

Chemistry B.S. with Biochemistry Option

Chemistry B.S. with Biochemistry Option Eight-Semester Degree Program

Students wishing to follow the eight-semester degree plan should see the Eight-Semester Degree Policy (<http://catalog.uark.edu/undergraduatecatalog/academicregulations/eightsemesterdegreecompletionpolicy/>) in the Academic Regulations chapter for university requirements of the program. Core requirement hours may vary by individual, based on placement and previous credit granted. Once all core requirements are met, students may substitute a three-hour (or more) general elective in place of a core area.

This program meets the minimum requirements for certification by the American Chemical Society if CHEM 38103 (or CHEM 481H3/CHEM 484H3) is included.

First Year	Units	
	Fall	Spring
ENGL 10103 Composition I (ACTS Equivalency = ENGL 1013)	3	
Select one of the following:	4	
MATH 12003 Plane Trigonometry (ACTS Equivalency = MATH 1203)		
MATH 13004 Precalculus Mathematics (ACTS Equivalency = MATH 1305)		
MATH 24004 Calculus I (ACTS Equivalency = MATH 2405) ¹		
Select one of the following:	4	
CHEM 12073 Chemistry for Majors I & CHEM 12071 Chemistry for Majors I Laboratory		
CHEM 14103 University Chemistry I (ACTS Equivalency = CHEM 1414 Lecture) & CHEM 14101 University Chemistry I Laboratory (ACTS Equivalency = CHEM 1414 Lab)		
University/State Core Fine Arts or Humanities requirement	3	
University/State Core U.S. History requirement if taking MATH 12003	0-3	
ENGL 10203 Composition II (ACTS Equivalency = ENGL 1023)		3
MATH 24004 Calculus I (ACTS Equivalency = MATH 2405) ¹ or MATH 25004 Calculus II		4
Select one of the following:	4	
CHEM 12283 Chemistry for Majors II & CHEM 12281 Chemistry for Majors II Laboratory		
CHEM 14203 University Chemistry II (ACTS Equivalency = CHEM 1424 Lecture) & CHEM 14201 University Chemistry II Laboratory (ACTS Equivalency = CHEM 1424 Lab)		

University/State Core Humanities or Fine Arts requirement (as needed)		3
University/State Core Social Science requirement		3
Year Total:	14	17

Second Year	Units	
	Fall	Spring
Select one of the following as needed:	3-4	
MATH 25004 Calculus II (if not already taken) ¹		
University/state core U.S. history requirement (as needed)		
Select one of the following:	4	
PHYS 20103 College Physics I (ACTS Equivalency = PHYS 2014 Lecture) & PHYS 20101 College Physics I Laboratory (ACTS Equivalency = PHYS 2014 Lab) ¹		
PHYS 20304 University Physics I (ACTS Equivalency = PHYS 2034) ^{1,3}		
CHEM 37073 Organic Chemistry I Lecture for Chemistry Majors & CHEM 37072 Organic Chemistry I Lab for Chemistry Majors ^{1,2}	5	
University/State Core Social Science requirement	3	
Select one of the following:		4
PHYS 20203 College Physics II (ACTS Equivalency = PHYS 2024 Lecture) & PHYS 20201 College Physics II Laboratory (ACTS Equivalency = PHYS 2024 Lab) ¹		
PHYS 20404 University Physics II (ACTS Equivalency = PHYS 2044 Lecture) ¹		
CHEM 37203 Organic Chemistry II Lecture for Chemistry Majors & CHEM 37202 Organic Chemistry II Lab for Chemistry Majors ^{1,2}		5
BIOL 10103 Principles of Biology (ACTS Equivalency = BIOL 1014 Lecture) & BIOL 10101 Principles of Biology Laboratory (ACTS Equivalency = BIOL 1014 Lab)		4
CHEM 22673 Analytical Chemistry Lecture ^{1,2}		3
Year Total:	15	16

Third Year	Units	
	Fall	Spring
CHEM 34603 Elements of Physical Chemistry & CHEM 34601 Elements of Physical Chemistry Laboratory ^{1,2}	4	
CHEM 22671 Analytical Chemistry Laboratory ¹	1	
BIOL 25473 Cell Biology & BIOL 25471 Cell Biology Laboratory	4	
University/State Core Social Science requirements	3	
General Elective	3	
Select one of the following:		3-4
CHEM 42203 Instrumental Analysis & CHEM 42101 Instrumental Analysis Laboratory ^{1,2}		

CHEM 41203 Advanced Inorganic Chemistry ^{1,2}		
BIOL 20003 General Microbiology (ACTS Equivalency = BIOL 2004 Lecture) & BIOL 20001 General Microbiology Laboratory (ACTS Equivalency = BIOL 2004 Lab)		4
3000+ General Elective (if CHEM 41203 is taken), else General Elective		3
General Electives		6
Year Total:	15	16

Fourth Year	Units	
	Fall	Spring
CHEM 481H3 Honors Biochemistry I ^{1,2}	3	
BIOL 23373 General Genetics & BIOL 23371 General Genetics Laboratory ^{1,2} or BIOL 42373 Genomics and Bioinformatics	3	
3000+ General Elective (if BIOL 2323 is taken), else General Elective	3	
General Electives	6	
CHEM 484H3 Honors Biochemistry II ^{1,2}		3
CHEM 48503 Biochemical Techniques ^{1,2}		3
General Electives as needed to complete 120-hour requirement		6
Year Total:	15	12

Total Units in Sequence: 120

¹ Meets 40-hour advanced credit hour requirement. See College Academic Regulations on page 131 of this chapter.

² Meets 24-hour rule (24 hours of 3000-4000 level courses in Fulbright College), in addition to meeting the 40-hour rule. See College Academic Regulations on page 131 of this chapter.

³ PHYS 20304 Calculus Based University Physics (pre- or co-requisite MATH 24004) and PHYS 20404 (pre- or co-requisite MATH 25004), is a better choice for students interested in graduate school.