



MANUFACTURING & PRODUCT DEVELOPMENT

MAY 2025

newsletter

VOL. 4, NO. 9

STUDENT QUESTION & ANSWERS



Why did you pick this pathway?

I chose this pathway because no other electives piqued my interest. I didn't want to waste my time in classes like drama or photography—instead, I'd rather play with torches and hot metal and learn a skill that could also become a career.

Favorite thing you learned in your pathway?

My favorite thing I've learned in welding is not only how to weld, but also how the process of welding works. I also learned there are other options after high school besides college, like working in trades or going to a trade school.

Briefly describe your participation in experiences and activities related to your pathway.

I've participated in a couple of different activities through welding, like the Tiger Romp competition at Reedley College. I was also given the opportunity to earn a welding certification through high school, which helps increase job opportunities after graduation.

Favorite memory of being a part of the pathway.

My favorite memory from welding class was when we were learning how to strike the arc of a torch, and I unknowingly turned the gas way too high—causing a small explosion and a huge flame that shot straight at my teacher's face. Luckily, he kept his hair and eyebrows, and I learned to always keep my torch low when lighting it.

Advice to students interested in your pathway.

The best advice I'd give to a student interested in welding is to take the class—why not? Welding is a valuable skill you won't learn for free anywhere else, and if you decide it's not for you, it's still an easy passing grade to help boost your GPA.

Do your future goals include what you learned in your pathway?

Yes, I plan to use my welding knowledge as I go through trade school for diesel automation. I want to be certified in welding and eventually use both welding and diesel automation in my business and career.

Plans after high school:

My plan after high school is to attend WyoTech, a diesel automation trade school in Laramie, Wyoming. I'll be attending with two of my close friends, sharing an apartment with them, and after the 9-month course, I'll return with a certification and job placement.



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PATHWAY AT A GLANCE



The Manufacturing and Product Development sector provides knowledge in the manufacturing processes and systems, including graphic design production, machine tooling and forming, welding and materials joining, and product innovation and design. The Welding and Materials Joining pathway at Dinuba High School provides students with an understanding of manufacturing processes and systems common to careers in welding and related industries. This pathway is designed around the American Welding Society (AWS) guidelines for the Entry Level Welder. Students will have the opportunity to learn about the interpretation and layout of welded and assembled-part prints, cutting, mechanical bonding, joining, cohesive bonding, adhesive bonding, and mechanical fastening. The knowledge and skills that are attained in this pathway are designed to prepare students for entry to a career, postsecondary education, or advanced technical training.

PATHWAYS AT DHS

Welding & Material Joining





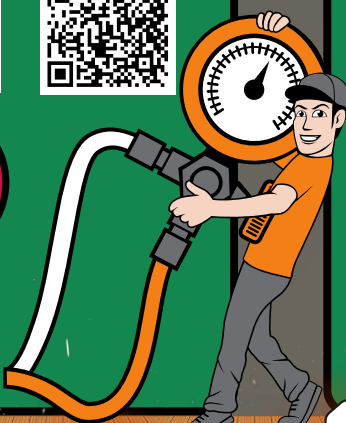
MANUFACTURING & PRODUCT DEVELOPMENT



COLLEGE KNOWLEDGE

The Welding & Materials Joining Pathway at Dinuba High School provides students with the foundational knowledge and skills to prepare them for different paths in college. While in this pathway, students have the ability to earn up to 6 college units and earn industry recognized safety and welder certifications. Student who may be interest in pursuing a career in Welding would want to explore all of the opportunities available at Reedley College. Reedley College offers 10 different certificate of achievement and associate degree options within their Manufacturing, Machine Tool Technology, and Welding Program. Students who may be more interested in the engineering side of product development should take a look at the Industrial & Manufacturing Engineering program at California Polytechnic State University in San Luis Obispo. They offer several different undergraduate and graduate programs depending on the interest of the student. In 2021, the top programs included Business Administration, leading with 1,993 completions, followed by Truck and Bus Driver/Commercial Vehicle Operator and Instructor with 851 graduates. The sciences made a strong showing with 370 students completing programs in Biological and Physical Sciences. Technical skills are also on the rise, with 267 students mastering HVAC and Refrigeration Maintenance and 262 becoming skilled Welders. CSU Fresno stands at the forefront of our top schools with 1,376 graduates, while Advanced Career Institute and Fresno City College boasted 1,022 and 654 completions, respectively. Embark on your future today—your journey begins here!

Use the QR code to take a virtual tour of Cal Poly's College of Engineering



UPCOMING EVENTS AT DHS



May 5 Spring Sports Banquet	May 18 Baccalaureate
May 6 CMA Senior Celebration	May 19 Scholarship Night
May 7 Skills Banquet	May 20 Excellence in Education Awards
May 8 Urban/Rural Firefighter Graduation College & Career Exploration Workshop Choir Spring Show Opening Night	May 21 Band Spring Concert Seniors LAST DAY
May 9 Elementary Track Meet Information's System Celebration Choir Spring Show Opening Night	May 22 Grad Nite
May 10 Choir Spring Show Final Night	May 23 Wildland Firefighter Graduation
May 12 College Signing Night	May 26 Memorial Day-No School MEMORIAL DAY
May 13 StuCo Banquet	May 27 Senior Breakfast Grad Walk Senior Sunset Dance
May 14 Jazz Band Concert	May 28 Grad Practice #1
May 15 FFA Awards/Banquet	May 29 DHS Minimum Day Grad Practice #2 DHS Graduation
May 16 Track & Field CIF Division 2 Championship CNA Graduation NJROTC Banquet	May 30 DHS Minim Day Last Day of School

EDUCATION LEVEL & RELATED OCCUPATIONS

Entry Level Careers (High School Diploma)

- Furniture Finisher 💰 \$26,200 - \$48,730 ➡ Declining Demand
- Electronics Assembler 💰 \$28,820 - \$57,240 ➡ Increasing Demand
- Production Woodworker 💰 \$23,430-\$47,330 ➡ Stable Demand
- Plumber 💰 \$36,700 - \$99,920 ➡ Increasing Demand
- Recycling Service Worker 💰 \$25,200-\$50,500 ➡ Increasing Demand
- Upholsterer 💰 \$23,700-\$52,190 ➡ Stable Demand
- Automobile Assembler 💰 \$27,000-\$63,190 ➡ Stable Demand

Technical Level Careers (Certificate and/ or Associate Degree)

- Electrician 💰 \$35,000-\$130,000 ➡ High Demand
- Electrical Engineering Tech 💰 \$37,020-\$99,800 ➡ Stable Demand
- Steamfitter 💰 \$36,700 - \$99,920 ➡ Increasing Demand
- Pipefitter 💰 \$36,700 - \$99,920 ➡ Increasing Demand
- Industrial Machinist Mechanic 💰 \$37,370-\$79,270 ➡ High Demand
- Welder 💰 \$31,350-\$63,650 ➡ High Demand
- Sheet Metal Worker 💰 \$34,450-\$95,010 ➡ Stable Demand

Professional Level Careers (Bachelor's Degree)

- Manufacturing Manager 💰 \$64,150-\$170,470 ➡ Stable Demand
- Biomedical Equipment Technician 💰 \$65,460-\$83,690 ➡ High Demand
- Quality Control Engineer 💰 \$77,570-\$108,000 ➡ Stable Demand
- Logistics Specialist 💰 \$45,160-\$122,390 ➡ High Demand
- Electronics Engineering Tech 💰 \$39,840-\$99,210 ➡ Stable Demand
- Quality Assurance Director 💰 \$90,000-\$150,000 ➡ Stable Demand

MANUFACTURING AND PRODUCT DEVELOPMENT

Career Cluster:

Manufacturing & Product Development

Jobs in this cluster plan and figure out the best way to make these things. They decide which materials (like wood, metal, or plastic) to use and how to turn these materials into cool products.

College & Career Resources

College Majors:

- Industrial Engineering
- Welding Technology
- Product Engineering

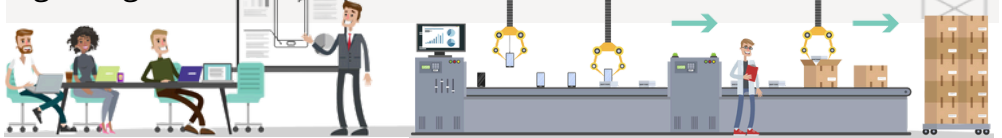
College & Universities:

- Fresno State
 - Industrial Technology
- Cal Poly
 - Manufactured Engineering
- Reedley College
- Fresno City College
 - Welding Technology
 - Computer Aided Manufacturing

[CLICK HERE](#)

In this pathway, people plan, manage, and make cool stuff by transforming materials into products. Whether it's turning wood into furniture, metal into cars, or plastic into toys, manufacturing experts are the magic behind it all. They also help with important tasks like figuring out the best ways to make things efficiently, keeping everything running smoothly, and making sure everything is safe and sound.

At Dinuba High School you can study and take classes in the Welding & Materials Joining Pathway and learn how to weld. Students get to wear special gear like helmets and gloves to protect themselves, and they learn all about different metals and how to join them together. It's a bit like doing a craft project, but on a big, strong scale!



ZOOM INTO CAREERS

TED Ed [CLICK HERE](#)

The Making of A Young Entrepreneur: Gabrielle Jordan Williams
Kids Can Too | Noah Diguangco

epic! SCHOOL Books to READ! Sign-in to Clever & click on the book to read!

FORD K-2

The BOY WHO INVENTED the POPSICLE K-2

Thomas Edison K-2

LEGO MANUFACTURERS 3-6

A Picture Book of Benjamin Franklin 3-6

INVENTIONS AND INVENTORS 3-6

A DAY IN THE LIFE OF AN ASSEMBLER K-6

CAREERS AT THE Ford ASSEMBLY PLANT K-6

MEET A FOOD QUALITY ASSURANCE MANAGER K-6

MEET A LOGISTICS COORDINATOR K-6

MEET A WELDER K-6

MEET AN APPRENTICE WELDER K-6

DAY IN THE LIFE OF A LOGISTICS MANAGER K-6

The mission of the College & Career Department is to empower all students with educational and work-based experiences to ensure that they are college, career, & life ready.

For more information visit our [website!](#)