

# BIOTECHNOLOGY LABORATORY TECHNICIAN - AAS

Offered at: Bluegrass Community and Technical College

Program Plan Number: 4101017029

Course	Title	Credits
<b>Required General Education Courses</b>		
Heritage/Humanities		3
Social/Behavioral Sciences		3
Natural Sciences with Laboratory <sup>1</sup>		4-5
Quantitative Reasoning <sup>2</sup>		3
Written Communication		3
Subtotal		16-17
<b>Required Technical Core Courses</b>		
BTN 101	Introduction to Biotechnology	1
BTN 105	Applied Laboratory Calculations for Biotechnology	3
BTN 201	Biotechnology Techniques I	4
BTN 202	Biotechnology Techniques II	4
Digital Literacy Course or demonstrated competency <sup>3</sup>		0-3
Subtotal		12-15
<b>Required Technical Elective Courses</b>		
Select at least 28 credit hours of the following 12 options:		28
BTN 106	Fundamentals of Scientific Communication	
BTN 110	Nucleic Acid Methods	
BTN 115	Biomanufacturing	
BTN 120	Biofuels	
BTN 125	Bioinformatics I	
BTN 126	Bioinformatics II	
BTN 160	Introduction to Agricultural Biotechnology	
BTN 210	Cell Culture and Function	
BTN 220	Immunological Methods	
BTN 225	Protein Bioseparation Methods	
BTN 295	Independent Investigation in Biotechnology <sup>4</sup>	
or BTN 298	Biotechnology Learning Laboratory	
or COE 199	Cooperative Education: (Topic)	
Course approved by the program coordinator		
Subtotal		28
<b>Technical Support Courses</b>		
Select at least 4 credit hours 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.		4
Subtotal		4
<b>Total Credits</b>		<b>60-64</b>

- One semester of college biology with lab, or
- One semester of college chemistry with lab, or
- Course approved by the program coordinator.

- <sup>2</sup> Assessment score above the KCTCS transitional course placement level or completion of transitional courses (courses numbered 001-099).
- <sup>3</sup> Digital literacy must be demonstrated either by competency exam or by successfully completing a digital literacy course.
- <sup>4</sup> Students are strongly encouraged to gain hands-on experience by enrolling in BTN 295 Independent Investigation in Biotechnology (1-3 credit hours), BTN 298 Biotechnology Learning Laboratory (1-8 credit hours) or COE 199 Cooperative Education: (Topic) (1-8 credit hours), to reinforce technical skills learned in the classroom.

<sup>1</sup> Science requirement may be satisfied by: