The Biotechnology Technician Associate in Science degree program provides the education and training in the skills required for entry-level employment for technicians in biotechnology manufacturing, research, media preparation, validation, quality control, documentation and process operations. Some students who complete this program continue their studies toward a bachelor’s degree and advanced degrees in biotechnology. Ninety-eight percent of the students who complete this program continue their education towards the bachelor’s degree and advanced degrees in the field of biotechnology. Our placement rate in this industry is 100 percent.

This advising guide includes information that will help you to explore your academic and career interests and determine whether the Biotechnology Program major will support your long-term goals.

**EXPLORE YOUR OPTIONS WITH ACADEMIC ADVISING**

Throughout each semester, meet with your advisor so that he/she can guide you through a self-exploration process that will help you identify your academic and career interests.

**Beginning of Semester:**
- ___ Schedule an appointment to meet with your academic advisor during the first few weeks to discuss future plans and how a Business Administration Degree can help you achieve your goals.
- ___ Explore your personal interests by completing Focus2, an online career assessment tool: https://www.middlesex.mass.edu/careerservices/focus2.aspx

**Mid-Semester:**
- ___ Schedule an appointment with academic advisor review your academic progress, Focus2 results and create an academic plan in Degree Works.

**Before Semester Ends:**
- ___ Schedule an appointment to discuss and register for the classes you will take the following semester. (Early November for spring, Early April for fall and summer)
- ___ Visit the Academic Career & Transfer Center or call 1-800-818-3434 to schedule an appointment.

**BIOTECHNOLOGY PROGRAM OUTCOMES**

Graduates of the program are prepared to:
- Follow standard operating procedures (SOP);
- Comply with safety procedures and use laboratory equipment properly;
- Exhibit teamwork, time management, meeting deadlines;
- Follow good manufacturing practices (GMP) and good laboratory practices (GLP);
- Keep the laboratory environment in an aseptic and sterile condition;
- Use computers to gather and process data and use computerized instrumentation;
- Exhibit appropriate workplace behaviors including teamwork, time management, effective communication and presentation skills, and integrity in their work.
IS THE BIOTECHNOLOGY MAJOR THE RIGHT FIT FOR ME?

This is a selective program that has special admissions requirements:
- Place into English Composition I
- Place into Algebra II
- Pass the CORI requirements

Student population: Our pool of students is derived from:
- Recent high school graduates or GED recipients
- Stay-at-home parents returning to the workforce
- Adults changing careers due to layoffs and unemployment
- People looking for better paying jobs

What characteristics/personal traits should the candidate possess?
- Responsibility
- Reliability
- Hard worker
- Ability to work with co-workers and supervisors (teamwork)
- Ability to work independently if required by the particular project
- Ability to pay attention to details
- Ability to follow protocols (standard operating procedures)
- Ability to communicate both written and orally
- Ability to multi-task
- Ability to prioritize and organize tasks
- Ability to use various computer software programs
- Ability to meet deadlines
- Professional/ethical behavior
- Commitment to the field

If you have some or all of these characteristics, Biotechnology is your major.
THE CAREER PATH

The biotechnology industry provides enormous career opportunities for our biotechnology graduates. Students have a choice of going to work full time after the Certificate, and continuing the associate degree part time, or going to work full time after the associate degree is finished. There are advantages and disadvantages with these choices.

**Advantage:** Going to work after the certificate will provide an income, benefits (such as tuition and books reimbursement by the biotechnology company), medical, dental benefits, stocks and bonuses, besides providing the experience in the field of biotechnology. Furthermore, by being employed, there will be no need to take student loans since the college cost will be paid by the place of employment.

**Disadvantage:** The student will have to continue the associate degree on a part-time basis since it is not feasible to maintain a full-time work and full-time school course load. This decision will imply that there will be a delay in completing the associate degree.

**Career Planning Activities:**
- Work with career advisor to create resume, cover letter and help improve your interview skills
- Identify internship and volunteer opportunities in your desired field
- Attend career workshops and job fairs
- Work with the Biotechnology Program advisors to devise a career/job path
- An integral part of this program is the ‘Biotechnology Internship,’ which is designed to send students at the end of the Certificate to work at a biotechnology company. This internship requires a minimum of 200 hours

THE TRANSFER PATH

The Biotechnology Program has articulation and transfer agreements with:

- **Boston University Metropolitan College of Biomedical and Clinical Sciences.** Their program accepts all the 66 credits of the MCC Biotechnology Program and once accepted into the BU Biomedical Program, the students are eligible for the ‘Boston University Community Scholarship’ which grants payment for 50 percent of the tuition of the BU Biomedical Program

- **University of Massachusetts Lowell Clinical Sciences Program.** This articulation provides acceptance of MCC Biotechnology Program credits and offers the option of a joint BS/MS degree following the completion of the MCC Biotechnology Associate degree

In addition to these above mentioned articulations, our students have transferred to: UMass Amherst, UMass Boston, and Northeastern University, which accept our 66 credits

The Biotechnology Program also has articulations with the following secondary schools: Minuteman Technical High School and Lawrence Vocational High School. The MCC Biotechnology Program provides students affiliations with:

- **New England Parenteral Drug Association (PDA)**
  - Student chapter
  - Scholarships: One $5,000 scholarship for transferring to a bachelor degree program and four to six $1,000 scholarships for second-year students
  - Mentoring program by members of the Biotechnology Industry

- **REU summer internships**
- **Life Science Initiative Scholarships**
- **Journal Club of the Biotechnology Program**

**Transfer Planning Activities:**
- Work with an advisor to discuss MassTransfer, Articulations and transfer agreements
- Visit your selected campuses in person. Every college looks good online or in a glossy photo, but you can get a better feel when you visit
- Meet with transfer counselor to identify transfer scholarships
- Research admissions requirements and deadlines at four-year colleges and universities

MCC ADVISING RESOURCES

- **Career Services:** https://www.middlesex.mass.edu/careerservices
- **Transfer Services:** https://www.middlesex.mass.edu/transfer
- **MassTransfer:** https://www.middlesex.mass.edu/transfer/masstransfer.aspx
- **Financial Aid:** https://www.middlesex.mass.edu/financialaid
- **Foundation Scholarships:** https://www.middlesex.mass.edu/foundation/scholarships
- **College Board Match Maker:** https://bigfuture.collegeboard.org/college-search

You can find more information about careers and salaries at: www.bls.gov

Sponsored by the Title III grant: Strategies for Success: Increasing Achievement, Persistence, Retention and Engagement, 2008-2013.