



# Introduction to Biomanufacturing Processing

A self-paced course designed to introduce participants to the exciting field of Biomanufacturing

### ABOUT THE COURSE

We emphasize the many process steps necessary for biologics manufacturing. The course is organized by two major process operations, with sufficient detail within each process to establish a high-level understanding of how these substances are produced.

Content material is delivered through two mechanisms by our BETC instructional staff.

1. Voice-annotated slides provide specific information by topic for trainees to advance at a pace each individual is comfortable. Each major topic concludes with a brief quiz for the trainee to assess comprehension.
2. Video segments of major equipment explain, component-by-component, how the equipment is used and operates within the overall biomanufacturing process and the criticality to operational success.

Hours: 8  
 Cost: \$249.00  
 CEU: 0.8

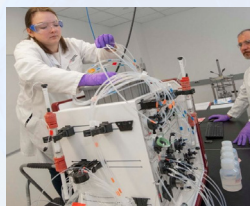
### WHO WILL BENEFIT

The course is aimed at individuals outside the biomanufacturing field considering a career transition into this exciting and rapidly expanding field.

Additionally, individuals already working in biomanufacturing in roles peripheral to production will benefit from the big picture overview of the processes they support. Participants will be able to put into context the vocabulary they hear coming from their scientists, engineers, and production staff.

Example roles include, but are not limited to:

- sales & marketing staff
- industry vendors/suppliers
- recruiters
- environmental health and safety specialists
- operations support personnel
- supply chain personnel
- students
- maintenance personnel (mfg. support)
- financial officers
- project managers
- career changers



	LECTURES		DEMONSTRATIONS	
<i>Upstream</i>	<b>Cell Lines &amp; Applications</b>	Adherent & suspension	<b>Aseptic Technique</b>	Handling protocols & Equipment
	<b>Upstream Unit Operations</b>	Understanding the workflow	<b>Bioreactors</b>	Design and controls
			<b>Harvest</b>	Equipment & process flow
<i>Downstream</i>	<b>Centrifugation &amp; Filtration</b>	Materials & continuous processing	<b>Chromatography</b>	System demonstration
	<b>Chromatography</b>	Principles & applications	<b>Resin Chemistry</b>	Functionality
	<b>Tangential Flow Filtration</b>	Principles & applications	<b>Tangential Flow Filtration</b>	Equipment overview

Learn more: [bit.ly/betc-intro-biomfg](http://bit.ly/betc-intro-biomfg)

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