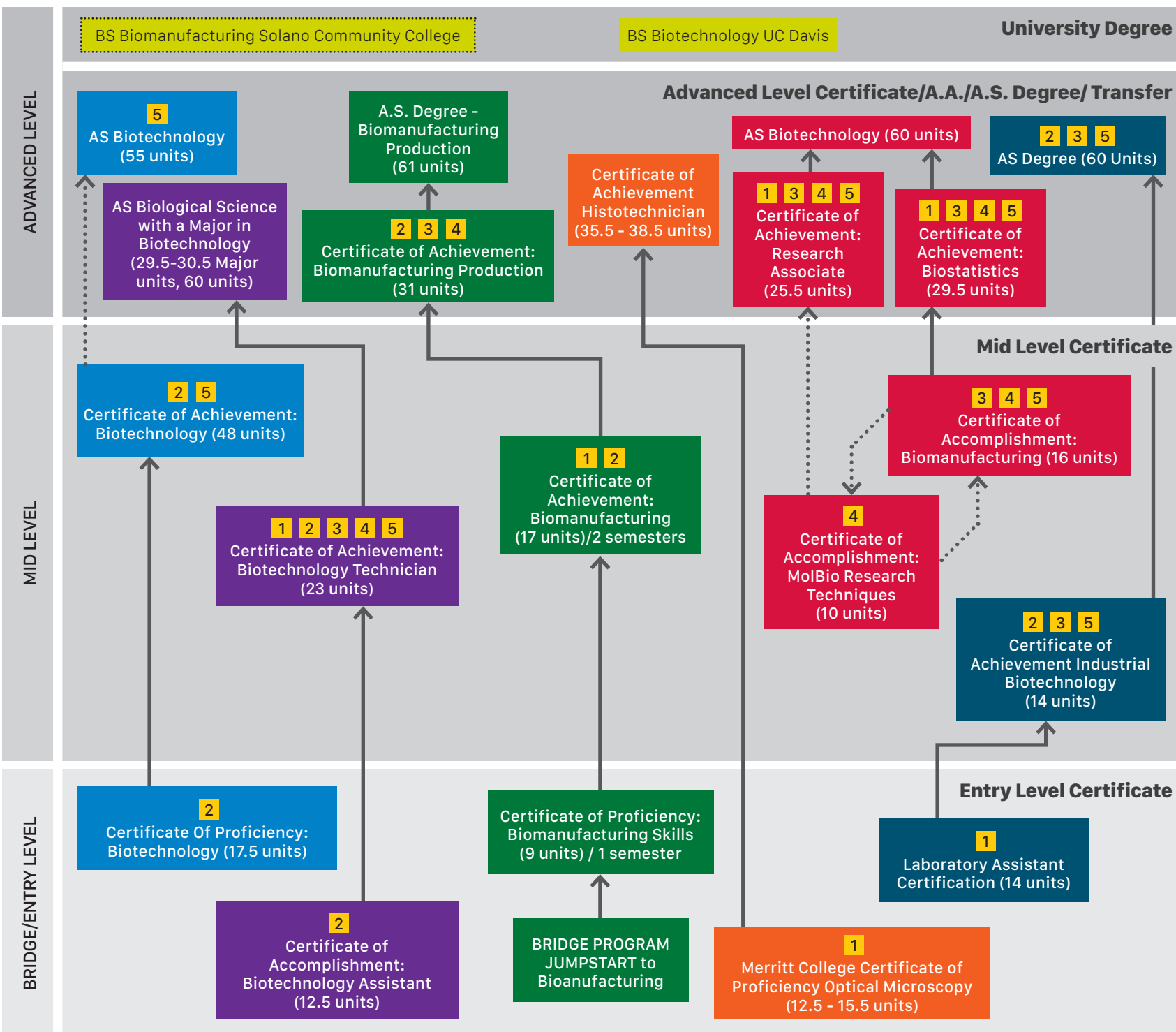


# East Bay Advanced Biotechnology Partnership

Biotechnology Regional Community College Offerings



## ACADEMIC PROGRAM OF STUDY



**Key**

- Pathways (within Programs)
- ▭ Programs in development
- ▭ DBS Programs
- ⋯→ Optional Pathways
- Berkeley City College
- Contra Costa College
- Laney College
- Merritt College
- Ohlone College
- Solano College

The **Course Identification Numbering System (C-ID)** is a statewide numbering system independent from the course numbers assigned by local California community colleges. A C-ID number signals that participating California colleges and universities have determined that courses offered by other California community colleges are comparable in content and scope to courses offered on their own campuses, regardless of their unique titles or local course number.

- 1 C-ID BIOT 101
- 2 C-ID BIOT 150
- 3 C-ID BIOT 210
- 4 C-ID BIOT 220
- 5 C-ID BIOT 230

## COMPETENCIES BY CATEGORY AND LEVEL

Category	Advanced Level	Mid Level	Entry Level
<b>Comply with applicable regulations and standards</b>	<ul style="list-style-type: none"> <li>- Aseptic technique</li> <li>- Basic microscopy</li> </ul>	<ul style="list-style-type: none"> <li>- Work in manner and regulatory expect</li> <li>- Good documentation standards</li> <li>- Items labeled appropriately and trackable</li> </ul>	<ul style="list-style-type: none"> <li>- Waste disposal - identify procedures (biohazards)</li> <li>- Maintain clean clutter free workplace/contamination free</li> <li>- Personnel Protective Equipment</li> <li>- Safe Chemical Handling</li> </ul>
<b>Manage and communicate information</b>	<ul style="list-style-type: none"> <li>- Presentations</li> </ul>	<ul style="list-style-type: none"> <li>- Errors in tech documents reports and changes suggested</li> <li>- Recognize when information is necessary and respond to appropriate personnel</li> <li>- Inefficiencies are recognized/continuous improvement occurs</li> <li>- Presentations</li> </ul>	<ul style="list-style-type: none"> <li>- Recognize when information is necessary and respond to appropriate personnel</li> <li>- Inefficiencies are recognized/continuous improvement occurs</li> <li>- Word processing and spreadsheets</li> </ul>
<b>Perform measurements/tests/assay</b>	<ul style="list-style-type: none"> <li>- Test specific math (analysis, stat)</li> </ul>	<ul style="list-style-type: none"> <li>- Choose and use appropriate MEAS tools</li> <li>- Data presented in appropriate manner</li> </ul>	<ul style="list-style-type: none"> <li>- Sample labeling</li> <li>- Test performed by procedure</li> <li>- Notebooks</li> </ul>
<b>Provide routine facility (media prep) support</b>	<ul style="list-style-type: none"> <li>- MEDIA solutions prepared correctly</li> </ul>	<ul style="list-style-type: none"> <li>- Equip inventory/calibrated</li> <li>- Materials stored and expired</li> <li>- MEDIA solutions prepared correctly</li> </ul>	<ul style="list-style-type: none"> <li>- MEDIA solutions prepared correctly</li> <li>- Appropriate glassware</li> </ul>
<b>Perform mathematical manipulations</b>	<ul style="list-style-type: none"> <li>- Multiple solutes</li> <li>- Dilutions</li> <li>- Serial dilutions</li> </ul>		<ul style="list-style-type: none"> <li>- Ratios and Proportions</li> <li>- Units measure/conversions</li> <li>- Graphing</li> </ul>

## JOBS & WAGES

Level	Employment	Wages
<b>Advanced Level Employment<sup>1</sup>:</b>	<ul style="list-style-type: none"> <li>- Laboratory Technician</li> <li>- Quality Control Analyst</li> <li>- Lab Manager</li> <li>- Quality Control Inspector</li> <li>- Quality Specialist</li> </ul>	\$18-\$28/hr
<b>Intermediate Level Employment<sup>1</sup>:</b>	<ul style="list-style-type: none"> <li>- Research Technician</li> <li>- Manufacturing Technician</li> <li>- Production Technician</li> </ul>	\$18-\$23/hr
<b>Entry Level Employment<sup>1</sup>:</b>	<ul style="list-style-type: none"> <li>- Glassware Washing</li> <li>- Documentation Support</li> <li>- Laboratory Support Workers</li> </ul>	\$16-\$18/hr
	<ul style="list-style-type: none"> <li>- Instrumentation and Calibration</li> <li>- Media Prep Technician</li> <li>- Quality Control Technician or Assistant</li> </ul>	\$18-\$20/hr
	<ul style="list-style-type: none"> <li>- Biotechnician</li> <li>- Research Associate</li> </ul>	\$18-\$23/hr

<sup>1</sup> Based on Supply and Demand Analysis: Life Sciences & Biotech Middle Skills Workforce in California, September, 2014

<sup>2</sup> Common Core Technical Skills and Standards for the Bioscience Laboratory Submitted by Bio-Link

This project is funded by a U.S. Department of Labor Trade Adjustment Assistance Community College Career Training grant to the East Bay. This product's cost to produce was \$4,203 (0.76% of project) from a grant awarded under the Trade Adjustment Assistance Community College and Career Training (TAACCCT) Grants, as implemented by the U.S. Department of Labor's Employment and Training Administration. Design it-Build it-Ship it (DBS) is an equal opportunity employer / program and auxiliary aids and services are available upon request to individuals with disabilities.

# BIOTECHNOLOGY

The Biotechnology Sector translates into high paying jobs for individuals with post-secondary education.

**HIGH DEMAND GROWTH WAGE**

## What is driving growth in the Biotechnology Sector?

Investments in bioscience development initiatives

Advancing commercialization of research discoveries

Building research and development capacity

Actively addressing bioscience's need for early-stage capital

## BIOTECHNOLOGY Workers EARN MORE:



\*those occupations that require more than a high school degree and less than a 4-year degree



## WHAT JOBS ARE IN THE BIOTECHNOLOGY SECTOR?



Research



Pharmaceuticals



Medical Devices



Distribution

## BAY AREA SNAPSHOT

What can workers with some post-secondary experience expect?

### Production Specialist



\$29/hr

761

open jobs by 2022

### Laboratory Technician



\$25/hr

266

open jobs by 2022

### Technical Services Assistant



\$22/hr

367

open jobs by 2022

### Manufacturing Assistant



\$20/hr

434

open jobs by 2022



Career Ladders Project

June 2014

Data and information sources: CCC Doing What Matters for Jobs and the Economy, California Employment Development Department, Economic Modeling Specialists International (EMSI), Alameda County WIB