

# GRADUATE CERTIFICATE IN BIOPROCESS ENGINEERING

The Graduate Certificate in Bioprocess Engineering offers a targeted curriculum designed to enhance the expertise of individuals working in or aspiring to work in the biotechnology and biomanufacturing industries. It prepares professionals with the knowledge and skills necessary to address the challenges of modern bioprocessing and biomanufacturing, emphasizing practical applications, regulatory compliance, and innovation.

Students interested in graduate work should refer to the Graduate and Professional Bulletin (<http://catalog.colostate.edu/general-catalog/graduate-bulletin/>).

## Learning Objectives

Anticipated Outcomes:

1. Enhanced career opportunities.
2. Up-to-date knowledge of biomanufacturing technologies and processes.
3. Expanded professional network within the biotechnology industry.

## Requirements Effective Fall 2025

Additional coursework may be required due to prerequisites.

Code	Title	Credits
<b>Core Courses</b>		
CBE 504/BIOM 504	Fundamentals of Biochemical Engineering	3
CBE 522/BIOM 522	Bioseparation Processes	3
Select a minimum of 4 credits from the following:		4
BUS 500	Foundations for Business Impact	
BUS 620	Leadership and Teams	
CBE 505	Biochemical Engineering Laboratory	
CBE 560	Engineering of Protein Expression Systems	
CBE 570	Biomolecular Engineering/Synthetic Biology	
<b>Program Total Credits:</b>		<b>10</b>

\*This certificate may have courses in common with other graduate certificates. A student may earn more than one certificate, but a given course may be counted only in one certificate.