ATU™ ARKANSAS TECH UNIVERSITY

NAME:_____ T#:_____ DATE:_____

2023-2024 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 http://www.atu.edu/catalog/

Employment Information: Electrical and Computer engineers design, develop, build, and test computer hardware, software, and systems. Other electrical systems may include robotics, controls, communications systems, and electronic equipment.

#Prerequisite Courses: ENGL 0303_____ MATH 0803_____ MATH 1003_____ MATH 0903_____ MATH 1113_____ MATH 1110_____ MATH 1203_____ MATH 1914_____

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	

Semester 2	Hrs.		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 3	Hrs.		Semester 3
PHYS 2114/2000- Calculus-Based Physics I (ACTS= PHYS 2034)	4		Milestone
COMS 2203- Programing Foundations II	3		Milestone
MATH 3243- Differential Equations I	3		Milestone
ELEG 2103- Electric Circuits I	3		Milestone
ELEG 3133- Microprocessor Systems Design	3		SEE NOTE 1: AB2M
Total hours	16	GPA	

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

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/

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		Milestone
ELEG 3103- Electronics I	3		Fall Only
Total hours	15	GPA	

Semester 6	Hrs.		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 7	Hrs.		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
ELEG 4191- Electrical Design Project I	1		
ELEG 4303- Control Systems	3		
Total hours	13	GPA	

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

General Electives: 0

2.00+ GPA

Min. hours 3000-4000 level courses: 40

# indicates a "C" or better is required

Fine Arts and Humanities	U.S. History & Government	Social Sciences	
ART 2123 Experiencing Art (ACTS=ARTA1003)	HIST 1903 Survey of American History	HIST 1503 World History to 1500 (ACTS=HIST1113)	ANTH 1213 Intro. to Anthropology (ACTS=ANTH1013)
MUS 2003 Introduction to Music (ACTS=MUSC1003)	HIST 2003 U.S. History to 1877 (ACTS=HIST2113)	HIST 1513 World History since 1500 (ACTS=HIST1123)	ANTH 2003 Cultural Anthropology (ACTS=ANTH2013)
TH 2273 Introduction to Theatre (ACTS=DRAM 1003)	HIST 2013 U.S. History since 1877 (ACTS=HIST2123)	HIST 2003 U.S. History to 1877 (ACTS=HIST2113)	GEOG 2013 Regional Geography of the World (ACTS=GEOG2103)
ENGL/JOUR 2173 Introduction to Film	POLS 2003 American Government (ACTS=PLSC2003)	HIST 2013 U.S. History since 1877 (ACTS=HIST2123)	AMST 2003 American Studies
ENGL 2003 Introduction to World Literature (ACTS=ENGL2113)		HIST 1903 Survey of American History	FIN 2013 Personal Finance
ENGL 2013 Intro. to American Literature (ACTS=ENGL2653)	**NOTE 1 - Consider Accelerated BSCMPE Computer Engineering to MENGR Electrical Engineering. See Catalog BEFORE Junior Year.**	POLS 2003 American Government (ACTS=PLSC2003)	LEAD 1003 Introduction to Leadership
PHIL 2003 Introduction to Philosophy (ACTS=PHIL1103)		ECON 2003 Principles of Macroeconomics (ACTS=ECON2103)	
PHIL 2053 Introduction to Critical Thinking (ACTS=PHIL 1003)		ECON 2013 Principles of Microeconomics (ACTS=ECON2203)	
1013 from SPAN, FR, GER, JPN, CHIN, or LAT		SOC 1003 Introductory Sociology (ACTS=SOCI1013)	
1023 from SPAN, FR, GER, JPN, CHIN, or LAT		PSY 2003 General Psychology (ACTS=PSYC1103)	
LEAD 2003 Ethics in Leadership			

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