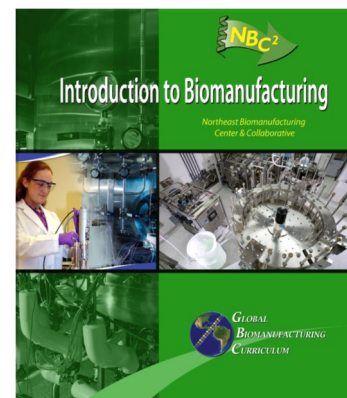


# Bio manufacturing Training at Montgomery County Community College

Hands-on training in a simulated cGMP environment

## Industry-endorsed curriculum including:

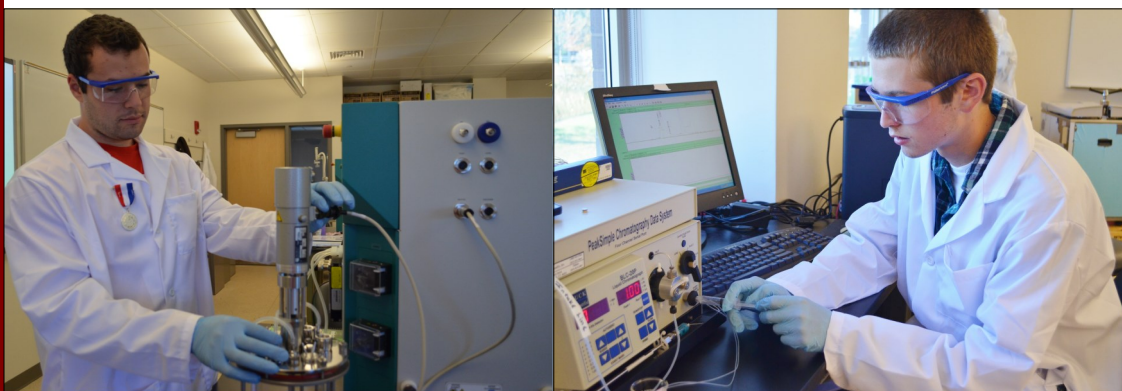
- ⇒ Facilities
- ⇒ Metrology
- ⇒ Validation
- ⇒ Environmental, Health, and Safety
- ⇒ Operational Excellence
- ⇒ Quality Assurance
- ⇒ Microbiological Control
- ⇒ Quality Control
- ⇒ Biochemistry
- ⇒ Upstream Processing
- ⇒ Downstream Processing
- ⇒ Process Development



The Biomanufacturing curriculum at Montgomery County Community College is based on the subject matter expert authored *Introduction to Biomanufacturing* textbook and is complemented by SOP-driven laboratory experiences. The 4-credit BIT 232 biomanufacturing course provides a hands-on learning experience that can be a stand-alone training opportunity or part of a 16-credit Biotechnology and Biomanufacturing Certificate of Completion.

## Biomanufacturing Suite outfitted with industrial-level equipment and instrumentation:

- Bioreactors for both mammalian cell culture and fermentation
- Biological Safety Cabinets
- CO<sub>2</sub> Incubators
- Autoclaves
- Floor Model Centrifuges
- Tangential Flow Filtration System
- Gel Doc Imagers
- Plate readers
- High-Performance Liquid Chromatography systems
- Low Pressure Chromatography systems
- Spectrophotometers



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# Biotechnology at Montgomery County Community College

*Opportunities for undergraduate and post-baccalaureate education*

## Highlights of this exciting training program include:

- ⇒ **A Certificate of Completion in Biotechnology and Biomanufacturing**
- ⇒ **An Applied Associates in Science degree designed for direct entry into the workforce or seamless transfer to baccalaureate programs**
- ⇒ **Hands-on, industry-relevant experience using state-of-the-art equipment and instrumentation**
- ⇒ **Individualized learning plans and prior learning assessments**



## Four core courses provide the foundation of the program:

**Introduction to Biotechnology**

**Biotechnology Techniques and Instrumentation**

**Biotechnology Research**

**Biomanufacturing**

## Grant Support:

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