

You'll enjoy training in our
lab that replicates the
real-world work environment.



State-of-the-art DeltaV digital bioreactor control system



*Chromatography system for the
separation and purification of proteins.*

MiraCosta College is one of five
Centers of Biotechnology Excellence
named by the
U.S. Department of Labor.

It is the policy of MiraCosta College not to discriminate against any person on the basis of race, color, religion, national origin, gender, marital or parental status, age, sexual orientation, status as a Vietnam-era veteran or mental or physical disability in all of its educational and employment programs and activities. Individuals with verifiable disabilities can be accommodated with advance notice.



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1-888-201-8480

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COMMUNITY LEARNING CENTER

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Biotechnology Pathways



Are you interested in...

- Getting a high paying job?
- Developing specialized skills?
- Improving lives?

***Train for an exciting, well-paid
career in biotechnology, right
after high school graduation!***

Plan for an exciting career in Biotechnology!

Here's how:

1

While You're in High School

- Concentrate on your writing skills
- Enroll in biology, chemistry and intermediate algebra
- Take the MiraCosta College placement tests in English and math in your senior year

2

While at MiraCosta College

Take all required core courses* including:

- CHEM 108 or 110 (General Chemistry, 3 or 5 units)
- MATH 101 (Intermediate Algebra, 4 units)
- BIO 101, 105 or 204 (General Biology, 3 or 4 units)

3

Select Your Path

Choose from

- Laboratory Assistant
- Bioprocessing Technician
- Biotechnology Research and Development (R&D) Technician



Laboratory Assistant

Required Core Courses*

BTEC 110: Basic Techniques in Biotech

Units

10-13

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With this certificate of achievement, enter the biotechnology workplace as support personnel. Perform general tasks including solution and media preparation, inventory and ordering of supplies and reagents. Provide general assistance in the performance of tests and routine tasks related to the bioprocessing and laboratory environments.

Complete the certificate in two semesters

Entry level wage: \$9-\$12/hr

Hire rate: 90% for qualified applicants

Bioprocessing Technician

Required Core Courses*

ENGL 100: Composition and Writing

CIS 100: Computer Applications

BTEC 110: Basic Techniques in Biotech

BTEC 120: Bus & Reg Practice in Biotech

BTEC 220: Bioprocessing

Units

10-13

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Electives, choose from one of the following:

BTEC180: Biostatistics BTEC215: Validation

This Certificate of Competence is designed to meet the increasing need for production technicians in the biotechnology industry. A production technician operates and maintains the equipment used to process protein pharmaceutical products or reagents utilized by pharmaceutical and academic research labs. Graduates of this certificate program can expect to be employed as bioprocess technicians in our local industry.

Complete the certificate in three semesters

Entry level wage: \$12-\$18/hr

Hire rate: 90% for qualified applicants

Biotechnology R&D Technician

Required Core Courses*

ENGL 100: Composition and Writing

CIS 100: Computer Applications

CHEM 110/111: GenCollege Chemistry

BIO 220: Human Physiology

BTEC 110: Basic Techniques in Biotech

BTEC 180: Biostatistics

Units

10-13

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Electives, choose from two of the following:

BTEC120: Bus/Reg BTEC202: Iso/Pur DNA

BTEC203: DNA Amp BTEC204: rDNA

BTEC206: HPLC BTEC207: ELISA

BTEC215: Validation BTEC220: Bioprocessing

BTEC292: Internship BTEC299: Work Exp

This Certificate of Competence is designed to meet the increasing need for entry-level laboratory technicians. Technicians in this field must be proficient in the application of scientific methodology to solve problems and show competency in organizational, computational, laboratory and communication skills. Graduates of this program can expect to be employed in various capacities including quality control and quality assurance, manufacturing, research and product development, analytical testing and academic research.

Complete the certificate in three semesters

Entry level wage \$12-\$18/hr

Hire rate: 90% for qualified applicants

You may also earn an associate degree by completing additional general education courses, or apply your coursework to a bachelor's degree. Many biotechnology companies encourage and support further education for their employees.