

East Bay Advanced Manufacturing Partnership

Advanced Manufacturing Regional Community College Offerings



ACADEMIC PROGRAM OF STUDY

INDUSTRY CERTIFICATION

JOBS & WAGES

	ACADEMIC PROGRAM OF STUDY					INDUSTRY CERTIFICATION	JOBS & WAGES
	University Degree	BS Industrial Technology San Jose State University	BS Materials Science & Engineering University of California Berkeley	BS Electrical Engineering San Jose State University	BS Mechanical Engineering San Jose State University		
ADVANCED LEVEL	<p>AS Industrial Maintenance</p> <p>Adv. Industrial Maintenance: (22 units)</p>	<p>AS Industrial Maintenance</p> <p>AS Industrial Maintenance Machinist/Mechanic</p> <p>AS Machine Technology</p> <p>AS Numerical Control</p> <p>AS Machine Tool Technology</p> <p>AS Process Technology</p> <p>Inspection Certificate: (tbd)</p>	<p>AS Construction Management</p> <p>AS Welding Technology</p> <p>AS Welding Technology</p> <p>AS Welding</p> <p>AS Welding</p>	<p>AS Electronic Systems Technology</p> <p>AS Electrical / Electronics Technology</p> <p>AS Electrical Technician</p> <p>AS Instrumentation Technician</p>	<p>AS Engineering Pathways</p> <p>AS Industrial Design</p> <p>AS Engineering Technology</p> <p>AS Architecture Technology</p> <p>AS Drafting Technician</p> <p>AS Survey / Civil Drafting Technician</p>	<ul style="list-style-type: none"> National Institute for Metalworking Skills- NIMS Level 2 Journey Level Computer Numerical Control Solidworks Professional 	<ul style="list-style-type: none"> Apprentice Machinist, \$20-\$30/hr Maintenance Mechanic, \$20-\$30/hr Plant Maintenance Worker II, \$20-\$30/hr Apprentice Machinist, \$25-\$35/hr Maintenance Mechanic, \$20-\$30/hr Plant Maintenance Worker II, \$20-\$30/hr Mapping Technician \$23-\$41/hr
MID LEVEL	<p>Industrial Maintenance: (29.5 units)</p> <p>CAA Industrial Maintenance 2: (17 units)</p> <p>CAA Industrial Maintenance 1: (19.5 units)</p>	<p>Tool Maker: (31 units)</p> <p>Numerical Control Programmer: (36 units)</p> <p>Industrial Maintenance Machinist/Mechanic (mTECH) (30 units)</p> <p>Machine Technology: (38 units)</p> <p>Mechatronics: (36 units)</p> <p>Process Technology: (35 units)</p>	<p>Construction Management (38 units)</p> <p>Welding Technology: (24 units)</p> <p>Welding Technology: (33-36 units)</p> <p>Inspection & Pipe Fitting: (16 units)</p> <p>Welding: (24 units)</p>	<p>Instrumentation Technology: (45 units)</p> <p>Electrical Technician: (42 units)</p> <p>Electronic Systems Technology: (16 units)</p> <p>Industrial Technology: (18 units)</p> <p>Electrical/Electronics Technology: (26 units)</p>	<p>Survey Technician / Civil Drafting Technician: (27 units)</p> <p>Drafting Technician: (30 units)</p> <p>Architecture Technology: (29 units)</p>	<ul style="list-style-type: none"> American Welding Society Overhead Flux-Core Arch Welding Vertical Up National Institute for Metalworking Skills- NIMS (Basic) Manufacturing Skills Standards Council-MSSC American Welding Society Drill Press Vertical Milling OSHA Safety 30 hr 	<ul style="list-style-type: none"> Process Technician, \$25-\$43/hr Electrical Technician (Industrial), \$27-\$47/hr Instrumentation Technician (Industrial), \$27-\$47/hr Combination Welder, \$18-\$40/hr Ironworker, \$18-\$38/hr Sheet Metal Worker, \$18-\$36/hr Production Machinist Intern, \$20-\$30/hr Machine Operator, \$20-\$30/hr Industrial Maintenance, \$25-\$30/hr Home Service Technician II, \$16-\$29/hr Maintenance and Repair Worker, \$14-\$24/hr Fire Safety Technician, \$20-\$30/hr Security Technician, \$21-\$37/hr Home Equipment Installer, \$21-\$37/hr Commercial Equipment Installer, \$21-\$37/hr Network Technician, \$35-\$53/hr Electronics Technician, \$26-\$39/hr Pipe Fitter, \$27-\$48/hr
ENTRY LEVEL		<p>Engineering/Manufacturing Core Certificate (13 units)</p> <p>Machinist: (27 units)</p>	<p>Energy Systems (ENSYS) Certificate of Achievement</p> <p>Welding: (15 units)</p> <p>Welding Pre-Apprenticeship: (10 units)</p>	<p>Electrical/Electronics Technology Certificate of Accomplishment (7 units)</p> <p>Construction Trades Pre-Apprenticeship: (23.5 units)</p> <p>Electrical Pre-Apprenticeship: (15 units)</p>	<p>Industrial Design (15 units)</p> <p>Engineering/Manufacturing Core Certificate (13 units)</p>	<ul style="list-style-type: none"> Measurement Materials & Safety Benchwork & Layout National Career Readiness Certificate-NCRC Food Handler Certificate 	<ul style="list-style-type: none"> Electrical Equipment Assembler, \$9-\$28/hr Welder Apprentice, \$16-\$21/hr Machine Shop Helper, \$14-\$18/hr Machine Operator, \$14-\$18/hr Electronics Apprentice, \$18-\$20/hr Home Service Technician, \$15-\$23/hr Machinist, \$20-\$32/hr Maintenance Technician, \$9-\$14/hr Welder, \$15-\$21/hr
BRIDGE		<p>i2m - Intro to Manufacturing: (4.5 units)</p> <p>On Ramp to Skill Trades: (10 units)</p> <p>iDesign Skilled Trades: (2 units)</p> <p>Industrial Laborer Bridge: (10 units)</p> <p>Intro to Digital Fabrication: (tbd)</p>			<p>Bridge to Engineering: (5-15 units)</p>		



Key

- Pathways (within Programs)
- ▭ DBS Programs
- ▭ Chabot College
- ▭ Los Medanos College
- ▭ Programs in development
- Optional Pathways
- ▭ Diablo Valley College
- ▭ Solano College
- ▭ Laney College

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.

ADVANCED MANUFACTURING

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

**HIGH DEMAND
GROWTH
WAGE**

California's Advanced Manufacturing Sector drives the Economy

For every one job created in manufacturing, at least two and a half jobs are created to support the sector

Manufacturing firms create regional wealth by producing goods that are exported across the state, nation and world

There are 64,000 manufacturing businesses across California, generating \$341 billion in revenue in 2011

Advanced Manufacturing Workers EARN MORE:



\$7.25/hr
National Minimum Wage



\$8.00/hr
California Minimum Wage



\$20.54/hr
Median Wage for Adv. Mfg. Occupations* in SF Bay Area

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



WHAT JOBS ARE IN THE ADV. MANUFACTURING SECTOR?



Electrical



Mechanical



Utilities



Petrochemicals

BAY AREA SNAPSHOT

What can workers with some post-secondary experience expect?

Maintenance Supervisor



\$29/hr 761 open jobs by 2022

Machinist



\$23/hr 697 open jobs by 2022

Welder



\$20/hr 600 open jobs by 2022

Process Technician



\$27/hr 39 open jobs by 2022



Career Ladders Project

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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