



Science, Technology, Engineering, and Mathematics Career and Academic Pathways (CAPs) Program Map: Certificate of Achievement for Biotechnology

Total number of units: 18 units

Top Code/Academic Plan: 4300.00

Updated on December 20, 2021

Semester 1	Course Code	Course	Units	Notes	Advising Notes
Program Course	BIOTECH 100	Foundations of Laboratory Science	4	This courses are offered short term and should be taken in order as listed through the course of the semester. This course is the prerequisite for BIOTECH 101.	The short term classes meet nights and weekends in order to complete all three courses in the semester.
Program Course	BIOTECH 101	Biological Molecules: Proteins and DNA	4	This course is the prerequisite for BIOTECH 103.	
Program Course	BIOTECH 103	Chromatography and Biomanufacturing	4	The prerequisite for this course is BIOTECH 101.	

Total Units 12

Semester 2	Course Code	Course	Units	Notes	Advising Notes
Program/GE Course	ENGLISH 101 OR LIB SCI 101	College Reading and Composition OR College Research Skills	3		
Program/GE Course	COMM 101	Public Speaking	3		

Total Units 6

Degree Path and Requirements:

The BIOTECH courses are offered short term and should be taken in order as listed through the course of the semester. The short term classes meet nights and weekends in order to complete all three courses in the semester.

This map is a suggested term-by-term sequence of courses to complete the program in a recommended time frame. This is an efficient and recommended plan, but actual plans may vary by individual student need. This map cannot replace a meeting with [counselors](#).

Department Advising Notes:

This certificate is designed for students without previous STEM experience.

Program Description

The Biotechnology Certificate of Achievement program prepares individuals seeking careers in the life sciences/ biotechnology sector. The program is highly hands-on, promotes teamwork, and trains students with analytical, practical, and communication skills that parallel the industry environment, enabling them to think critically and solve on-the-job problems. Employment opportunities include positions such as biological technicians, quality control analysts, manufacturing production technicians, inspectors, testers.

Career and Transfer Opportunities

This certificate leads to careers as a lab assistant and technician. This is an entry level certificate. A Bachelor's Degree, in addition to this certificate, will lead to careers as a [Biological Technician](#).

Visit the [Transfer Center](#) for transfer information, which varies based on transfer college. Make an appointment with a [counselor](#). Students can visit [Career and Job Services](#) for career counseling and further exploration.

Youtube Videos

[Biological Technician](#)

Program Map

A suggested sequence of classes to complete a degree, certificate, or program of study. Students should consult an academic counselor for variations to this plan based on part-time or full-time status, transfer plans, pre-requisites needed, etc.

Prerequisite Course

A specific course that must be completed before advancing to the next course.

Check the online catalog at elac.edu for the latest and most accurate information.

Contact

Dr. Kirk Olsen
Department Chair
olsenkn@elac.edu
323-265-8878