Kentucky CTE

Advanced Manufacturing: Welding Technology: Gas Tungsten Arc Welding and Lab 480525 (2026–2027)

Practice and perform safe shop procedures at all times. 1	1 Practice and perform safe shop procedures at all times. 1
Apply the technical math required for employment opportunities in welding. 2	2 Apply the technical math required for employment opportunities in welding. 2
Perform all duties with emphasis on integrity, responsibility, quality, discipline and teamwork. 3	3 Perform all duties with emphasis on integrity, responsibility, quality, discipline and teamwork. 3
Use lab equipment and tools. 4	4 Use lab equipment and tools. 4
Apply principles of GTAW to weld metals. 5	5 Apply principles of GTAW to weld metals. 5
Set up GTAW systems. 6	6 Set up GTAW systems. 6
Apply knowledge of the effects of variables to weld plates and pipes. 7	7 Apply knowledge of the effects of variables to weld plates and pipes. 7
Apply knowledge of ba co physical, and	8 Apply knowledge of basic metallurgy to control chemical, physical, and mechanical characteristics of non-ferrous metals. 8

Skip to main content

mechanical characteristics of non-ferrous metals. 8

Identify and select GTAW electrodes. 9

9 Identify and select GTAW electrodes. 9

Identify and select GTAW fill rods. 10

10 Identify and select GTAW fill rods. 10

Clean metals with solvent or cleaning fluids. 11

11 Clean metals with solvent or cleaning fluids. 11

Set up and operate plasma arc-cutting equipment. 12

12 Set up and operate plasma arc-cutting equipment. 12