

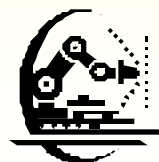
Sample Average Salaries

Electrical & Electronics Installers, Repairers \$21.82/hr.
Electrician \$29.34/hr.
Machinist \$19.44/hr.
Welder \$20.03/hr.
Sheet Metal Worker \$36.01/hr.
HVAC Mechanic \$27.13/hr.
<i>Median wages for California</i>

Industry Partners

Datum Technologies	Sonoma Precision Manufacturing Company
Quality Machine Engineering, Inc.	Agilent Technologies
Santa Rosa Junior College	Selway Machine Tool Company
Kal Engineering, Inc.	G-Man Precision & Machining
North Coast Builders Exchange	Coast Tool Company
GXC Corporation	National Tooling and Machining Association, Inc.

Manufacturing & Robotics



Post-Secondary Training Options

Santa Rosa Junior College

Certificates:

- Civil and Surveying Technology
- Electro-Mechanical Maintenance Technician
- Electronic Technology
- Machine Tool Technology
- Welding Technology

Areas of Study:

- Electronics
- Machine Tool
- Welding

Sonoma State University

Bachelor Degrees:
Applied Physics

University of California

Bachelor Degrees:
Civil & Environmental Engineering
Electrical & Computer Engineering



Sonoma County Office of
Education
Career Development/ROP
5340 Skylane Boulevard
Santa Rosa, CA 95403



Manufacturing and Robotics

Why prepare for a career

If you are creative and like working with your hands, enjoy using tools and machinery that make sparks fly, are interested in building things or inventing electronic gadgets, and do well in your science and math classes, then a career in manufacturing may be for you.

Sonoma County is one of the leading high-tech manufacturing counties in the state, despite the trend to move manufacturing jobs to other countries. Today, companies involved in high-tech manufacturing employ 54% of Sonoma County's total workforce. Students can prepare for entry into this field by taking applied technology, electronics, and robotics classes. Other types of manufacturing jobs involve welding and metal-work, skills that are also used in the related fields of construction, automotive services, and agriculture. Students taking these courses might choose to enter the workforce as metal fabricators, welders, or equipment operators.

ROP offers several education and training opportunities to help you prepare for a career in manufacturing. You can obtain some types of entry-level jobs after completing these high school courses, while other positions require additional training and education at a community college, trade school, or four-year college/university.

To enroll in an ROP course, please contact your high school counselor

Program Offerings

Petaluma High School 201 Fair Street, Petaluma

- Metal Art/Advanced Manufacturing Tech.
- Product Development & Manufacturing
- Pre-Engineering & Mechanical Design

Santa Rosa High School 1235 Mendocino Avenue, Santa Rosa

- Manufacturing

Windsor High School 8695 Windsor Road, Windsor

- Robotics

Types of Jobs

- Welder Fabricator
- Machinist
- Tool & Die Maker
- Sheet Metal Worker
- Manufacturing Technician
- Ornamental Iron Worker
- Electronic Repair Technician
- Electrical Technician
- Vending Machine Technician
- Automation Engineer
- Electrical Engineer
- Field Service Engineer
- Electronic Assembler
- Electronic Component Processor
- Robotics Technician
- Electronics Tester

What you can learn in these ROP courses

Electronics & Robotics:

- Basic Electronic Circuitry
- Circuit Board Soldering
- Electronic Fundamentals
- Principles of Robotics
- Schematic Diagramming (Trace & Draw)

Manufacturing:

- Machine Tool Technology
- Metal Forging and Casting
- Metal Working Skills
- Sheet Metal Fabrication
- Welding
- Blueprinting Reading
- Drill Press Use
- Engine Lathe Use

Sample Pathway Schedule

<i>Introductory</i>	Manufacturing 1 or Pre-Engineering & Mechanical Design
<i>Intermediate</i>	Product Development & Manufacturing Or Manufacturing 2
<i>Advanced</i>	Product Development & Manufacturing, N.I.M.S., or Manufacturing 3