

2016-2017 Degree Map Program: Bachelor of Science Electrical Engineering, Major: Electrical Engineering With Computer Engineering Option

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/academics/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.

#Remedial Courses (if applicable): ENGL 0303 ___ ENGL 0404 ___ READ 0103 ___ MATH 0903 ___

Sample Schedule

Semester 1	Hrs.	Grade	Milestones/Notes	Semester 1
ENGL 1013-Comp I (ACTS=ENGL 1013)	3	#		
CHEM 2124/2120- General Chemistry I (ACTS= CHEM 1414)	4			
MATH 2914- Calculus I (ACTS= MATH 2405)	4		#C or > required for Gen Ed. Milestone	
TECH1001: Orientation to the University	1			
ELEG 1011- Intro. to Electrical Engineering	1			
U.S. History/Government	3			
Total hours	16	GPA		
Semester 2	Hrs.	Grade	Milestones/Notes	Semester 2
ENGL 1023- Comp II (ACTS= ENGL 1023)	3	#		
COMS 2104- Foundations of Computer Programming I	4	#	(COMS 1403/1411 not required)	
MATH 2924- Calculus II (ACTS= MATH 2505)	4		Milestone	
ELEG 2134/2130- Digital Logic Design/ Lab	4		Milestone	
Total hours	15	GPA		
Semester 3	Hrs.	Grade	Milestones/Notes	Semester 3
PHYS 2114/2000- General Physics I (ACTS= PHYS 2034)	4		Milestone	
COMS 2203- Foundations of Computer Prog II	3		Milestone	
MATH 3243- Differential Equations I	3		Milestone	
ELEG 2103- Electrical Circuits I	3		Milestone	
ELEG 3133- Microprocessor Systems Design	3			
Total hours	16	GPA		

Semester 4	Hrs.	Grade	Milestones/Notes	Semester 4
PHYS 2124/2010- General Physics II (ACTS= PHYS 2044)	4		Milestone	
MATH 2934- Calculus III (ACTS= MATH 2603)	4		Milestone	
ELEG 3173 or MATH 3173- Math Methods	3		Spring only	
ELEG 2113/2111- Electrical 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 at <http://acts.adhe.edu/>

Fine Arts and Humanities
 ART 2123 Experiencing Art (ACTS=ARTA 1003)
 MUS 2003 Intro to Music (ACTS=MUSC 1003)
 TH 2273 Intro to Theatre (ACTS =DRAM 1003)
 ENGL 2173 Intro to Film
 JOUR 2173 Intro to Film
 ENGL 2003 Intro to World Literature (ACTS=ENGL 2113)
 ENGL 2013 Intro to American Literature (ACTS=ENGL 2653)
 ENGL 2023 Honors World Literature
 PHIL 2003 Intro to Philosophy (ACTS=PHIL 1103)
 PHIL 2043 Honors Introduction to Philosophy

U.S. History & Government
 HIST 1903 Survey of American History
 HIST 2003 United States History to 1877 (ACTS=HIST2113)
 HIST 2043 Honors United States History to 1877
 HIST 2013 United States History from 1877 (ACTS=HIST2123)
 POLS 2003 American Government (ACTS=PLSC2003)

Prerequisites (if applicable): MATH 1914 (ACTS=MATH1305) ___ OR MATH 1203 (ACTS=MATH1203) ___

Sample Schedule

Semester 5	Hrs.	Grade	Milestones/Notes	Semester 5
Social Sciences	3			
ELEG 3003 or MCEG 3003- Modeling Design	3		Milestone	
ELEG 3103- Electronics I	3		Fall Only	
COMS 2903-Discrete Structures	3			
Fine Arts & Humanities	3			
Total hours	15	GPA		

Semester 6	Hrs.	Grade	Milestones/Notes	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	
Total hours	15	GPA	APPLY FOR GRADUATION	

Semester 7	Hrs.	Grade	Milestones/Notes	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 4202 or MCEG 4202- Engineering Design	2		Milestone	
ELEG 4303- Control Systems	3			
ELEG 4191- Electrical Design Project I	1			
Total hours	15	GPA		

Semester 8	Hrs.	Grade	Milestones/Notes	Semester 8
Fine Arts & Humanities	3			
COMS 3703- Operating Systems	3		Spring only	
ELEG 4122- Electrical Systems Lab	2		Spring only	
ELEG 4192- Electrical Design Project II	2			
Engineering Elective (3000-4000 level)	3		No more than 4 PE activity hours Min. hours required:120	
Total Hours	13	GPA	2.00+ GPA Min. hours 3000-4000 level courses: 40	

General Electives: 0

indicates a "C" or better is required

Social Sciences
ECON 2013 Principles of Economics II (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