



Program Description:

The Biotechnology Technician Certificate program permits students to concentrate on coursework with the goal of entering the job market after completing the required 29 credits. An internship is a requirement of the certificate program. Many graduates of the certificate program return to Middlesex and apply all 29 credits previously earned from the certificate program to the Biotechnology Technician associate degree program.

Career and Transfer Outlook:

Students who complete this certificate program work as laboratory technicians in various departments within the biotechnology industry. These departments have included, but are not limited to: production support, validation, manufacturing, process operation and quality control.

Helpful Hints:

Students should take the required English and mathematics courses early in the program. Writing and mathematics are fundamental to every subsequent course in the certificate program. First-year courses would also include General Biology (BIO 131) and Introduction to Chemistry (CHE 121).

Program Outcomes:

Graduates of the Biotechnology Technician Certificate program are prepared to:

- Follow standard operating procedure (SOP) protocol;
- Use laboratory equipment properly;
- Use computers to gather and process data and use computerized instrumentation;
- Interpret results of experiments;
- Work collaboratively as a member of a team, and collaborate with other teams and individuals to achieve common outcomes
- Think critically and act appropriately;
- Manage time efficiently;
- Communicate results, decisions and ideas verbally, in writing and numerically, as appropriate;
- Accept accountability for themselves and the materials they handle;
- Show integrity in their work, while completing documentation, and with their interaction with others.

BIOTECHNOLOGY TECHNICIAN • Certificate

BEDFORD CAMPUS - EVENING AND LOWELL CAMPUS - DAY AND EVENING

✓	COURSE #	COURSE TITLE	CREDITS	PREREQUISITES
_____	BIT 150	Methods of Biotechnology	4	BIO 131, CHE 121, ENG 101, TMA 090
_____	BIT 155	Quality Control and GMP	3	BIO 131, CHE 121, ENG 101, TMA 090
_____	BIT 200	Internship in Biotechnology	3	BIT 150, BIT 155
_____	ENG 101	English Composition I	3	C- in ENG 071 or eligible for ENG 101 and placement above or successful completion of ENG 060
_____	BIO 131	General Biology I	4	ENG 060 or higher placement and eligible for MAT 080 and ENG 101. A college-level lab science or high school biology or chemistry within the last 5 years
_____	BIO 240	Microbiology for Industrial Applications	4	BIO 131, CHE 121, ENG 101, TMA 090
_____	CHE 121	Introduction to Chemistry	4	MAT 070 and ENG 071 or placement above or ENG 060 or higher placement
_____	TMA 090	Mathematics for Technology	<u>4</u>	BIO 131 and eligible for MAT 080
			29	

Note: Some courses available only in Lowell. Additional coursework may be required based on college placement testing.

Admission Information

Required Testing/ Prerequisites: Readiness for college Algebra II (MAT 080), and English Composition I (ENG 101). Readiness may be demonstrated through the college placement test or previous college coursework.

Admission Notes: No previous science background is required. The college offers accelerated math and writing classes during the summer to help students meet entrance requirements for the fall.

Deadline: There is no deadline for applications.