

2025-2026 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 <https://catalog.atu.edu/>

#Prerequisite Courses: ENGL 0303 ____ MATH 0803 ____ MATH 1003 ____ MATH 0903 ____ MATH 1113 ____

MATH 1110 ____ MATH 1203 ____ MATH 1914 ____ COMS 1003 ____

Possible Careers: Chemical, Pharmaceutical, Biotechnology, Analysis, Testing, Consulting, Environmental Analysis

Sample Schedule

Semester 1	Hrs.	Grade	Milestones/Notes
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.
PHSC 1001- Orientation to Physical Science	1		
CHEM 2124/2120- General Chemistry I and lab	4	#	Milestone
Total hours	15	GPA	

Semester 2	Hrs.	Grade	Milestones/Notes
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	1		No Substitutions
CHEM 2134/2130- General Chemistry II and lab	4	#	Freshman Milestone: Visit the Tutoring Center at least once
Total hours	16	GPA	

Semester 3	Hrs.	Grade	Milestones/Notes
Social Science	3		
PHYS 2114/2000- Calculus-Based Physics I and lab	4		Milestone
MATH 2934- Calculus III (ACTS= MATH 2603)	4		
COMS 2003*- Microcomp Appl or COMS 2803-Program in C	3		*(COMS 2003 prereq.= COMS 1003)
CHEM 3254/3250- Fundamentals of Org. Chemistry and lab	4	#	Milestone
Total hours	18	GPA	

Semester 4	Hrs.	Grade	Milestones/Notes
U.S. History & Government	3		
PHYS 2124/2010- Calculus-Based Physics II and lab	4		
CHEM 3245- Quantitative Analysis	5	#	Sophomore Milestone: Meet with faculty about career paths in your field
CHEM 3264/3260- Mechanistic Organic Chemistry and lab	4	#	
Total hours	16	GPA	CHEM 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 by searching keyword "ACTS" at <https://adhe.edu/>

Fine Arts and Humanities	U.S. History & Government
ART 2123 Experiencing Art (ACTS=ARTA1003)	HIST 1903 Survey of American History
MUS 2003 Survey of Music History (ACTS=MUSC1003)	HIST 2003 U.S. History to 1877 (ACTS=HIST1113)
TH 2273 Introduction to Theatre (ACTS=DRAM 1003)	HIST 2013 U.S. History since 1877 (ACTS=HIST2123)
ENGL/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)	University Honors students should consult Course Catalog for appropriate Fine Arts/Humanities, US History/Government and Social Science options for University Honors Curriculum.
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	

Sample Schedule

Semester 5	Hrs.	Grade	Milestones/Notes
Fine Arts & Humanities	3		
CHEM 3301- Chemistry Seminar	1	#	
CHEM 3324- Physical Chemistry I	4	#	
CHEM 3423- Descriptive Inorganic Chemistry	3	#	
CHEM Elective	3	#	Any CHEM excluding CHEM 1113/1111 and 2204
Total hours	14	GPA	

Semester 6	Hrs.	Grade	Milestones/Notes
Fine Arts & Humanities	3		
Social Sci/Fine Arts/Humanities/Comm	3		
CHEM 3334- Physical Chemistry II	4	#	
*General Elective	3		Junior Milestone: Research grad school or post-grad options
*General Elective	3		
Total hours	16	GPA	APPLY FOR GRADUATION

Semester 7	Hrs.	Grade	Milestones/Notes
CHEM 3344/3340- Principles of Biochemistry and lab	4	#	
CHEM 4401- Chemistry Seminar (Spring only)	1	#	
CHEM 4414- Instrumental Analysis	4	#	
CHEM 4433- Advanced Topics in Chemistry (Spring only)	3	#	
			Senior Milestone: Complete a senior check-in with Career Services
Total hours	12	GPA	

Semester 8	Hrs.	Grade	Milestones/Notes
CHEM 4424- Advanced Inorganic Chemistry	1	#	Graduation Requirements: Min. hours 3000-4000 level courses: 40 No more than 4 PE activity hours Min. hours required:120 2.00+ GPA
CHEM 4991-4- Special Problems in Chemistry OR CHEM 4951-4- Undergraduate Research in Chemistry	2-4	#	
*General Elective	5-7		
Total Hours	13	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

Social Sciences	Communication Courses
HIST 1503 World History to 1500 (ACTS=HIST1113)	ANTH 1213 Intro. to Anthropology (ACTS=ANTH1013)
HIST 1513 World History since 1500 (ACTS=HIST1123)	ANTH 2003 Cultural Anthropology (ACTS=ANTH2013)
HIST 2003 U.S. History to 1877 (ACTS=HIST2113)	GEOG 2013 Regional Geography of the World (ACTS=GEOG2103)
HIST 2013 U.S. History since 1877 (ACTS=HIST2123)	AMST 2003 American Studies
HIST 1903 Survey of American History	FIN 2013 Personal Finance
POLS 2003 American Government (ACTS=PLSC2003)	LEAD 1003 Introduction to Leadership
ECON 2003 Principles of Macroeconomics (ACTS=ECON2103)	
ECON 2013 Principles of Microeconomics (ACTS=ECON2203)	
SOC 1003 Introductory Sociology (ACTS=SOCI1013)	
PSY 2003 General Psychology (ACTS=PSYC1103)	
	COMM 1003 Intro to Speech Comm
	COMM 2003 Public Speaking
	COMM 2173 Business and Professional Speaking