

NAME:	T#:	DATE:

8-Semester Guaranteed Program

Rev. 08.13.2025

2025-2026 Degree Map Program- Bachelor of Science in Electrical 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: Electronics, Power Systems, Control Systems, and Renewable Energy Systems Engineering.

Sample Schedule

Milestones/Notes

Semester 1	Hrs.	Grade	Semester 1
ENGL 1013- Comp I (ACTS=ENGL 1013)	3	#	
Fine Arts & Humanities	3		
CHEM 2124/2120- General Chemistry I and lab	4		
MATH 2914- Calculus I (ACTS= MATH 2405)	4	#	
ELEG 1011- Intro to Electrical and Computer Engineering	1		
TECH 1001- Orientation to the University	1		
Total hours	16	GPA	Meet with Career Services

Semester 2	Hrs.		Semester 2
ENGL 1023- Comp II (ACTS= ENGL 1023)	3	#	Create résumé and upload it to Handshake
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		
ELEG 2134/2130- Digital Logic Design and Lab	4		Pre-req: ELEG 1011
Total hours	15	GPA	

Semester 3	Hrs.		Semester 3
COMS 2203- Programing Foundations II	3		C > required in COMS 1013/1011
PHYS 2114/2000- Calculus-Based Physics and lab	4		
MATH 3243- Differential Equations I	3		
ELEG 2103- Electrical Circuits I	3		
ELEG 3133- Microprocessor Systems Design	3		Attend Career fairs on campus
			Work on resume for interships
Total hours	16	GPA	SEE NOTE 1: AB2M

Semester 4	Hrs.		Semester 4
PHYS 2124/2010- Calculus-Based Physics II and lab	4		Meet with faculty advisor about interships
MATH 2934- Calculus III (ACTS= MATH 2603)	4		
ELEG 2113/2111- Electrical Circuits II and Lab	4		
STAT3153- Applied Statistics	3		Do a mock interview utilizing Career Services
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/ 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=

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.

Sample Schedule

Milestones/Notes

Semester 5	Hrs.	Grade	Semester 5
ELEG/MCEG 3003- System Modeling & Analysis	3		
ELEG 3103- Electronics I	3		Fall Only Course
ELEG 3153- Electrical Machines	3		Fall Only Course
Technical Elective	3		Department Approval Required
ELEG Elective (3000-4000 level)	3		
Total hours	15	GPA	Start applying to interships

Semester 6	Hrs.		Semester 6
ELEG 3123- Signals and Systems	3		Spring only
ELEG 3143- Electromagnetics	3		Spring only
ELEG 4103- Electronics II	3		Spring only
ELEG/MCEG 4202- Engineering Design	2		
MATH 2703- Discrete Math	3		
Total hours	14	GPA	APPLY FOR GRADUATION

Semester 7	Hrs.		Semester 7
Social Sciences	3		
U.S. History/Government	3		
ELEG 4113-Digital Signal Processing	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	16	GPA	

Semester 8	Hrs.		Semester 8
ELEG 4122- Electrical Systems Lab	2		Spring only
Fine Arts & Humanities	3		Graduation Requirements:
ELEG 4192- Electrical Design Project II	2		Min. hours 3000-4000 level courses: 40
Technical Elective- Department Approval Required	3		No more than 4 PE activity hours
ELEG Elective (3000-4000 level)	3		Min. hours required: 120
Total Hours	13	GPA	2.00+ GPA

General Electives: 0

indicates a "C" or better is required

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 2003 U.S. History since 1877 (ACTS=HIST2123)
HIST 1903 Survey of American History
POLS 2003 American Government (ACTS=HEC2003)
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 BSEE Electrical Engineering to MENGR Electrical Engineering. See Catalog BEFORE Junior Year.