REQUIREMENTS FOR THE BACHELOR OF SCIENCE
DODGE FAMILY COLLEGE OF ARTS AND SCIENCES
THE UNIVERSITY OF OKLAHOMA

Academic Year	General Requirements	Program
For Students Entering the Oklahoma State System for Higher Education **Summer 2024 through Spring 2025**	Minimum Total Credit Hours ..... **120** Minimum Upper-Division Hours ..... **48** Major Hours ..... **37** **Minimum Retention/Graduation Grade Point Averages:** Overall - Combined and OU ..... **2.00** Major - Combined and OU **2.00**	**Chemistry (Professional)** **B175** Bachelor of Science

OU encourages students to complete at least 30 hours of applicable coursework each year to have the opportunity to graduate in 4 years.

GENERAL EDUCATION AND COLLEGE REQUIREMENTS

Courses for fulfillment of General Education and Dodge College of Arts & Sciences requirements must be from the approved General Education course list published in the Class Schedule or at http://www.ou.edu/gened/courses. **Courses graded P/NP will not apply.**

UNIVERSITY-WIDE GENERAL EDUCATION (MINIMUM 40 HOURS) AND COLLEGE REQUIREMENTS

Code	Title	Credit Hours
Core Area I: Symbolic and Oral Communication		
English Composition (6 hours)		
ENGL 1113	Principles of English Composition	3
ENGL 1213	Principles of English Composition	3
or EXPO 1213	Expository Writing	
Language (0-13 hours in the same language)		
The college requirement cannot be met by high school coursework.		
Beginning Course		0-5
Beginning Course, continued		0-5
Intermediate Course (2000 level) [1,2]		0-3
Mathematics (3 hours)		
Choose one course from the General Education Mathematics list		3
Core Area II: Natural Science (7 hours, including one laboratory component)		
Biological Science		
Choose an approved General Education Natural Science course with one of the following prefixes: BIOL, HES, MBIO, or PBIO [1]		3-4
Physical Science		
Choose an approved General Education Natural Science course with one of the following prefixes: AGSC, ASTR, CHEM, GEOG, GEOL, GPHY, METR, or PHYS [1]		3-4
Core Area III: Social Science (6 hours)		
P SC 1113	American Federal Government	3
Choose one course from the General Education Social Science list		3
Core Area IV: Arts and Humanities (18 hours)		
Artistic Forms		
Choose one course from the General Education Artistic Forms list		3
Western Culture		
HIST 1483	United States to 1865	3
or HIST 1493	United States, 1865 to the Present	
Choose one course from the General Education Western Culture list (excluding HIST 1483/1493)		3
World Culture		
Choose one course from the General Education World Culture list		3
Additional Core IV Upper-Division Arts & Humanities courses		
Choose one course from Artistic Forms, Western Culture, or World Culture [1,3]		3
Choose one course from Artistic Forms, Western Culture, or World Culture [1,3]		3
Core Area V: First Year Experience (3 hours)		
Choose one course		3
Total Credit Hours		**56**

1 College of Arts and Sciences Requirements: college requirements are not automatically fulfilled by a previous degree.
2 One course at the intermediate level or demonstrated competency at that level
3 6 upper-division hours, 2 courses, at the 3000- 4000-level. ***Must be outside the major.***

FREE ELECTIVES

Electives to bring total applicable hours to the minimum total required for the degree including 48 upper-division hours.

MAJOR REQUIREMENTS

- **Some courses required for the major may also fulfill University General Education and/or Dodge College of Arts & Sciences Requirements.**
- **A grade of C or better must be earned in each Chemistry course presented for major credit. No grade below a C made in a Chemistry course at OU may be made up elsewhere without prior written approval by the OU Chemistry Department.**
- The introductory courses (CHEM 1315, CHEM 1335, CHEM 1415, CHEM 1425, & CHEM 1435) do not count towards the 37 required major hours.

Code	Title	Credit Hours
Chemistry		
CHEM 1315	General Chemistry	
or CHEM 1335	General Chemistry I: Signature Course	
Choose one of the following:		
CHEM 1415	General Chemistry (Continued)	
CHEM 1425	Advanced General Chemistry (HONORS)	
CHEM 1435	General Chemistry II: Signature Course	
CHEM 3064	Organic Chemistry I	4
CHEM 3164	Organic Chemistry II	4
CHEM 3005	Quantitative Analysis	5
CHEM 3421	Physical Chemistry Laboratory	1
CHEM 3423	Physical Chemistry I	3
CHEM 3521	Physical Chemistry Laboratory	1
CHEM 3523	Physical Chemistry II	3
CHEM 4023	Instrumental Methods of Chemical Analysis	3
CHEM 4033	Instrumental Methods of Chemical Analysis Laboratory	3
CHEM 4333	Advanced Inorganic Chemistry-Periodic System	3
CHEM 4444	Advanced Synthesis and Spectral Characterization	4
CHEM 3653	Introduction to Biochemistry	3
Total Credit Hours		**37**

MAJOR SUPPORT REQUIREMENTS

Code	Title	Credit Hours
Math		
Select one of the following pairs:		6-8
MATH 1823 & MATH 2423	Calculus and Analytic Geometry I and Calculus and Analytic Geometry II	
MATH 1914 & MATH 2924	Differential and Integral Calculus I and Differential and Integral Calculus II	
Physics		
Choose one of the following groups:		10
Group A:		
PHYS 2414 & PHYS 1311	General Physics for Life Science Oriented Majors and General Physics Lab I	
PHYS 2424 & PHYS 1321	General Physics for Life Science Oriented Majors and General Physics Lab II	
Group B:		
PHYS 2514 & PHYS 1311	General Physics for Engineering and Science Majors and General Physics Lab I	
PHYS 2524 & PHYS 1321	General Physics for Engineering and Science Majors and General Physics Lab II	
Total Credit Hours		**16-18**

More information in the catalog: (http://ou-public.courseleaf.com/dodge-arts-sciences/chemistry-biochemistry/chemistry-professional-bachelor-science/).

INFORMATION CONCERNING GENERAL RULES, REGULATIONS AND MINIMUM REQUIREMENTS

Arts and Sciences Hours: At least 80 semester hours of liberal arts and sciences courses are required for a BA degree. At least 55 semester hours of liberal arts and sciences courses are required for a BS degree.
Pass/No Pass Enrollment: A maximum of 16 semester hours of free elective credit may be attempted under this option.
Individual Studies (e.g., courses titled "Independent Study"): A maximum of 12 total semester hours may be counted toward graduation, excluding Honors Reading and Honors Research.
P.E. Courses: No physical education activity courses will be counted toward the 120 semester hours of acceptable credit for graduation.
Senior Institution Hours: A minimum of 60 semester hours applied toward graduation must be earned at senior (4-year) institutions.
Residency:

- At least 15 of the final 30 hours applied toward the degree or at least 50 percent of the hours required by the institution in the major field must be satisfactorily completed at the awarding institution.
- At least 15 semester hours of upper-division major work must be completed in residence at OU.
- OU correspondence courses are ***not*** considered resident credit.

Grade Point Averages: Students must earn a minimum over all 2.00 for each of the following: Combined Retention GPA (all college grades), OU Retention GPA, GPA for all major courses, and GPA for all major courses taken at OU. Some schools and departments of the College have higher minimum grade point averages required for their students.

SUGGESTED SEMESTER PLAN OF STUDY

This plan shows one possible grouping of courses that would allow students to graduate in four years. Please refer to the front of the degree checksheet for official requirements. Students must consult with Dodge College of Arts and Sciences and/or Department of Chemistry and Biochemistry academic advisors to verify that courses selected each semester fulfill the recommended plan and satisfy University, College of Arts and Sciences, and Chemistry and Biochemistry major requirements.

Year	FIRST SEMESTER		Hours	SECOND SEMESTER		Hours
FRESHMAN	CHEM 1315 or CHEM 1335	General Chemistry or General Chemistry I: Signature Course	5		Choose one of the following:	5
	ENGL 1113	Principles of English Composition (Core I)	3	CHEM 1415	General Chemistry (Continued)	
	MATH 1823 or MATH 1914	Calculus and Analytic Geometry I (Core I) or Differential and Integral Calculus I	3-4	CHEM 1425	Advanced General Chemistry (HONORS)	
		First Year Experience (Core V)	3	CHEM 1435	General Chemistry II: Signature Course	
				ENGL 1213 or EXPO 1213	Principles of English Composition (Core I) or Expository Writing	3
				MATH 2423 or MATH 2924	Calculus and Analytic Geometry II or Differential and Integral Calculus II	3-4
					Artistic Forms (Core IV)	3
	CREDIT HOURS		**14**		**CREDIT HOURS**	**14**
SOPHOMORE	CHEM 3064	Organic Chemistry I	4	CHEM 3005	Quantitative Analysis	5
	PHYS 2514 or PHYS 2414	General Physics for Engineering and Science Majors or General Physics for Life Science Oriented Majors	4	CHEM 3164	Organic Chemistry II	4
	PHYS 1311	General Physics Lab I	1	PHYS 2524 or PHYS 2424	General Physics for Engineering and Science Majors or General Physics for Life Science Oriented Majors	4
		Biological Science without lab (Core II)	3	PHYS 1321	General Physics Lab II	1
	HIST 1483 or HIST 1493	United States to 1865 (Core IV) or United States, 1865 to the Present	3		World Culture (Core IV)	3
	CREDIT HOURS		**15**		**CREDIT HOURS**	**17**
JUNIOR	CHEM 3421	Physical Chemistry Laboratory	1	CHEM 3521	Physical Chemistry Laboratory	1
	CHEM 3423	Physical Chemistry I	3	CHEM 3523	Physical Chemistry II	3
	CHEM 4023	Instrumental Methods of Chemical Analysis	3	CHEM 4033	Instrumental Methods of Chemical Analysis Laboratory	3
		Western Culture (Core IV)	3	P SC 1113	American Federal Government (Core III)	3
		Beginning Language (Core I)	5		Beginning Language continued (Core I)	5
	CREDIT HOURS		**15**		**CREDIT HOURS**	**15**
SENIOR	CHEM 3653	Introduction to Biochemistry	3		Social Science (Core III)	3
	CHEM 4333	Advanced Inorganic Chemistry-Periodic System	3		Arts & Humanities, upper-division, outside major (Gen. Ed.)	3
	CHEM 4444	Advanced Synthesis and Spectral Characterization	4		Free Elective, upper-division (3000-4000-level)	2
		Arts & Humanities, upper-division, outside major (Gen. Ed.)	3		Free Elective, lower- or upper-division	3
		Intermediate Language	3		Free Elective, lower- or upper-division	3
	CREDIT HOURS		**16**		**CREDIT HOURS**	**14**

1 CHEM 4913, CHEM 4923, and CHEM 4933 are not all offered every semester. Students should plan accordingly.