

2015-2016 Degree Map-Bachelor of Science in Electrical Engineering- Traditional 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 engineers design, develop, build, and test, electrical and electronic devices and systems. These systems include robotics, controls, electric motors, radar and navigation systems, communications systems, electronic equipment, and power generation and distribution devices and systems including renewable energy applications.

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

Sample Schedule	Milestones/Notes		
Semester 1	Hrs.	Grade	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
ELEG 1012- Intro. to Electrical Engineering	2		
Total hours	13	GPA	

Semester 2	Hrs.	Grade	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	Semester 3
MCEG 2023- Engineering Materials	3		
PHYS 2114/2000- General Physics I (ACTS= PHYS 2034)	4		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	Semester 4
Fine Arts & Humanities	3		
PHYS 2124/2010- General Physics II (ACTS= PHYS 2044)	4		Milestone
MATH 2934- Calculus III (ACTS= MATH 2603)	4		Milestone
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	U.S. History & Government
ART 2123 Experiencing Art (ACTS=ARTA1003)	HIST 1903 Survey of American History
MUS 2003 Introduction to Music (ACTS=MUSC1003)	HIST 2003 United States History to 1877 (ACTS=HIST1113)
TH 2273 Introduction to Theatre (ACTS=DRAM 1003)	HIST 2043 Honors United States History to 1877
ENGL 2173 Introduction to Film	HIST 2013 United States History from 1877 (ACTS=HIST2123)
JOUR 2173 Introduction to Film	POLS 2003 American Government (ACTS=PLSC2003)
ENGL 2003 Introduction to World Literature (ACTS=ENGL2113)	
ENGL 2013 Intro. to American Literature (ACTS=ENGL2653)	
ENGL 2023 Honors World Literature	
PHIL 2003 Introduction to Philosophy (ACTS=PHIL1103)	
PHIL 2043 Honors Introduction to Philosophy	

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

Sample Schedule	Milestones/Notes		
Semester 5	Hrs.	Grade	Semester 5
MCEG 2013- Statics	3		Milestone
ELEG 3003 or MCEG 3003- Modeling Design	3		Milestone
ELEG 3103- Electronics I	3		Fall Only Course - Milestone
ELEG 3153- Electrical Machines	3		Fall Only Course- Milestone
Engineering Elective (3000-4000 level)	3		
Total hours	15	GPA	

Semester 6	Hrs.	Grade	Semester 6
MCEG 2033- Dynamics	3		
ELEG 3123- Signals and Systems	3		Spring only
ELEG 3143- Electromagnetics	3		Spring only
ELEG 3173 or MATH 3173- Math Methods	3		Spring only
ELEG 4103- Electronics II	3		Milestone - Spring Only
Total hours	15	GPA	APPLY FOR GRADUATION

Semester 7	Hrs.	Grade	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 4202 or MCEG 4202- Engineering Design	2		Milestone
ELEG 4303- Control Systems	3		
Total hours	17	GPA	

Semester 8	Hrs.	Grade	Semester 8
ELEG 4122- Electrical Systems Lab	2		Spring only
Fine Arts & Humanities	3		
ELEG 4193- Electrical Design Project	3		Graduation Requirements: Min. hours 3000-4000 level courses: 40 No more than 4 PE activity hours Min. hours required:120 2.00+ GPA
Technical Elective- Department Approval Required	3		
Engineering Elective (3000-4000 level)	3		
Total Hours	14	GPA	

General Electives: 0

indicates a "C" or better is required (C > required in COMS 2104 only as prereq for COMS 2203)

Social Sciences	Social Sciences
HIST 1503 World Civilization to 1500 (ACTS=HIST1113)	ECON 2013 Principles of Economics II (ACTS=ECON2203)
HIST 1513 World Civilization since 1500 (ACTS=HIST1123)	SOC 1003 Introductory Sociology (ACTS=SOCI1013)
HIST 1543 Honors World Civilization to 1500	PSY 2003 General Psychology (ACTS=PSYC1103)
HIST 2003 U.S. History to 1877 (ACTS=HIST2113)	ANTH 1213 Intro. to Anthropology (ACTS=ANTH1013)
HIST 2013 U.S. History since 1877 (ACTS=HIST2123)	ANTH 2003 Cultural Anthropology (ACTS=ANTH2013)
HIST 2043 Honors U.S. History to 1877	GEOG 2013 Regional Geography of the World (ACTS=GEOG2103)
HIST 1903 Survey of American History	AMST 2003 American Studies
POLS 2003 American Government (ACTS=PLSC2003)	
ECON 2003 Principles of Economics I (ACTS=ECON2103)	
ECON 2103 Honors Principles of Economics I	