

2013-2014 Degree Map-Bachelor of Science in Engineering Physics

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/>.

Possible careers include: Architectural and Engineering Manager, Validation Engineer, Photonics Engineer, Nanosystems Engineer, Physicist, Engineering Teacher, Solar Energy Systems Designer

#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		
PHSC1001: Orientation to Physical Science	1		
MATH2914: Calculus I (ACTS= MATH 2405)	4		C or > required for Gen Ed. Milestone
COMS2803: Programming in C	3		
CHEM2124/2120: Gen. Chem. I (ACTS=CHEM1414) MILESTONE	4		Milestone
Total hours	15	GPA	

Semester 2	Hrs.	Grade	Semester 2
#ENGL 1023: Comp II (ACTS= ENGL 1023)	3		
PHSC1011: Orientation to Physical Science II	1		No substitutions allowed.
MATH2924: Calculus II (ACTS= MATH2505)	4		Milestone
MCEG2023: Engineering Materials	3		
CHEM2134/2130: General Chemistry II (ACTS= CHEM 1424)	4		
Total hours	15	GPA	

Semester 3	Hrs.	Grade	Semester 3
Social Sci./Fine Arts/Humanities/Speech	3		
PHYS 2114/2000: General Physics I (ACTS=PHYS 2034)	4		Milestone
MATH2934: Calculus III (ACTS= MATH 2603)	4		
Biological Science	4		
Total hours	15	GPA	

Semester 4	Hrs.	Grade	Semester 4
Social Sci./Fine Arts/Humanities/Speech	3		
Social Sci./Fine Arts/Humanities/Speech	3		
PHYS 2124/2010: General Physics II (ACTS=PHYS 2044)	4		Milestone
MATH3243: Differential Equations I	3		
General Elective	2		
Total hours	15	GPA	PHYS 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=ARTA1003) MUS 2003 Introduction to Music (ACTS=MUSC1003) TH 2273 Introduction to Theatre (ACTS=DRAM 1003) ENGL 2173 Introduction to Film JOUR 2173 Introduction to Film 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	U.S. History & Government HIST 1903 Survey of American History HIST 2003 U.S. History I (ACTS=HIST2113) HIST 2043 Honors U.S. History I HIST 2013 U.S. History II (ACTS=HIST2123) POLS 2003 American Government (ACTS=PLSC2003) Speech Courses SPH 1003 Intro. to Speech Com. (ACTS=SPCH1003) SPH 2003 Public Speaking SPH 2173 Business and Professional Speaking
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Prerequisites (if applicable): MATH 1914 (ACTS=MATH1305) ____ OR MATH 1203 (ACTS=MATH1203) ____

Sample Schedule
Milestones/Notes

Semester 5	Hrs.	Grade	Semester 5
Social Sci./Fine Arts/Humanities/Speech	3		
ELEG2103: Electric Circuits I	3		
PHYS 3023 Mechanics or PHYS 3213 Modern Physics	3		
PHYS 4113 (Adv. Physics Lab) or *MATH Elec. (3000-4000)	3		Complete both PHYS 4113 & MATH. PHYS 4113 offered in alternating years.
PHYS 4213 Adv Topics or MCEG3013 Mech of Materials	3		
Total hours	15	GPA	

Semester 6	Hrs.	Grade	Semester 6
Social Sci./Fine Arts/Humanities/Speech	3		
ELEG 2111 and ELEG 2113: Electric Circuits II and Lab	4		
PHYS 4003 Thermo/Stats Mech or PHYS 3003 Optics	3		
PHYS4013 Quantum Mech or PHYS 3133 Electr. & Magnetism	3		
Total hours	13	GPA	APPLY FOR GRADUATION

Semester 7	Hrs.	Grade	Semester 7
U.S. History & Government	3		
PHYS 3023 Mechanics or PHYS 3213 Modern Physics	3		
PHYS 4113 (Adv. Physics Lab) or *MATH Elec. (3000-4000)	3		Complete both PHYS 4113 & MATH. PHYS 4113 offered in alternating years.
PHYS 4213 Adv Topics or MCEG3013 Mech of Materials	3		
PHYS4991: Special Problems in Physics and Astronomy	1		
ELEG/MCEG Elective (3000-4000 level)	3		
Total hours	16	GPA	

Semester 8	Hrs.	Grade	Semester 8
ELEG 4991/MCEG 4991: Special Problems in Engineering	1		
MCEG4403: Mechanics of Fluids and Hydraulics	3		
MCEG4443: Heat Transfer	3		
PHYS4013 Quantum Mech or PHYS 3133 Electr. & Magnetism	3		
PHYS 4003 Thermo/Stats Mech or PHYS 3003 Optics	3		
ELEG/MCEG Elective (3000-4000 level)	3		
Total Hours	16	GPA	

General Electives: 2 hours 1000-4000 level *MATH Electives exclude MATH 3003, 3033, 4113

indicates a "C" or better is required

Social Sciences HIST 1503 World Civilization (ACTS=HIST1113) HIST 1513 World Civilization II (ACTS=HIST1123) HIST 1543 Honors World Civilization I HIST 2003 U.S. History I (ACTS=HIST2113) HIST 2013 U.S. HISTORY II (ACTS=HIST2123) HIST 2043 Honors U.S. History I HIST 1903 Survey of American History POLS 2003 American Government (ACTS=PLSC2003) ECON 2003 Principles of Economics I (ACTS=ECON2103) ECON 2103 Honors Principles of Economics I	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
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