

**2026-2027 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		
MATH 2914-Calculus I (ACTS= MATH 2405)	4		Prereq: MATH ACT >26, or C> in MATH 1203/1914
CHEM 2124/2120-General Chemistry I and lab	4	#	Prereq: MATH ACT >21, or C> in MATH 1113 or CHEM 1113/1111
TECH 1001-Orientation to the University	1		
ELEG 1011-Intro to Electrical and Computer Engineering	1		Prereq: C> in MATH 1203/1914 or higher
<b>Total hours</b>	<b>16</b>	<b>GPA</b>	Meet with Career Services

**Sample Schedule**
**Milestones/Notes**

Semester 5	Hrs.	Grade	Semester 5
ELEG/MCEG 3003-System Modeling & Analysis	3		Prereq: COMS 1013 or MCEG 2203 & MATH 3243
ELEG 3103-Electronics I	3		Fall Only Prereq: C> in ELEG 2113/2111
ELEG 3153-Electrical Machines	3		Prereq: ELEG 2113
Technical Elective	3		See list on ELEG website
ELEG Elective (3000-4000 level)	3		
<b>Total hours</b>	<b>15</b>	<b>GPA</b>	Do a mock interview utilizing Career Services

Semester 2	Hrs.	Grade	Semester 2
ENGL 1023-Comp II (ACTS= ENGL 1023)	3	#	Create résumé and upload it to Handshake
COMS 1013/1011-Programming Foundations I and lab	4		Prereq: MATH 1113 or higher
MATH 2924-Calculus II (ACTS= MATH 2505)	4		Prereq: C> in MATH 2914
ELEG 2134/2130-Digital Logic Design and Lab	4		Pre-req: ELEG 1011 or COMS 1013
<b>Total hours</b>	<b>15</b>	<b>GPA</b>	Work on resume for interships

Semester 6	Hrs.	Grade	Semester 6
ELEG 3123-Signals and Systems	3		Spring only Prereq: MATH 3243 & ELEG 2113
ELEG 3143-Electromagnetics	3		Spring only Prereq: MATH 2934 & PHYS 2124
ELEG 4103-Electronics II	3		Spring only Prereq: ELEG 3103
ELEG/MCEG 4202-Engineering Design	2		Prereq: ELEG 3103
MATH 2703-Discrete Math	3		Prereq: C> in MATH 1113 or higher
<b>Total hours</b>	<b>14</b>	<b>GPA</b>	<b>APPLY FOR GRADUATION</b>

Semester 3	Hrs.	Grade	Semester 3
COMS 2203-Programing Foundations II	3		Prereq: C> in COMS 1013
PHYS 2114/2000-Calculus-Based Physics and lab	4		Coreq: MATH 2914 & PHYS 2000
MATH 3243-Differential Equations I	3		Prereq: C> in MATH 2924
ELEG 2103-Electrical Circuits I	3		Prereq: C> in MATH 2924
ELEG 3133-Microprocessor Systems Design	3		Prereq: C> in ELEG 2134/2130
<b>Total hours</b>	<b>16</b>	<b>GPA</b>	Attend Career fairs on campus <b>SEE NOTE 1: AB2M</b>

Semester 7	Hrs.	Grade	Semester 7
Social Sciences	3		
U.S. History/Government	3		
ELEG 4113-Digital Signal Processing	3		Fall Only Prereq: ELEG 3123 & 3003/MCEG 3003
ELEG 4143-Communication Systems I	3		Fall Only Prereq: ELEG 3123
ELEG 4191-Electrical Design Project I	1		Prereq: ELEG/MCEG 4202
ELEG 4303-Control Systems	3		Prereq: ELEG 2113 & 3003/MCEG 3003
<b>Total hours</b>	<b>16</b>	<b>GPA</b>	

Semester 4	Hrs.	Grade	Semester 4
PHYS 2124/2010-Calculus-Based Physics II and lab	4		Prereq or Coreq: MATH 2924
MATH 2934-Calculus III (ACTS= MATH 2603)	4		Prereq: C> in MATH 2924
ELEG 2113/2111-Electrical Circuits II and Lab	4		Prereq: C> in ELEG 2103 & MATH 3243
STAT3153-Applied Statistics	3		Prereq: C> in MATH 2924
<b>Total hours</b>	<b>15</b>	<b>GPA</b>	Start applying to interships <b>ELEG ADVISOR ASSIGNED</b>

Semester 8	Hrs.	Grade	Semester 8
ELEG 4122-Electrical Systems Lab	2		Spring Only Prereq: ELEG 3103
Fine Arts & Humanities	3		<b>Graduation Requirements:</b>
ELEG 4192-Electrical Design Project II	2		Min. hours 3000-4000 level courses: 40
Technical Elective- See list on ELEG website	3		No more than 4 PE activity hours
ELEG Elective (3000-4000 level)	3		Min. hours required: 120
<b>Total Hours</b>	<b>13</b>	<b>GPA</b>	2.00+ 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/>

Fine Arts and Humanities	U.S. History & Government
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	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)  <b>University Honors students should consult Course Catalog for appropriate Fine Arts/Humanities, US History/Government and Social Science options for University Honors Curriculum.</b>

Electives: 0	Social Sciences
# indicates a "C" or better is required	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  <b>NOTE 1 - Consider Accelerated BSEE Electrical Engineering to MENG Electrical Engineering. See Catalog BEFORE Junior Year.</b>