

Welding 2024-2025

Short Course Description:	This program provides training for students who wish to prepare for jobs in the Welding Trade. A combination of lab and classroom activities provides the experience and knowledge to help you gain an entry-level position in this growing career field. This course blends curriculum prepared by National Center for Construction Education and Research (NCCER), Hobart Institute of Welding, OSHA, and our professional trades instructors.					
Certifications Offered:	<ul style="list-style-type: none"> ● NCCER Core Curriculum ● AWS D1.1 ● Mid-East Safety Certificate <ul style="list-style-type: none"> ○ OSHA 10 hour safety ○ American Safety and Health Institute First Aid/CPR/AED ○ Forklift Certificate ○ Scissor/Man Lift Certificate 					
Start Date:	August 20, 2024					
End Date:	May 22, 2025					
Hours/Days:	Monday – Thursday, 4:30 – 9:30 pm (5 hours/day)					
Program Hours:	720					
Instructional Weeks:	39					
Book/Laptop Cost:	\$773	Supplies:		\$765		
Tuition:	\$5,370	Fees:		\$3,940		
Total Program Cost:	\$10,848					
Additional program requirements not included in tuition:						
Entrance Requirements:	Provide copy of high school or GED transcript. Students must also complete all financial aid arrangements for payment of tuition, fees, books and supplies.					
WorkKeys – required/not required:	Required					
WorkKeys Score Levels:	Workplace Documents	3	Graphic Literacy	3	Applied Math	3
Graduation Rate	67%					
Job Placement Rate	90%					
Program Completion Requirements:	<ul style="list-style-type: none"> ● A “C” average or higher ● Attendance rate not less than 90% ● Payment of all outstanding obligations to the school ● Current resume on file with Student Services ● Stafford Loan Exit Counseling complete (if applicable) 					

Welding Course Outline

Core Curriculum	Basic Safety, OSHA 10 Safety, Intro to Construction Math, Intro to Hand Tools, Intro to Power Tools, Intro to Construction Drawings, Basic Rigging, Basic Communication Skills, Basic Employability Skills, Intro to Material Handling-Forklift-Scissor Lift, First Aid, CPR, AED
Blue Print Reading for Welders & Fitters	Introduction to blueprint reading for welders and fitters, Review of Welding Symbols, Standard Drawing Lines and Symbols, Interpreting Blueprint Information, Set-up Tools, Set-up applications
Thermal Cutting Oxyfuel Process	Intro to Oxyfuel Cutting, Safety and Health of Welders, Assembly and Preparation of Equipment, Application of Fuel Gases for Welding and Cutting
Thermal Cutting Plasma Process	Intro to Plasma Cutting, Safety and Health of Welders, Assembly and Preparation of Equipment, Application of Plasma for Cutting,
SMAWB (Basic Stick)	Shielded Metal Arc Welding Basic, course Overview, Introduction to Shielded Metal Arc Welding, Safety and Health of Welders, The Five Essentials, Striking and Controlling the ARC, Pad of Beads, flat position and Crater filling, The Welders role in Quality Control
SMAWA-1 (Advanced 1 STRUCTURAL)	Shielded Metal Arc Welding Pre-pipe Course Overview, Introduction to Shielded Metal Arc Welding, Safety and Health of Welders, Single V-Groove Weld (2G Position), Horizontal, Procedure and Welder Qualification, Single V-Groove Weld (2G Position), Horizontal, destructive testing, SMAW AWS D1.1. Structural Certification Prep/Testing
Weld Symbols	Fillet Weld Symbol, Plug Slot and Seam Symbols, Groove and Combination Weld Symbols
GMAWB (Basic MIG)	Gas Metal Arc Welding Course Overview, Introduction to Gas Metal Arc Welding, Safety and Health of Welders, Installation and Set-up of Equipment, Surface Welds Flat Position
FLUXCORE	Flux Core Welding Course Overview, Introduction to Flux Core Welding, Safety and Health of Welders, Installation and Set-up of Equipment, Surface Welds Flat Position
GTAW (Basic TIG)	Gas Tungsten Arc Welding Course Overview, Introduction to Gas Tungsten Arc Welding, Safety and Health of Welders, Equipment Set-up, Adjustment and Shut Down, Stringer Bead, Flat position (Carbon Steel)
Fabrication/Metal Finishing	Layout, Clamping, Tacking, Finish Welding/grinding rough-finish,
Final Exam/Practical	Final Exam/Practical

Welding Hour Breakdown

Course	Theory	Lab	Total Hours
Core Curriculum	64	56	120
Blueprint Reading for Welders	30	10	40
Oxyfuel Cutting	7	23	30
Plasma Cutting	7	23	30
SMAWB Basic Stick	20	40	60
SMAWA-1 Advanced Structural	30	90	120
Weld Symbols	20	40	60
GMAWB	20	40	60
Fluxcore	20	40	60
GTAW	20	40	60
Fabrication	20	40	60
Final Exam / Practical	0	20	20
Total	258	462	720