

NAME: \_\_\_\_\_ T#: \_\_\_\_\_



Bachelor of Science in Nuclear Physics - 8-Semester Guaranteed Program			
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 <a href="http://www.atu.edu/academics/catalog/">http://www.atu.edu/academics/catalog/</a> .			
Employment Information: Materials Engineer, Nuclear Engineer, Nuclear Fuels Research Engineer, Nuclear Medicine Technologist, Nuclear Power Reactor Operator			
#Remedial Courses (if applicable): ENGL 0303____ ENGL 0404____ READ 0103____ MATH 0903____			
Prerequisites (if applicable): MATH 1914 (ACTS = MATH 1305)____ or MATH 1203 (ACTS = MATH 1203)____			

Semester 1 Course Information	Hrs.	Grade	Notes
ENGL 1013 - Composition I (ACTS = ENGL 1013)	3	#	
Social Science/Fine Arts/Humanities/Speech	3		
MATH 2914 - Calculus I (ACTS = MATH 2405)	4	#	Milestone
PHSC 1001 - Orientation to Physical Science	1		
CHEM 2124/2120 - General Chemistry I (ACTS = CHEM 1414)	4		Milestone
<b>Total hours</b>	<b>15</b>	<b>GPA</b>	

Semester 2 Course Information	Hrs.	Grade	Notes
ENGL 1023 - Composition II (ACTS = ENGL 1023)	3	#	
MCEG 2023 - Engineering Materials	3		Milestone
MATH 2924 - Calculus II (ACTS = MATH 2505)	4		Milestone
PHSC 1011 - Orientation to Physical Science II	1		No substitutions allowed.
CHEM 2134/2130 - General Chemistry II (ACTS = CHEM 1424)	4		Milestone
<b>Total hours</b>	<b>15</b>	<b>GPA</b>	

Semester 3 Course Information	Hrs.	Grade	Notes
Social Science	3		
Social Science	3		
COMS 2803 - Programming in C	3		
MATH 2934 - Calculus III (ACTS = MATH 2603)	4		Milestone
PHYS 2114/2000 - General Physics I (ACTS = PHYS 2034)	4		Milestone
<b>Total hours</b>	<b>17</b>	<b>GPA</b>	

Semester 4 Course Information	Hrs.	Grade	Notes
U.S. History & Government	3		
Biological Science	4		
MATH 3243 - Differential Equations I	3		
PHYS 2124/2010 - General Physics II (ACTS = PHYS 2044)	4		Milestone
<b>Total hours</b>	<b>14</b>	<b>GPA</b>	<b>PHYS ADVISOR ASSIGNED</b>

# indicates a "C" or better is required

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 = ARTA 1003)	HIST 1903 - Survey of American History
MUS 2003 - Introduction to Music (ACTS = MUSC 1003)	HIST 2003 - U.S. History to 1877 (ACTS = HIST 2113)
TH 2273 - Introduction to Theatre (ACTS = DRAM 1003)	HIST 2043 - Honors U.S. History to 1877
ENGL 2173 - Introduction to Film	HIST 2013 - U.S. History II (ACTS = HIST 2123)
JOUR 2173 - Introduction to Film	POLS 2003 - American Government (ACTS = PLSC 2003)
ENGL 2003 - Intro to World Literature (ACTS = ENGL 2113)	<b>Science with Lab</b>
ENGL 2013 - Intro to American Literature (ACTS = ENGL 2653)	BIOL 1014 - Intro to Biological Science (ACTS = BIOL 1004)
ENGL 2023 - Honors World Literature	BIOL/PHSC 1004 - Principles of Environmental Science
PHIL 2003 - Introduction to Philosophy (ACTS = PHIL 1103)	GEOL 1014 - Physical Geology (ACTS = GEOL 1114)
PHIL 2043 - Honors Introduction to Philosophy	PHSC 1013/1021 - Physical Sci/Lab (ACTS = PHSC 1004)

Semester 5 Course Information	Hrs.	Grade	Notes
ELEG 2103 - Electric Circuits I	3		
MCEG 3313 - Thermodynamics I	3		
MCEG 3503 - Basic Nuclear Engineering	3		
PHYS 3213 - Modern Physics <b>or</b> PHYS Elective (3000-4000)	3		<b>Note 1:</b> PHYS 3213 & 4113 must be completed. Both courses are offered in alternating years. When not available, choose a PHYS Elective.
PHYS 4113 - Adv. Physics Lab <b>or</b> PHYS Elective (3000-4000)	3		
<b>Total hours</b>	<b>15</b>	<b>GPA</b>	

Semester 6 Course Information	Hrs.	Grade	Notes
Fine Arts & Humanities	3		
ELEG 2111/2113 - Electric Circuits II and Lab	4		
MCEG 3523 <b>or</b> PHYS 3033 - Radiation Health Physics	3		
MCEG 4403 - Mechanics of Fluids and Hydraulics	3		
<b>Total hours</b>	<b>13</b>	<b>GPA</b>	<b>APPLY FOR GRADUATION</b>

Semester 7 Course Information	Hrs.	Grade	Notes
MCEG 4323 - Power Plant Systems	3		
PHYS 3143 <b>or</b> ELEG 3103 - Electronics I	3		
PHYS 3213 - Modern Physics <b>or</b> PHYS Elective (3000-4000)	3		See <b>Note 1</b> in Semester 5
PHYS 4113 - Adv. Physics Lab <b>or</b> PHYS Elective (3000-4000)	3		See <b>Note 1</b> in Semester 5
General Elective (3000-4000)	3		
<b>Total hours</b>	<b>15</b>	<b>GPA</b>	

Semester 8 Course Information	Hrs.	Grade	Notes
Fine Arts & Humanities	3		<b>Graduation Requirements:</b>  Students must complete 120 hours and achieve a 2.0 GPA or higher with at least 40 hours over 3000 level. No more than 4 hours can be in PE. No more than 12 hours of "D" grades.
MCEG 4443 - Heat Transfer	3		
PHYS 4991-4 - Spec Prob in Phys & Astron <b>or</b> PHYS 4951-4 - Research in Phys	1-4		
Engineering Elective	3		
PHYS Elective (3000-4000)	3-6		
<b>Total Hours</b>	<b>16</b>	<b>GPA</b>	

**General Electives: 3 hours (1000-4000)**

Social Sciences	
HIST 1503 - World History to 1500 (ACTS = HIST 1113)	ECON 2013 - Princ of Economics II (ACTS = ECON 2203)
HIST 1513 - World History since 1500 (ACTS = HIST 1123)	SOC 1003 - Introductory Sociology (ACTS = SOCI 1013)
HIST 1543 - Honors World History to 1500	PSY 2003 - General Psychology (ACTS = PSYC 1103)
HIST 2003 - U.S. History to 1877 (ACTS = HIST 2113)	ANTH 1213 - Intro to Anthropology (ACTS = ANTH 1013)
HIST 2013 - U.S. History since 1877 (ACTS = HIST 2123)	ANTH 2003 - Cultural Anthropology (ACTS = ANTH 2013)
HIST 2043 - Honors U.S. History to 1877	GEOG 2013 - Regional Geography (ACTS = GEOG 2103)
HIST 1903 - Survey of American History	AMST 2003 - American Studies
POLS 2003 - American Government (ACTS = PLSC 2003)	<b>Speech Courses</b>
ECON 2003 - Princ of Economics I (ACTS = ECON 2103)	SPH 1003 - Intro to Speech Com (ACTS = SPCH 1003)
ECON 2103 - Honors Principles of Economics I	SPH 2003 - Public Speaking
	SPH 2173 - Business and Professional Speaking