

### **BIOTECHNOLOGY**

CREATE THE FUTURE OF SCIENCE



Inventive | Determined | Analytical berkeleycitycollege.edu/biotechnology





Discover your community at BCC

Are you curious? Interested in how we study viruses, or create vaccines? If you're a natural problem solver fascinated by genetics, immunology, or biology, or want to make a difference to the future of research, medicine, or environmental sciences—then our biotechnology program could be right for you. With best-in-class facilities and labs, BCC is creating the future of science.



### **GET STARTED**

No matter where you are in your academic or professional career, the Biotechnology Program at BCC is a great pathway for:

- Current BCC students
- Graduates who have a degree, but could benefit from specialized training (particularly in the lab)
- Adult learners exploring a career change in the science field
- Current High School students interested in Dual Enrollment courses over the school year or summer
- High School Graduates preparing for a career in biotechnology



### STEM CELL TRAINING AND INTERNSHIP OPPORTUNITIES

Berkeley City College offers laboratory training in stem cell biology. The biotechnology program was awarded a grant from the California Institute of Regenerative Medicine (CIRM) that offers paid internships in academic and industry research laboratories working in the stem cell field in the SF Bay Area. Learn about the academic requirements and eligibility criteria at:

berkelevcitycollege.edu/biotechnology/interns/apply-for-an-internship/

Earn an income while you fasttrack your degree—and career—with paid internships with UCSF, Bayer, and other industry partners. These internships afford students the opportunity to work with the latest technologies not available in their college classes and to gain experience working in research and industry laboratories dedicated to solving real world problems.



### PREPARE TO WORK AND TRANSFER

When you earn a Biotechnology certificate, your transfer application gets a competitive edge—increasing your opportunities to work as a lab assistant!



### GROW YOUR CAREER IN BIOTECHNOLOGY

Get hands-on lab experience in our state-of-the-art facilities and learn about careers in STEM from industry experts at our Science Seminar Series!



#### Twice as Strong with DE at BCC

As a Dual Enrolled student, you can earn college credit while you finish high school. So don't wait—ask your quidance counselor, today!



# BIOTECHNOLOGY CERTIFICATES & DEGREES

Looking to advance your career or launch a new career path with an affordable college degree? Our programs can get you where you need to be.

#### CREDIT



### BIOTECHNOLOGY

Associate in Science (60 units)

Format: Partially online (Labs are In-person)

Full-time status: 4 semesters

Cost: \$0-2,940\*



### RESEARCH LABORATORY ASSISTANT Certificate of Achievement (20–23 units)

Format: Partially online (Labs are In-person)

Full-time status: 2 semesters

Cost: \$0-1,127\*



#### LABORATORY ASSISTANT

Certificate of Achievement (16.5 units)

Format: Partially online (Labs are In-person)

Full-time status: 1 semester

Cost: \$0-808\*

<sup>\*</sup>The actual cost for a California resident depends on the financial aid status. (\$49 per credit unit)

### **Biotechnology**



#### **CREATE THE FUTURE OF SCIENCE**

Schedule an appointment with a BCC Counselor to learn more! www.berkeleycitycollege.edu/counseling

#### **ASSOCIATE DEGREES**



### BIOTECHNOLOGY Associate in Science (60 units)

Required courses: BIOL 32, 33, 34, 34L, 50A, 50D
Select three courses: BIOL 50B, 51B, 50C, 1A, CHEM 1A, PHYS 3A, 4A
Select one course: Math 1, 3A, 16A

Earn General Education and Elective courses while completing the major units required to earn your Associate degree!

#### **CERTIFICATES**



### RESEARCH LABORATORY ASSISTANT Certificate of Achievement (20–23 units)

#### Select 12-15 units from the following:

- BIOL 34 Genetics (3 units)
- ☐ BIOL 34L Genetics Laboratory (2 units)
- ☐ BIOL 50C Stem Cell Biology (3 units)
- ☐ BIOL 33 Immunology (4 units)
- ☐ BIOL 1A General Biology (5 units)
- ☐ CHEM 1A General Chemistry (5 units)
- ☐ BIOL 3 Microbiology (5 units)

#### Required courses:

- ☐ BIOL 32 Scientific Literature & Writing (3 units)
- ☐ BIOL 50B Protein Chemistry & Fermentation (3 units)
- ☐ BIOL 50D Cell & Tissue Culture (2 units)

**Note:** BIOL 3 is a prerequisite for BIOL 33, BIOL 50C and BIOL 50D.

### LABORATORY ASSISTANT CERTIFICATE OF ACHIEVEMENT

### LABORATORY ASSISTANT Certificate of Achievement (16.5 units)

- ☐ BIOL 50A Introductory Biotechnology with Laboratory (4 units)
- ☐ BIOL 32 Scientific Literature and Writing (3 units)
- ☐ BIOL 10 Introduction to Biology (4 units)
- ☐ CHEM 30A Introductory Chemistry (4 units)
- ☐ CIS 200 Computer Concepts and Applications (1.5 units)

#### **Preliminary Coursework:**

- ☐ Algebra
- ☐ English 1A

Note: Higher level courses in biology, chemistry and CIS can be substituted for those listed above CIS

200 and can be cretdited by exam

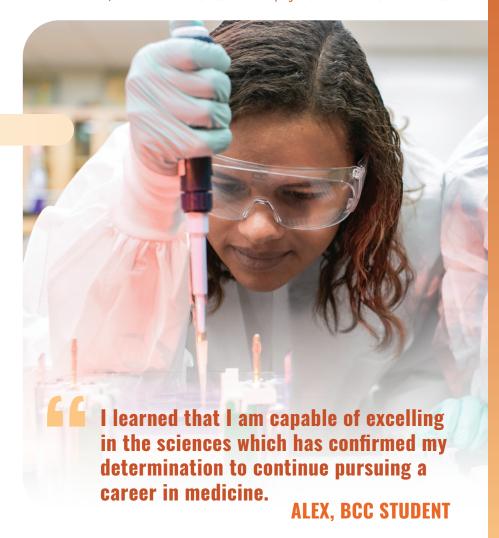


### **Transfer Opportunities**

- Molecular Cell Biology
- Integrated Biology
- Biotechnology
- Health/Medical related fields
- Bioengineering
- Genetics
- Microbiology

\*All biology and chemistry courses are transferable to UC/CSU systems.

BIOL 50A, 50B and 50D are transferable to Biotech programs at all California State Universities.





This map represents one possible pathway at BCC and is based on the 2023-2024 catalog.

# OCCUPATION OUTLOOK IN THE BIOTECHNOLOGY FIELD



The Bay Area has the largest number of biotechnology companies and employees in the United States.







Scientific Research



Environmental Protection



**Human Health** 



















### (\$) BIOLOGICAL TECHNICIAN YEARLY MEDIAN WAGE

**United States** 

\$48,140

**\$50,150** 

Bay Area **\$61.530** 

Source: Bureau of Labor Statistics



## **Quick Guide to Community College Terminology**

**apprenticeship** A work-based learning model where apprentices have supervised on-the-job training, along with job-related education, all while earning a wage that increases during the progression of the program.

Associate in Arts (AA)/Associate in Science (AS) An undergraduate degree requiring at least two years of full-time study and completion of 60-semester units, including major and GE courses.

**Associate Degree for Transfer (AD-T)** A specific set of courses required to transfer into an upper-division program at the CSU system as part of the junior class with guaranteed priority admission.

**Certificate of Achievement (CA)** A qualified credential noted on your official transcript upon completion of a series of courses of a specific subject or skill set. At minimum, 16 units, often connected to an Associate degree.

**Certificate of Proficiency (CP)** Smaller unit certificate related to a specific skill set or subject. Often part of a pathway to update a professional skill set or launch a new career.

**co-requisite** Courses required to be taken in tandem during the same term.

**dual enrollment** A program that allows students to take college courses while in high school and earn both high school and college credits simultaneously.

**internship** When a student works in an organization in order to gain work experience or satisfy requirements for a qualification. Internships can be paid or unpaid and help students make connections in professional fields they are considering for career paths.

**lecture/lab hours** Number of contact hours a lecture or laboratory course meets during a term

**non-credit courses** Intended for personal enrichment or to acquire a skill set, but not applicable toward a degree. No units are earned upon completion, but non-credit vocational certificates may be awarded upon completion of a series of classes in this category.

**prerequisite** Previous experience or course completions required for entry into another course.

**Student Education Plan (SEP)** Specific courses to enroll in each semester over a period of time, in order to meet the requirements of an educational goal, Associate Degree Transfer program (AD-T), or completion of Associate Degree (AA/AS).

unit Used synonymously with "credit", the value earned in a course.

5 6

## **APPLY ONLINE NOW!**



Learn the steps to apply and enroll at BCC on our website at berkeleycitycollege.edu/menu-links/getting-started-at-bcc/





berkeleycitycollege.edu





