

This roadmap is a recommended semester-by-semester plan of study for this major. However, courses and milestones designed as critical (!) must be completed in the semester listed to ensure a timely graduation.

Critical	Course Subject and Title	Credit Hours	Min. Grade	Major GPA	Attribute	Notes
Semester One [17 Credits]						
Note: With the selection of appropriate concentration electives, this program meets the minimum requirements for certification by the American Chemical Society						
!	BSCI 10120 Biological Foundations	4		■	KBS	
!	CHEM 10060 General Chemistry I and CHEM 10062 General Chemistry I Laboratory or CHEM 10960 Honors General Chemistry	5		■	KBS KBS KBS	
!	MATH 12021 Calculus for Life Sciences	4		■		
	US 10097 Destination Kent State: First Year Experience ¹	1				
	Kent Core Requirement	3				
Semester Two [14 Credits]						
!	CHEM 10061 General Chemistry II and CHEM 10063 General Chemistry II Laboratory or CHEM 10961 Honors General Chemistry	5		■	KBS KBS KBS	
!	MATH 12022 Probability and Statistics for Life Sciences	3		■		
	Kent Core Requirement	3				
	Kent Core Requirement	3				
Semester Three [15 Credits]						
!	BSCI 30156 Elements of Genetics	3		■		
!	CHEM 30475 Organic Chemistry Laboratory I ²	1		■	ELR	
!	CHEM 30481 Organic Chemistry I ²	3		■		
!	PHY 13001 General College Physics I	4		■	KBS	
!	PHY 13021 General College Physics Laboratory I	1		■	KBS	
	Kent Core Requirement	3				
Semester Four [15 Credits]						
!	BSCI 30140 Cell Biology	4		■		
!	CHEM 30301 Inorganic Chemistry I ³	2		■		
!	CHEM 30476 Organic Chemistry Laboratory II ⁴	1		■		
!	CHEM 30482 Organic Chemistry II ⁴	3		■		
!	PHY 13002 General College Physics II	4		■	KBS	
!	PHY 13022 General College Physics Laboratory II	1		■	KBS	
Semester Five [15-16 Credits]						
!	CHEM 30105 Analytical Chemistry I ⁵	3		■		
!	CHEM 30107 Analytical Chemistry Laboratory I	1	C ⁶	■	WIC	
!	CHEM 40567 Basic Concepts of Physical Chemistry ⁵	4		■		
	Foreign Language ⁷	4 - 5				
	Kent Core Requirement	3				
Semester Six [16-17 Credits]						
!	BSCI 30171 General Microbiology	4		■		
!	CHEM 40245 Biochemical Foundations of Medicine ⁴	4		■		
!	CHEM 40568 Elementary Physical Chemistry Laboratory ³	1		■		
	Foreign Language ⁷	4 - 5				
	Kent Core Requirement	3				
Semester Seven [15 Credits]						
!	CHEM 40248 Advanced Biological Chemistry ⁵	3		■		
	Biochemistry Concentration electives ⁸	6		■		
	Kent Core Requirement	3				
	General Electives ⁹	3				
Semester Eight [13 Credits]						
!	CHEM 40251 Advanced Biological Chemistry Laboratory ⁶	2	C ⁶	■	WIC	
!	CHEM 40263 Physical Biochemistry I ³	3		■		
	Biochemistry Concentration electives ⁸	2		■		
	General Electives ⁹	6				

Graduation Requirements Summary

Minimum Total Hours	Minimum Upper-Division Hours 30000 – 40000 level course	Minimum Kent Core Hours	Minimum	
			Major GPA	Overall GPA
120	42	36	2.000	2.000

- US 10097 is not required of transfer students with 25 credits (excluding College Credit Plus and dual-enrollment) or students age 21+ at time of admission.
- Offered in fall and summer only
- Offered in spring only
- Offered in spring and summer only
- Offered in fall only
- A minimum C (2.000) grade must be earned in CHEM 30107 (offered in fall only) or CHEM 40251 (offered in spring only) to fulfill the writing-intensive requirement.
- Fulfills College General Requirement
- Biochemistry Concentration electives (8 credits)

Choose from the following:	
BSCI 40143 Eukaryotic Cell Biology (3)	BSCI 40158 Molecular Biology (3)
BSCI 40174 Immunology (3)	BTEC 40191 Seminar: Recent Developments in Biotechnology (1)
CHEM 30106 Analytical Chemistry II (2)	CHEM 40295 Special Topics in Biochemistry (1 - 3)
CHEM 40302 Inorganic Chemistry II (2)	CHEM 40303 Inorganic Chemistry III (2)
CHEM 40365 Biological Inorganic Chemistry (3)	CHEM 40477 Intermediate Organic Chemistry Laboratory (1)
CHEM 40483 Intermediate Organic Chemistry (1)	CHEM 40796 Individual Investigation (1 - 4)
Chemistry Department-approved upper-division electives (1 - 8)	

- Credits required depend on meeting minimum 120 credit hours and minimum 42 upper-division credit hours.

University Requirements: Bachelor's degree-seeking students must meet Kent Core (general education requirements), diversity, writing-intensive and experiential learning requirements. For more information about these requirements, please read the following sections in the University Catalog: Kent Core – www.kent.edu/catalog/kent-core; Diversity Course Requirement – www.kent.edu/catalog/diversity; Writing-Intensive Course Requirement – www.kent.edu/catalog/wic; Experiential Learning Requirement – www.kent.edu/catalog/elr.

Attribute Legend: **DD** Diversity–Domestic; **DG** Diversity–Global; **ELR** Experiential Learning; **KAD** Kent Core Additional; **KBS** Kent Core Basic Sciences; **KCM** Kent Core Composition; **KFA** Kent Core Fine Arts; **KHU** Kent Core Humanities; **KMC** Kent Core Mathematics and Critical Reasoning; **KSS** Kent Core Social Sciences; **WIC** Writing Intensive