I	3		Fall Only
Total hours	15	GPA	

Semester 2	Hrs.	Grade	Semester 2
ENGL 1023- Comp II (ACTS= ENGL 1023)	3	#	
COMS 1013- Programming Foundations I	3	#	
COMS 1011- Programming Foundations I Lab	1	#	Lab is Pass/Fail
MATH 2924- Calculus II (ACTS= MATH 2505)	4	#	Milestone
ELEG 2134/2130- Digital Logic Design/ Lab	4		Pre-req: ELEG 1011 -Milestone
Total hours	15	GPA	

Semester 6	Hrs.	Grade	Semester 6
COMS 2213- Data Structures	3		Spring only
COMS 2223- Computer Organization and Prog.	3		Spring only
ELEG 3123- Signals and Systems	3		Spring only
ELEG 3143- Electromagnetics	3		Spring only
ELEG 4103- Electronics II	3		Spring only
ELEG 4202 or MCEG 4202- Engineering Design			
Total hours	17	GPA	APPLY FOR GRADUATION

Semester 3	Hrs.	Grade	Semester 3
PHYS 2114/2000- Calculus-Based Physics I (ACTS= PHYS 2034)	4		
COMS 2203- Programming Foundations II	3		
MATH 3243- Differential Equations I	3		
ELEG 2103- Electric Circuits I	3		
ELEG 3133- Microprocessor Systems Design	3		SEE NOTE 1: AB2M
Total hours	16	GPA	

Semester 7	Hrs.	Grade	Semester 7
ELEG 4113-Digital Signal Processing	3		Fall Only
ELEG 4133- Advanced Digital Design	3		Fall Only
ELEG 4143- Communication Systems I	3		Fall Only
CMPE 4191- Design Project I	1		
ELEG 4303- Control Systems	3		
Total hours	13	GPA	

Semester 4	Hrs.	Grade	Semester 4
PHYS 2124/2010- Calculus-Based Physics II (ACTS= PHYS 2044)	4		
MATH 2934- Calculus III (ACTS= MATH 2603)	4		
STAT 3153 Applied Statistics 1	3		
ELEG 2113/2111- Electric Circuits II/ Lab	4		
Total hours	15	GPA	ELEG ADVISOR ASSIGNED

Semester 8	Hrs.	Grade	Semester 8
COMS 3703- Operating Systems	3		Spring only
ELEG 4122- Electrical Systems Lab	2		Spring only
U.S. History/Government	2		Graduation Requirements: No more than 4 PE activity hours Min. hours required:120 2.00+ GPA
CMPE 4192- Design Project II	2		
ELEG Engineering Elective (3000-4000 level)	3		
Total hours	13	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 Min. hours 3000-4000 level courses: 40

indicates a "C" or better is required

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/IOUR 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.	

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)	Social Sciences 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
NOTE 1 - Consider Accelerated BSCMPE Computer Engineering to MENG Electrical Engineering. See Catalog BEFORE Junior Year.	