

Roadmap: Biotechnology - Bachelor of Science

AS-BS-BTEC

College of Arts and Sciences
Department of Biological Sciences
Catalog Year: 2016-2017

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	Min.	Major	Attribute	Notes
Samasta	r One [15 Credits]	Hours	Grade	GPA		
!	BSCI 10120 Biological Foundations	4			KBS	
!	CHEM 10060 General Chemistry I	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 ¹	1		-	KIVIC	
Semeste	r Two [15 Credits]	'				
Comosio	BSCI 30140 Cell Biology	4				
	BTEC 10210 Introduction to Biotechnology	3				
	CHEM 10061 General Chemistry II	4			KBS	
	CHEM 10063 General Chemistry II Laboratory	1			KBS	
	Kent Core Requirement	3			1.20	
Semeste	r Three [15 Credits]	ū				
	BSCI 30171 General Microbiology	4				
	CHEM 20481 Basic Organic Chemistry I	4				
	PHIL 21001 Introduction to Ethics	3			DG/KHU	
	Foreign Language ²	4 - 5			2 5,1410	
Semeste	r Four [16 Credits]					
	BSCI 30156 Elements of Genetics	3				
	CS 10051 Introduction to Computer Science	4			KMC	
	PHY 13001 General College Physics I	4			KBS	
	PHY 13021 General College Physics Laboratory I	1			KBS	
	Foreign Language ²	4 - 5				
Semeste	r Five [16 Credits]					
	BSCI 40158 Molecular Biology	3				
	BUS 10123 Exploring Business	3				
	MATH 30011 Basic Probability and Statistics	3				
	Kent Core Requirement	3				
	Kent Core Requirement	3				
	General Electives ³	1				
Semeste	r Six [16 Credits]					
	CHEM 30284 Introductory Biological Chemistry	4				
	PHIL 30015 Medicine and Morality	3		•		
	Kent Core Requirement	3				
	Kent Core Requirement	3				
	Approved Electives ⁴	3				
Semeste	r Summer III [2 Credits]					
	192 Internship in Biotechnology (2-9)				ELD	
	40196 Individual Investigation (2-9)	2 - 6		•	ELR	
Semeste	r Seven [16 Credits]	4				
	BTEC 40191 Seminar: Recent Developments in Biotechnology	1				
	BTEC 40210 Case Studies in Biotechnology	3		-		
	BTEC 40220 Bioinformatics	3				
	CHEM 40248 Advanced Biological Chemistry	3				
	Kent Core Requirement	3				
0	Approved Electives ⁴	3				
Semeste	r Eight [9 Credits]				ELD	
	BTEC 40192 Internship in Biotechnology (2-9) or BTEC 40196 Individual Investigation in Biotechnology (2-9)	4 - 6		•	ELR	
	CHEM 40251 Advanced Biological Chemistry Laboratory	2	C ⁵		WIC	
	Approved Electives ⁴	3		-	0	
	Librarian months	U	1		1	



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Graduation Requirements Summary

Minimum Total Hours	Minimum Upper-Division Hours	Minimum Kent Core Hours	Minimum	
Millimum Total Hours	30000 - 40000 level course	Millimum Rent Core nours	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. Fulfills College General Requirement
- 3. Credits required depend on meeting minimum 120 credit hours and minimum 42 upper-division credit hours.
- 4. Approved Electives (9 credits)

Choose from the following:					
BSCI 30518 Vertebrate Anatomy (4)	BSCI 40143 Eukaryotic Cell Biology (3)				
BSCI 40159 Molecular Biology Laboratory (3) (WIC) (ELR)	BSCI 40174 Immunology (3)				
CHEM 30105 Analytical Chemistry I (3)	CHEM 30107 Analytical Chemistry Laboratory I (1)				
CHEM 30301 Inorganic Chemistry I (2)	CHEM 30475 Organic Chemistry Laboratory I (1) (ELR)				
CHEM 40567 Basic Concepts of Physical Chemistry (4)	PSYC 41363 Biopsychology (3)				
Upper-division courses approved by program director (1 - 9)					

5. A minimum C (2.000) grade must be earned to fulfill the writing-intensive requirement.

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/kent-core; Experiential Learning 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