

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
<b>Semester One [14 Credits]</b>						
<b>Note: This program meets the minimum requirements for certification by the American Chemical Society</b>						
!	CHEM 10060 General Chemistry I (4) <i>or</i> CHEM 10970 Honors General Chemistry I (4)	4		■	KBS	
!	CHEM 10062 General Chemistry I Laboratory	1		■	KBS	
!	MATH 12002 Analytic Geometry and Calculus I	5		■	KMC	
	UC 10097 Destination Kent State: First Year Experience <sup>1</sup>	1				
	Kent Core Requirement	3				
<b>Semester Two [16 Credits]</b>						
!	CHEM 10061 General Chemistry II (4) <i>or</i> CHEM 10971 Honors General Chemistry II (4)	4		■	KBS	
!	CHEM 10063 General Chemistry II Laboratory	1		■	KBS	
!	MATH 12003 Analytic Geometry and Calculus II	5		■		
	Kent Core Requirement	3				
	Kent Core Requirement	3				
<b>Semester Three [16 Credits]</b>						
!	CHEM 30475 Organic Chemistry Laboratory I <sup>2</sup>	1		■	ELR	
!	CHEM 30481 Organic Chemistry I <sup>2</sup>	3		■		
!	MATH 22005 Analytic Geometry and Calculus III	4		■		
!	PHY 23101 General University Physics I	5		■	KBS	
	Kent Core Requirement	3				
<b>Semester Four [14 Credits]</b>						
!	CHEM 30301 Inorganic Chemistry I <sup>3</sup>	2		■		
!	CHEM 30476 Organic Chemistry Laboratory II <sup>4</sup>	1		■		
!	CHEM 30482 Organic Chemistry II <sup>4</sup>	3		■		
!	PHY 23102 General University Physics II	5		■	KBS	
	Kent Core Requirement	3				
<b>Semester Five [16 Credits]</b>						
!	CHEM 30105 Analytical Chemistry I <sup>5</sup>	3		■		
!	CHEM 30107 Analytical Chemistry Laboratory I	1	C <sup>6</sup>	■	WIC	
!	CHEM 40477 Intermediate Organic Chemistry Laboratory <sup>5</sup>	1		■		
!	CHEM 40483 Intermediate Organic Chemistry <sup>5</sup>	1		■		
!	CHEM 40555 Physical Chemistry I <sup>5</sup>	3		■		
	Foreign Language <sup>7</sup>	4 - 5				
	Kent Core Requirement	3				
<b>Semester Six [15 Credits]</b>						
!	CHEM 30106 Analytical Chemistry II <sup>3</sup>	2		■		
!	CHEM 30108 Analytical Chemistry Laboratory II	2	C <sup>6</sup>	■	WIC	
!	CHEM 40556 Physical Chemistry II <sup>3</sup>	3		■		
!	CHEM 40568 Elementary Physical Chemistry Laboratory <sup>3</sup>	1		■		
	Foreign Language <sup>7</sup>	4 - 5				
	Kent Core Requirement	3				
<b>Semester Seven [13 Credits]</b>						
!	CHEM 40302 Inorganic Chemistry II <sup>5</sup>	2		■		
!	CHEM 40557 Physical Chemistry Lab <sup>5</sup>	2		■		
	CHEM 40000-Level Elective <sup>8</sup>	3		■		
	General Electives <sup>9</sup>	6				
<b>Semester Eight [16 Credits]</b>						
!	CHEM 30284 Introductory Biological Chemistry <sup>4</sup>	4		■		
!	CHEM 40303 Inorganic Chemistry III <sup>3</sup>	2		■		
!	CHEM 40364 Intermediate Inorganic Chemistry Lab <sup>3</sup>	1		■		
	General Electives <sup>9</sup>	9				

### 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

1. UC 10097 is not required of transfer students with 25 credits (excluding College Credit Plus) or students age 21+ at time of admission.
2. Offered in fall and summer only
3. Offered in spring only
4. Offered in spring and summer only
5. Offered in fall only
6. A minimum C (2.000) grade must be earned in CHEM 30107 (offered in fall only) or CHEM 30108 (offered in spring only) to fulfill the writing-intensive requirement.
7. Fulfills College General Requirement
8. Must be approved by advisor.
9. Number of general elective credits required depends on meeting minimum 120 credit hours and minimum 42 upper-division 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](http://www.kent.edu/catalog/kent-core); Diversity Course Requirement – [www.kent.edu/catalog/diversity](http://www.kent.edu/catalog/diversity); Writing-Intensive Course Requirement – [www.kent.edu/catalog/wic](http://www.kent.edu/catalog/wic); Experiential Learning Requirement – [www.kent.edu/catalog/elr](http://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