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CHEMISTRY - GENERAL OPTION, BACHELOR OF SCIENCE

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Curriculum

Course	Title	Hours	Completed
Freshman			
Fall			
CHEM 2124	General Chemistry I	4	
& CHEM 2120	and General Chemistry I Lab		
ENGL 1013	Composition I ¹	3	
MATH 2914	Calculus I	4	
SS 1XXX	Social Science Courses ¹	3	
PHSC 1001	Orientation to Physical Science	1	
	Hours	15	
Spring			
BIOL 1114	Principles of Biology	4	
CHEM 2134	General Chemistry II	4	
& CHEM 2130	and General Chemistry II Lab		
ENGL 1023	Composition II ¹	3	
MATH 2924	Calculus II	4	
PHSC 1011	Orientation to Physical Science II	1	
	Hours	16	
Sophomore			
Fall			
CHEM 3254	Fundamentals of Organic Chemistry	4	
COMS 2003	Microcomputer Applications	3	
or COMS 2803	or Programming in C		
Select one of the following:		4	
PHYS 2014 & PHYS 2000	Algebra-Based Physics I and Physics Laboratory I		
PHYS 2114	Calculus-Based Physics I		
& PHYS 2000	and Physics Laboratory I		
SS 1XXX	Social Science Courses ¹	3	
	Hours	14	
Spring			
CHEM 3245	Quantitative Analysis	5	
CHEM 3264	Mechanistic Organic Chemistry	4	
Select one of the following:		4	
PHYS 2024	Algebra-Based Physics II		
& PHYS 2010	and Physics Laboratory II		
PHYS 2124	Calculus-Based Physics II		
& PHYS 2010	and Physics Laboratory II		
USHG 1XXX	U.S. History and Government ¹	3	
	Hours	16	
Junior			
Fall			
CHEM 3301	Chemistry Seminar	1	
CHEM 3324	Physical Chemistry I	4	

CHEM 3423	Descriptive Inorganic Chemistry	3	
FAH 1XXX	Fine Arts and Humanities Courses ¹	3	
Science Elective ²		3	
Elective ³		1	
	Hours	15	
Spring			
CHEM 3344	Principles of Biochemistry	4	
FAH 1XXX	Fine Arts and Humanities Courses ¹	3	
Elective ³		5	
	Hours	12	
Senior			
Fall			
CHEM 4414	Instrumental Analysis	4	
CHEM Elective ⁴		3	
Elective ³		9	
	Hours	16	
Spring			
CHEM 4401	Chemistry Seminar	1	
CHEM Elective ⁴		3	
SFHS 1XXX	Social Sciences/Fine Arts/ Humanities/Communication Courses ¹	3	
Elective ³		9	
	Hours	16	
	Total Hours	120	

See appropriate alternatives or substitutions in "General Education Requirements (https://catalog.atu.edu/undergraduate/general-education-requirements/)". A specific general education core course does not have to be taken in the semester listed, any other part of the general education core at any time is acceptable as well.

Science electives from BIOL, GEOL, PHYS, PHSC (excluding BIOL 1014 Introduction to Biological Science,PHSC 1013 Introduction to Physical Science and PHSC 1021 Physical Science Laboratory), and excluding CHEM.

German, Statistics, and Technical Communications are encouraged. (Electives must include sufficient upper-division courses to result in 40 upper division hours) (upper division = 3000-4000 level).

⁴ Excluding CHEM 1113 A Survey of Chemistry and CHEM 1111 Survey of Chemistry Laboratory.