

Career Focus on...

# Biotechnology Technician

## Introduction

- Are you interested in learning how to work in a lab setting, perform scientific tests, and advance the cause of medicine?
- Are you comfortable working with science and math?
- Would you like a career in one of the fastest-growing and most talked-about fields in Massachusetts?

If you answered “yes” to these questions, you may want to consider starting your career with a Biotechnology Technician Certificate.

## Did You Know... ?

- In the past decade, Massachusetts has made an effort to grow its biotechnology industries.
- Many of the state’s fastest growing occupations in Massachusetts are related to biotechnology, including Biomedical Engineers, Surgical Technologists, Biochemists and Biophysicists.
- Biotechnology is one of today’s most talked-about fields; every day brings new advancements and new discoveries, so the number of opportunities will continue to grow for graduates with a Biotechnology Technician Certificate.
- A certificate can be a first step towards earning an Associate’s degree. Students who complete an Associate’s degree at QCC may be able to transfer to a variety of other schools to continue their education.

## Biotechnology Technician Certificate @ QCC

The Biotechnology Technician Certificate program at Quinsigamond Community College (QCC) prepares students for a broad range of career opportunities in the Biotechnology field. Graduates are prepared to work in a variety of medical and scientific settings or to continue onto a four-year school for a bachelor’s degree.

The Biotechnology Technician Certificate can be completed in as little as a year, and course credits from the Certificate may be applied towards an Associate’s Degree or towards transfer to a four-year college.

Upon completion of the program, graduates will be able to:

- Understand the fundamental scientific principles of biotechnology.
- Demonstrate the ability to manipulate and analyze data.
- Demonstrate the ability to work effectively in a laboratory setting.
- Utilize critical thinking and scientific methodology.

## Career Options

### BIOLOGICAL TECHNICIAN

Median Annual Salary: \$39,020

Recommended Education: Bachelor’s degree  
[www.bls.gov/ooh/life-physical-and-social-science/biological-technicians.htm](http://www.bls.gov/ooh/life-physical-and-social-science/biological-technicians.htm)

### MEDICAL EQUIPMENT REPAIRER

Median Annual Salary: \$44,490

Recommended Education: Associate’s degree  
[www.bls.gov/ooh/installation-maintenance-and-repair/medical-equipment-repairers.htm](http://www.bls.gov/ooh/installation-maintenance-and-repair/medical-equipment-repairers.htm)

### MEDICAL OR CLINICAL LABORATORY TECHNOLOGIST/TECHNICIAN

Median Annual Salary: \$46,680

Recommended Education: Bachelor’s or Associate’s degree  
[www.bls.gov/ooh/healthcare/medical-and-clinical-laboratory-technologists-and-technicians.htm](http://www.bls.gov/ooh/healthcare/medical-and-clinical-laboratory-technologists-and-technicians.htm)

### BIOMEDICAL ENGINEER

Median Annual Salary: \$81,540

Recommended Education: Bachelor’s degree  
[www.bls.gov/ooh/architecture-and-engineering/biomedical-engineers.htm](http://www.bls.gov/ooh/architecture-and-engineering/biomedical-engineers.htm)

## Worcester Area Employers

- Abbott Bioresearch Center
- Astra Zeneca
- Charles River Laboratories
- ECI
- Genzyme
- Lonza
- UMass Medical School Bioresearch

## Professional Associations

- American Society for Clinical Laboratory Science: [www.ascls.org](http://www.ascls.org)
- Association for the Advancement of Medical Instrumentation: [www.aami.org](http://www.aami.org)
- Massachusetts Biotechnology Council: [www.massbio.org](http://www.massbio.org)
- New England Biotech Association: [www.newenglandbiotech.org](http://www.newenglandbiotech.org)

## Next Steps

Wondering if the Biotechnology Technician Certificate is right for you?

- Take a Career Assessment to match your interests with potential careers:  
[www.qcc.mass.edu/t3/ort/sites.html#careerassess](http://www.qcc.mass.edu/t3/ort/sites.html#careerassess)
- Research the web links on this *Career Focus* page, as well as links suggested online under Career Information: [www.qcc.mass.edu/t3/ort/sites.html#careerinfo](http://www.qcc.mass.edu/t3/ort/sites.html#careerinfo)
- Conduct an Informational Interview with someone employed in the field. For more information on how to do this, review the Informational Interview links online:  
[www.qcc.mass.edu/t3/ort/sites.html#infointerview](http://www.qcc.mass.edu/t3/ort/sites.html#infointerview)
- Attend a Career Planning Session. For more information, and the current schedule, visit Career Academic Personal Success (CAPS) online:  
[www.QCC.edu/services/academic-advising/career-academic-personal-success](http://www.QCC.edu/services/academic-advising/career-academic-personal-success)
- Speak with an Advisor:  
[www2.qcc.mass.edu/advising/](http://www2.qcc.mass.edu/advising/)
- Speak with QCC Faculty who teach Biotechnology Technician Certificate courses.

## Sources Used

Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Outlook Handbook, 2014-15 Edition*:

- Biochemists and Biophysicists:  
[www.bls.gov/ooh/life-physical-and-social-science/biochemists-and-biophysicists.htm](http://www.bls.gov/ooh/life-physical-and-social-science/biochemists-and-biophysicists.htm)
- Biological Technician:  
[www.bls.gov/ooh/life-physical-and-social-science/biological-technicians.htm](http://www.bls.gov/ooh/life-physical-and-social-science/biological-technicians.htm)
- Biomedical Engineers:  
[www.bls.gov/ooh/architecture-and-engineering/biomedical-engineers.htm](http://www.bls.gov/ooh/architecture-and-engineering/biomedical-engineers.htm)
- Medical and Clinical Laboratory Technologists and Technicians:  
[www.bls.gov/ooh/healthcare/medical-and-clinical-laboratory-technologists-and-technicians.htm](http://www.bls.gov/ooh/healthcare/medical-and-clinical-laboratory-technologists-and-technicians.htm)
- Medical Equipment Repairer:  
<http://www.bls.gov/ooh/installation-maintenance-and-repair/medical-equipment-repairers.htm>

Massachusetts Executive Office of Labor and Workforce Development, "Fastest Growing Occupations Through 2014."

Quinsigamond Community College:

- Biotechnology Technician Certificate:  
<http://www.qcc.edu/academics/technology/biotechnology-technician>

## Positions Entered by QCC Graduates

- Biotechnology Technician
- Manufacturing Technician
- Media Preparation Associate
- Process Development Associate
- Production Associate
- Qualitative Analysis Technician
- Quality Control Associate
- Quality Assurance Associate
- Research Laboratory Assistant
- Technician Assistant

## Employment, Co-op, Internship, or Service Learning Opportunities

Contact the Career Placement Office:

[www.qcc.edu/pages/Career\\_Placement.html](http://www.qcc.edu/pages/Career_Placement.html)

## Possible Transfer Schools

- Assumption College
- Bay Path College
- Clark University
- Endicott College
- Fitchburg State University
- Northeastern University
- UMass Lowell
- Worcester State University
- WPI

## Specific Transfer Information

- Start at the QCC Transfer web site:  
[www.qcc.mass.edu/transfer](http://www.qcc.mass.edu/transfer)
- Make an appointment online with the Transfer Advisor:  
[www.qcc.mass.edu/transfer/calendar](http://www.qcc.mass.edu/transfer/calendar)
- Email questions to:  
[transfer@qcc.mass.edu](mailto:transfer@qcc.mass.edu)

*Quinsigamond Community College is part of the Massachusetts Community Colleges and Workforce Development Transformation Agenda, which brings together Massachusetts' 15 community colleges, the Commonwealth's adult basic education and workforce development systems, career centers and industry stakeholders to change the way education and skills training are delivered and to prepare dislocated and under-skilled workers for the emerging, knowledge-based economy. As part of the initiative, Quinsigamond Community College supports students along efficient career pathways by helping them attain degrees, certificates and industry recognized credentials through accelerated programs linked closely to industry need. The statewide initiative is supported by a \$20 million, three-year grant from the United States Department of Labor, Employment & Training Administration TAACCCT. Grant Agreement #TC-22505-11-60-A-25.*