

PROFESSIONAL CHEMIST'S COMPREHENSIVE, BACHELOR OF SCIENCE

Offered by Department of Chemistry (<http://catalog.unk.edu/undergraduate/departments-programs/chemistry/>)

Code	Title	Credit Hours
General Studies		
<i>Foundational Requirements (LOPERs 1-4)</i>		14
Including:		
LOPER 4: Mathematics, Statistics, and Quantitative Reasoning		
MATH 115	Calculus I with Analytic Geometry ¹	
<i>Broad Knowledge Requirements (LOPERs 5-8)</i>		13
Including:		
LOPER 8: Natural Sciences		
BIOL 106	Biology II	
<i>Dispositional Requirements (LOPERs 9-10)</i> ²		6
<i>Wellness (LOPER 11) Optional</i>		0
BS Science-related course requirements		
MATH 202	Calculus II with Analytic Geometry	5
PHYS 276	General Physics II (Calculus)	4
PHYS 276L	General Physics II (Calculus) Laboratory	1
Program Specified Requirements		5
PHYS 275	General Physics I (Calculus)	
PHYS 275L	General Physics I (Calculus) Laboratory	
Major Option		
Complete all required courses		60
Unrestricted electives		
Needed to reach 120 credit hour minimum		12
Total Credit Hours		120

Major Option

Code	Title	Credit Hours
Chemistry Major Foundation Requirements		
CHEM 160	General Chemistry	3
CHEM 160L	General Chemistry Laboratory	1
CHEM 161	General Chemistry	3
CHEM 161L	General Chemistry Laboratory	1
CHEM 169	Chemistry Foundations and Careers	1
CHEM 301	Analytical Chemistry	3
CHEM 301L	Analytical Chemistry Lab	1
CHEM 310	Safety in Chemistry	1
CHEM 351	Biochemistry	3
CHEM 351L	Biochemistry Lab	1
CHEM 360	Organic Chemistry	4
CHEM 360L	Organic Chemistry Laboratory	1
CHEM 430	Inorganic Chemistry	3

CHEM 480	Physical Chemistry	3
CHEM 490L	Advanced Chemistry Laboratory I	2
Chemistry In-Depth Courses		
CHEM 352	Biochemistry II	3
CHEM 352L	Biochemistry II Lab	1
CHEM 361	Organic Chemistry	4
CHEM 361L	Organic Chemistry Laboratory	1
CHEM 469	Advanced Seminar in Chemistry	1
CHEM 475	Instrumental Analysis	3
CHEM 481	Physical Chemistry II	3
CHEM 491L	Advanced Chemistry Laboratory II	2
Select 1 credit hour of the following:		
CHEM 499L	Research in Chemistry	1
Professional Chemist's Supporting Course Requirements		
MATH 260	Calculus III	5
Select 5 credit hours of the following:		
MATH 305	Differential Equations	
MATH 440	Linear Algebra	
CHEM 300 - CHEM 499L		
PHYS 300 - PHYS 499		
Total Credit Hours		60

¹ Students without sufficient preparation will also need to take the following courses, increasing the total credit hours needed:

- MATH 102
- MATH 103

² Designated courses with the appropriate content may be approved to satisfy one of the Broad Knowledge requirements plus LOPER 9 or Broad Knowledge plus LOPER 10. Courses may be approved to satisfy LOPER 9 or LOPER 10 alone. (*Courses satisfying LOPER 9 or LOPER 10 alone must be 3 credit hours.*) Students applying this option will need to take additional hours in other categories to meet the required GS hours.