Biomanufacturing

Certificate

DIVISION OF SCIENCE, TECHNOLOGY, ENGINEERING & MATHEMATICS

The Biomanufacturing Certificate program is an excellent opportunity for individuals looking to enter the ever-expanding biotechnology industry. This 12-month program will equip students with the skills and knowledge necessary to excel as entry-level Biotechnology/Biomanufacturing technicians. With a curriculum that covers a wide range of biomanufacturing, cell & gene therapy principles, graduates of this program possess a strong foundation in the field and are highly sought-after candidates for employment.

The Biomanufacturing Certificate program prepares students for various biotech and biopharma industry career paths, advanced research and development, or further education. It is designed to accommodate nontraditional students and includes inquiry-based labs and research internships. Throughout the program, students gain expertise in genetic engineering, gene regulation, flow cytometry, cell culture, biologics, bioprocessing, and more. One of the standout features of this program is its stackable certificate, which allows for seamless credit transfer for further education in biotechnology. This provides students with a clear pathway for continuous growth and enhances the value of the certificate. Graduates of the Biomanufacturing Certificate program have excellent career prospects in medical devices, diagnostics, and pharmaceuticals. Their comprehensive knowledge and skills in biomanufacturing make them valuable assets in these industries, where they can contribute to developing and manufacturing innovative products that positively impact healthcare.

Upon successful completion of the program, students are awarded a Certificate in Biomanufacturing. This certificate signifies their readiness to contribute to the industry and positions them as highly employable professionals. If you are looking to launch a successful career in the biotechnology industry, the Biomanufacturing Certificate program is the ideal choice for you.

COURSE	COURSE TITLE	CREDITS
	Fall Semester	
CH 110**	Principles of Chemistry I w/Lab	4
BI 110	Principles of Biology I w/Lab	4
BT 101*	Introduction to Biotechnology	3
MA 102***	College Algebra	3
	credits:	14
	Spring Semester	
BT 201*	Cell Culture	3
BT 222	Cell & Gene Therapy	3
BT 225	Biomanufacturing I	4
	credits:	10
	Summer	
BT 240	Research Internship	4
	OR	
BT 247	Therapeutics Research Experience	4
	credits:	4
	Total Credits:	**28**

* BT 101 and BT 201 require co-enrollment in CH 110.

** CH 110 co-requisite: a 100-level MA course or higher. This requirement can be fulfilled via transfer credit, AP credits, or by registering for a 100-level math class in the first semester of the program.

*** Pre-Calculus Mathematics (MA 104) may be substituted.