



WELDING TECHNOLOGY

2023-2024

Learn on the same kind of cutting-edge, topnotch equipment that professional welders use out in the workforce. No matter where you live in the great state of Texas, you can find our welding courses nearby.

At TSTC, you can get hands-on learning with top-of-the-line technology at the best technical college in the state. Class sizes are small. Training is one-on-one. You'll have every opportunity to learn on the best equipment with the best teachers personally guiding you every step of the way.

Welding Career Pathways



Postsecondary Opportunities

Associates Degrees

- Welding Technology/Welder
- Machine Shop Technology/Assistant
- Operations Management and Supervision
- Occupational Safety and Health Technology/Technician

Bachelor's Degrees

- Welding Engineering Technology/Technician
- Biomedical Technology/Technician
- Operations Management and Supervision
- Environmental Health

Master's, Doctoral, and Professional Degrees

- Welding Engineering Technology/Technician
- Occupational Health and Industrial Hygiene
- Operations Management and Supervision
- Environmental Health

Work-Based Learning and Expanded Learning Opportunity

Exploration Activities	Work-Based Learning Activities
<ul style="list-style-type: none"> • Participate and compete in SkillsUSA • Job shadow a machinist 	<ul style="list-style-type: none"> • Work in a local business or industry apprenticeship • Join the American Welding Society

Industry-Based Certifications

- API 1104 Welding Pipelines and Related Facilities
 - AWS Certified Welder
 - AWS D1.1 Structural Steel
 - AWS D9.1 Sheet Metal Welding
 - AWS SENSE Level 1: Entry Welder
 - Industrial Technology Maintenance (ITM) -
 - Maintenance Welding
 - NCCER Construction Technology Certification Level I
 - NCCER Core
 - NCCER Welding Level I
 - Welding - Job Ready
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- OSHA 30 Hour General*
- *IBC sunseting 8/31/24



MANUFACTURING TECHNOLOGY

Statewide Program of Study

The Welding program of study focuses on the development and use of automatic and computer-controlled machines, tools, and robots that perform work on metal or plastic. CTE learners will learn how to modify parts to make or repair machine tools or maintain individual machines, and how to use hand-welding or flame-cutting equipment.

CAREER OPPORTUNITIES

Welders keep the world together. That's why welding is a recession-proof career. Welders are in demand everywhere. And in no state is that more true than in Texas. We have more welders here than anywhere else.

Welding is the backbone of manufacturing, including the booming industries in our state: petrochemical, manufacturing, fabrication and aerospace/aviation.



STRUCTURAL WELDING TECHNOLOGY CERTIFICATE 2

TSTC COURSE	Crosswalk Suggestion (CTE/ TEKS Title)	PEIMS Suggestion	CTE Level	TSTC Credit
TECM 1303 Technical Calculations	Applied Mathematics for Technical Professionals	12701410	1	3
WLDG 1407 Intro To Welding Using Multiple Processes	Intro to Film Interpretation of Weldments (A)	1303687	2	4
WLDG 1428 Intro To Shielded Metal Arc Welding	Intro to Film Interpretation of Weldments (B)	1303687	1	4
WLDG 1313 Intro To Blueprint Reading for Welders	Intro to Welding	13032250	1	3
WLDG 1417 Intro To Layout And Fabrication	Welding 1 (A)	1303233	2	3
WLDG 1434 Intro to Gas Tungsten Arc	Welding 1 (B)	1303233	2	4
WLDG 1457 Inter Shielded Metal Arc Welding	Welding 2 (A)	1302400	3	4
WLDG 2413 Inter Welding Using Multiple Processes	Welding 2 (B)	1302400	3	4
WLDG 2435 Advanced Layout And Fabrication	Practicum in Manufacturing (A)	13033000	4	4
WLDG 2443 Advanced Shielded Metal Arc Welding	Practicum in Manufacturing (B)	1303300	4	4
WLDG 1435 Intro to Pipe Welding	Practicum of Manufacturing II (A)	13033010	4	4
WLDG 2406 Inter Pipe Welding	Practicum of Manufacturing II (B)	13033010	4	4
WLDG 2453 Advanced Pipe Welding	Practicum in Entrepreneurship	1303425	4	4



It is the policy of La Vega ISD not to discriminate on the basis of race, color, national origin, sex or handicap in its vocational programs, services or activities as required by Title VI of the Civil Rights Act of 1964, as amended; Title IX of the Education Amendments of 1972; and Section 504 of the Rehabilitation Act of 1973, as amended.