

## CAREER PATHWAY

# MACHINING & FORMING TECHNOLOGIES

### Sample Beginning National Salary Ranges

Welders

\$16,333-\$37,916

Heavy Equipment & operations

\$24,217- \$57,192

Electronics & Electrical Technology

\$33,585- \$55,340

Sheet Metal & Machine tools

\$36,060- \$53,585

### Education Level & Related Occupations

#### High School

Network Installer Educator  
Special Effects Animator  
Maintenance Mechanic  
Welder

#### Certificate and/or AA degree

Production Manager  
Special Effects Editor  
Machine Technician  
Composite Fabricator

#### Bachelors

Industrial & Technology  
Multimedia Author  
Manufacturing Engineer  
Quality Control Inspector

From cars to contact lenses, lipstick to bicycles this industry sector creates some of the best products and highest paying skilled jobs in the workforce. While some manufacturing jobs are declining, high-tech manufacturing is hard at work creating products to solve many of today's most challenging problems. Because robots and automation take care of the repetitive work, today's manufacturing employees have more challenging and interesting job assignments.

### Traits and skills necessary for success in this industry

#### Are You?

- Curious about how things work
- At ease in the mechanical world

#### Do You?

- Like to work with your hands
- Follow assembly instructions
- Enjoy computer/technical magazines
- Like to work with computers/ machines
- Use math skills
- Apply scientific and technical
- Grasp how complicated equipment works

### Machining and Forming Technologies

The Machine and Forming Technologies pathway provides students with an understanding of manufacturing processes and systems common to careers in machine tool and materials forming industries. Representative topics include trade vocabulary; shop math; basic material identification; proper use of hand and machine tools; reading precision measuring tools within .001" and the interpretation of machined and formed-part prints; the cutting, shaping, fastening, and finishing of machined parts; fixtures; forging, molding (casting), cold forming, and shearing processes.

### SDA Pathway Courses

- Introduction to Technology
- Metals II
- Welding and Metal Fabrication
- Enrichment - Internship

