



MANUFACTURING & PRODUCT DEVELOPMENT

MAY 2024

newsletter

VOL.3, NO.9

STUDENT QUESTION & ANSWERS



Why did you pick this pathway?

I love welding, I love everything about it. I love how when you start welding, everything around you disappears and it's just you.

Favorite thing you learned in your pathway?

The thing I enjoy most that I've learned in this pathway is stick welding.

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

I've gone to competitions for welding and I was also in charge of a project where we built four ladder racks for the Dinuba Fire Department. I will soon have the opportunity to get certified in stick welding through Reedley College.

Favorite memory of being a part of the pathway.

My favorite memory has to be the friendships I've made. Thanks to this class, the friends I've made are now some of the best friends I have to this day.

Advice to students interested in your pathway.

Take it, if you're the type of person who loves to get their hands dirty and love to work in a group take this class.

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

Yes, because I took this class, it really opened my eyes and showed me that welding is what I want to do for the rest of my life. So, I joined the Navy to make sure I can keep welding in the future.

Plans after high school:

After high school, on August 27, I'm heading off to boot camp for the Navy to become a Navy diver.



NICHOLAS RUIZ, SENIOR

MANUFACTURING & PRODUCT DEVELOPMENT

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





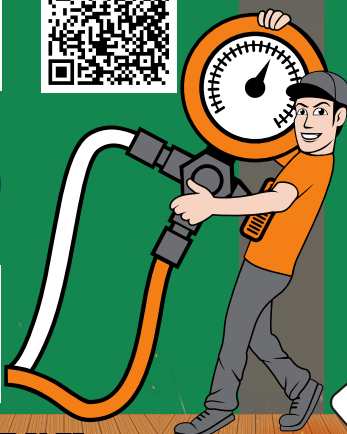
MANUFACTURING & PRODUCT DEVELOPMENT

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



May UPCOMING EVENTS AT DHS



May 1 Military Signing Night	May 20 Scholarship Night
May 2 CNA Graduation	May 21 Excellence in EDU
May 3 Powder Puff Game	May 22 Band Spring Concert Awards
May 6 Spring Sports Banquet	May 23 Seniors Last Day
May 7 CMA Senior Celebration	May 23 Senior Sunset/Meltdown
May 9 Urban/Rural Firefighter Graduation	May 24 Grad Nite
May 10 Spring Show Annual FFA Plant Sale	May 27 Memorial Day - No School
May 11 Annual FFA Plant Sale	May 28 Senior Breakfast
May 13 College Signing Night	May 28 Grad Walk
May 14 Student Council Pool Party	May 28 8th Grade Promotion Celebration
May 14 Skills Banquet	May 29 Graduation Practice #1
May 16 FFA Awards Banquet	May 29 8th Grade Promotion Ceremony
May 17 Wildland Firefighter Graduation	May 29 SV/RR/ Adult Graduation
May 19 Baccalaureate	May 30 Minimum Day
	May 30 Graduation Practice #2
	May 31 DHS Graduation Ceremony
	May 31 Minimum Day
	May 31 Year End Video

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 - \$63,660 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 - \$121,390 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

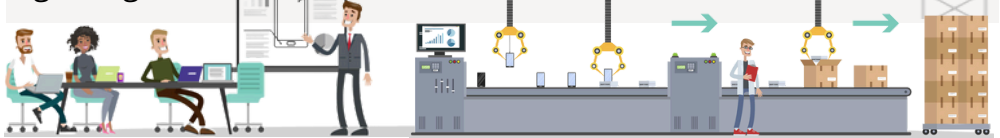
College & Universities:

- 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!](#)