

Program Coordinator: Deborah Davis

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 Program Website: <https://bluegrass.kctcs.edu/education-training/program-finder/biotechnology.aspx>

Student Name: _____

Student ID: _____

Students must meet college readiness benchmarks as identified by the Council on Postsecondary Education or remedy the identified skill deficiencies.

First Semester	Credit Hours	Term	Grade	Prerequisites	Notes
BTN 101 Introduction to Biotechnology	1				
Digital Literacy	0 – 3				Digital Literacy course or competency exam
Heritage or Humanities course	3				
Natural Sciences course with Laboratory	4 – 5				One semester of college Biology with lab or college Chemistry with lab
Quantitative Reasoning course	3				
Written Communication course	3				
Total Semester Credit Hours	14 – 18				

Second Semester	Cr. Hrs.	Term	Grade	Prerequisites	Notes
BTN 105 Applied Laboratory Calculations for Biotechnology	3				
BTN 201 Biotechnology Techniques I	4			A semester of college biology with lab or college chemistry with lab	First 8 weeks
BTN 202 Biotechnology Techniques II	4			BTN 201	Second 8 weeks
Social and Behavioral Sciences course	3				
Technical Support course	4				See Additional Information on back.
Total Semester Credit Hours	18				

Third Semester	Credits	Term	Grade	Prerequisites	Notes
Required Technical Elective courses	14				See list on back.
Total Semester Credit Hours	14				

Fourth Semester	Credits	Term	Grade	Prerequisites	Notes
Required Technical Elective courses	14				See list on back.
Total Semester Credit Hours	14				
Total Degree Credit Hours	60 – 64				

- Graduation Requirements:**
- 25% or more of Total Program Credit Hours must be earned at BCTC
 - Cumulative GPA must be 2.0 or higher

Advisor Name _____

Advisor Contact _____

Additional Information

Required Technical Support courses can be courses within Natural Sciences and Mathematics, usually courses with prefixes ANA, BIO, BTN, CHE, EST, GLY, MA, MAT, PGY, PHY, STA or any course approved by the program coordinator. BTN courses not used to satisfy Technical Electives may be used to satisfy Technical Support.

Students are strongly encouraged to gain hands-on experience by enrolling in BTN 295, BTN 298 or COE 199, to reinforce technical skills learned in the classroom.

Technical Elective Courses

Course	Cr. Hrs.	Prerequisites	Notes
BTN 106 Fundamentals of Scientific Communication	3		
BTN 110 Nucleic Acid Methods	4	One semester of college biology with lab or college chemistry with lab	
BTN 115 Biomanufacturing	4	BTN 201 and BTN 202 with grade of C or better	
BTN 120 Biofuels	4	BTN 201 and BTN 202 with grade of C or better	
BTN 125 Bioinformatics I	2	Prereq or coreq: BTN 201 and BTN 202	
BTN 126 Bioinformatics II	2	BTN 125 with grade of C or better	
BTN 160 Introduction to Agricultural Biotechnology	4	BTN 201 and BTN 202 with grade of C or better	
BTN 210 Cell Culture and Function	4	BTN 110 with grade of C or better	
BTN 220 Immunological Methods	4	BTN 110 with grade of C or better	
BTN 225 Protein Bioseparation Methods	4	BTN 201 and BTN 202 with grade of C or better	
BTN 295 Independent Investigation in Biotechnology OR BTN 298 Biotechnology Learning Laboratory OR COE 199 Cooperative Education	1 – 3 1 – 8	BTN 201 and BTN 202 with grade of C or better	
Other courses approved by the Biotechnology Laboratory Technician Coordinator	1 – 28		

Sample Course Rotation Schedule for BTN Courses

BTN 101, BTN 105, BTN 201, BTN 202 and BTN 298 are commonly offered in both the Fall and Spring semesters.

	Fall	Spring	Summer
BTN 106, 220, 225, and 295 are commonly offered in a 2-year block		X	BTN 106 may be offered
BTN 110	X		
BTN 115, 125, 126, and 160 are commonly offered in a 2-year block	X		BTN 126 may be offered
BTN 210		X	

Embedded Credentials

Credential	Title	Requirements	Total Credit Hours
Certificate	Advanced Biotechnician	BTN 101, BTN 105, BTN 201, BTN 201, 15 credit hours from Technical Elective Courses list	27
Certificate	Basic Biotechnician	BTN 101, BTN 105, BTN 201, BTN 202, One semester of college biology with lab or college chemistry with lab or course approved by Program coordinator	16 – 17

Certificate Requirements:

- 25% or more of Total Certificate Credit Hours must be earned at BCTC
- Grade of C or higher in each course required for certificate