

**2017-2018 Degree Map-Bachelor of Science in Chemistry: Professional 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/>.

**Possible careers include: Biophysicist, Chemical Engineer, Chemical Technician, Conservation Scientist, Environmental Engineer, Food & Drug Inspector, Food Technologist, Forensic Science Technician, Industrial Air Pollution Analyst, Industrial Waste Inspector, Materials Scientist, Microbiologist, Pharmacist, Soil Scientist, Toxicologist, Water Pollution Control Inspector**

#Prerequisite Courses: ENGL 0303 \_\_\_\_\_ ENGL 0404 \_\_\_\_\_ READ 0103 \_\_\_\_\_ MATH 0803 \_\_\_\_\_ MATH 1003 \_\_\_\_\_ MATH 0903 \_\_\_\_\_ MATH 0900 \_\_\_\_\_ MATH 1110 \_\_\_\_\_ MATH 1203 \_\_\_\_\_ MATH 1914 \_\_\_\_\_

Sample Schedule		Milestones/Notes	
Semester 1	Hrs.	Grade	Semester 1
ENGL 1013- Comp I (ACTS=ENGL 1013)	3	#	
Social Science	3		
MATH 2914- Calculus I (ACTS= MATH 2405)	4	#	C or > required for Gen Ed. Milestone
PHSC 1001- Orientation to Physical Science	1		
CHEM 2124/2120- General Chemistry I (ACTS= CHEM 1414)	4	#	Milestone
Total hours	15	GPA	

Sample Schedule		Milestones/Notes	
Semester 2	Hrs.	Grade	Semester 2
ENGL 1023- Comp II (ACTS= ENGL 1023)	3	#	
BIOL 1114- Principles of Biology (ACTS= BIOL 1014)	4		Milestone
MATH 2924- Calculus II (ACTS= MATH 2505)	4		Milestone
PHSC 1011- Orientation to Physical Science II (MANDATORY)	1		
CHEM 2134/2130- General Chemistry II (ACTS= CHEM 1424)	4	#	
Total hours	16	GPA	

Sample Schedule		Milestones/Notes	
Semester 3	Hrs.	Grade	Semester 3
Social Science	3		
PHYS 2114/2000- General Physics I(ACTS= PHYS 2034)	4		Milestone
MATH 2934- Calculus III (ACTS= MATH 2603)	4		
COMS 2003*- Microcomp. Apps. or COMS 2803-Prog. in C	3		*(COMS 2003 prereq.= COMS 1003)
CHEM 3254- Fundamentals of Organic Chemistry	4	#	Milestone
Total hours	18	GPA	

Sample Schedule		Milestones/Notes	
Semester 4	Hrs.	Grade	Semester 4
U.S. History & Government	3		
PHYS 2124/2010- General Physics II (ACTS= PHYS 2044)	4		
CHEM 3245- Quantitative Analysis	5	#	
CHEM 3264- Mechanistic Organic Chemistry	4	#	
Total hours	16	GPA	<b>CHEM ADVISOR ASSIGNED</b>

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=HIST2113)
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)	<b>Communication Courses</b>
ENGL 2013 Intro. to American Literature (ACTS=ENGL2653)	COMM 1003 Intro to Speech Comm
ENGL 2023 Honors World Literature	COMM 2003 Public Speaking
PHIL 2003 Introduction to Philosophy (ACTS=PHIL1103)	COMM 2173 Business and Professional Speaking
PHIL 2043 Honors Introduction to Philosophy	

Sample Schedule		Milestones/Notes	
Semester 5	Hrs.	Grade	Semester 5
Fine Arts & Humanities	3		
CHEM 3301- Chemistry Seminar	1	#	
CHEM 3324- Physical Chemistry I	4	#	
CHEM 3423- Descriptive Inorganic Chemistry	3	#	
CHEM Elective- Excluding CHEM 1113 and CHEM 2204	3	#	CHEM 1113 (ACTS=CHEM1214)
Total hours	14	GPA	

Sample Schedule		Milestones/Notes	
Semester 6	Hrs.	Grade	Semester 6
Fine Arts & Humanities	3		
Social Sci/Fine Arts/Humanities/Comm	3		
CHEM 3334- Physical Chemistry II	4	#	
*General Elective	3		
*General Elective	3		
Total hours	16	GPA	<b>APPLY FOR GRADUATION</b>

Sample Schedule		Milestones/Notes	
Semester 7	Hrs.	Grade	Semester 7
CHEM 3344- Principles of Biochemistry	4	#	
CHEM 4401- Chemistry Seminar	1	#	
CHEM 4414- Instrumental Analysis	4	#	
CHEM 4433- Advanced Topics in Chemistry	3	#	
Total hours	12	GPA	

Sample Schedule		Milestones/Notes	
Semester 8	Hrs.	Grade	Semester 8
CHEM 4424- Advanced Inorganic Chemistry	4	#	
CHEM 4992-4- Special Problems in Chemistry OR CHEM 4952-4- Undergraduate Research in Chemistry	2-4	#	<b>Graduation Requirements:</b> Min. hours 3000-4000 level courses: 40 No more than 4 PE activity hours Min. hours required:120 2.00+ GPA
*General Elective	5-7		
Total Hours	11-15	GPA	

\*General Electives: 13 hours (1000-4000 level) or sufficient number to earn 120 total hours.

Recommended electives: German, Statistics, or ENGL 2053 (ACTS=ENGL2023)

# indicates a "C" or better is required

HIST	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	