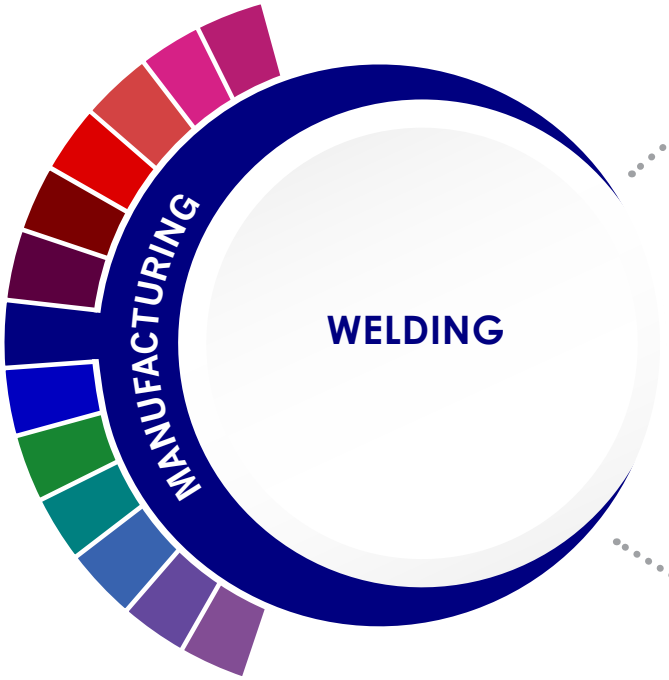


COURSES

LEVEL 1

Welding I

LEVEL 2

Welding II/Lab

LEVEL 3

Practicum in Manufacturing

LEVEL 4

POSTSECONDARY OPTIONS

HIGH SCHOOL/ INDUSTRY CERTIFICATION	CERTIFICATE/ LICENSE*	ASSOCIATE'S DEGREE	BACHELOR'S DEGREE	MASTER'S/ DOCTORAL PROFESSIONAL DEGREE
AWS Certified Welder, D1.1, D9.1	Certified Welder or Welder Inspector	Welding Technology/ Welder	Welding Engineering Technology/ Technician	
ASW SENSE Level 1	Machining Level 1 - CNC Milling: Programming Setup & Operations	Machine Shop Technology/ Assistant	Biomedical Technology/ Technician	Occupational Health and Industrial Hygiene
API 1104 Welding Certificate	Certified Welding Engineering	Operations Management and Supervision		
NCCER Welding, Level 1	Certified Environmental, Safety, and Health Trainer	Occupational Safety and Health Technology/ Technician	Environmental Health	

Additional industry based certification information is available from the TEA CTE website.

For more information on postsecondary options for this program of study, visit TXCTE.org.

OCCUPATIONS	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Welders, Cutters, Solderers, and Brazers	$41,350	6,171	9%
Welding Soldering and Brazing Machine Setters, Operators and Tenders	$40,040	280	9%

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities:
Participate and compete in SkillsUSA
Job shadow a machinist

Work Based Learning Activities:
Apprenticeship at a local business or industry
American Welding Society

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. Students 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.

The Manufacturing Career Cluster® focuses focuses on planning, managing, and performing the processing of materials into intermediate or final products and related professional and technical support activities such as production planning and control, maintenance, and manufacturing/process engineering.

Successful completion of the Manufacturing Technology program of study will fulfill requirements of the Business and Industry Endorsement.

Approved Statewide Program of Study - September 2019

Texas Education Agency

COURSE INFORMATION

COURSE NAME	SERVICE ID	PREREQUISITES (PREQ) COREQUISITES (CREQ)	GRADE
Welding I	13032300 (2 credit)	None	
Welding II/Lab	13032400 (2 credits) 13032410 (3 credits)	PREQ: Welding I	
Practicum in Manufacturing	13033000 (2 credits) 13033005 (3 credits) 13033010 (2 credits) 13033015 (3 credits)	None	

FOR ADDITIONAL INFORMATION ON THE MANUFACTURING CAREER CLUSTER, PLEASE CONTACT:

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https://tea.texas.gov/cte