

Course Descriptions for Welding

WELDING

Introduction to Welding

This course is an introduction to welding processes, products, equipment and terminology. Through discussions and lab work, the student will cover welding and cutting safety, oxyfuel welding and cutting and various types of arc welding: shielding metal, gas metal, flux core and gas tungsten, plus plasma-arc cutting and air-carbon-arc cutting.

Welding SMAWII-Stick

Apply the principles of shield-metal-arc welding to master welding common joints in all positions. Not only will the student learn to produce quality open-rott, single V-groove and multi-pass groove welds with backing on 3/8-inch mild steel plate, but also cut with oxyacetylene, and use machine and hand torches to cur straight and irregular shapes in carbon and alloy steel.

Welding GMAW & FCAW (MIG)

Students will expand their knowledge and ability into gas metal and flux-core arc welding through instruction in welding safety, GMAW equipment adjustments, metal transfer, and shielding gases. They will build skills at making quality GMAW weld in all positions on mild steel sheet to 3/8-inch plate. The student will also practice using short-circuit transfer to make fillet and groove welds. It time permits, the student will also train of flux-cored arc welding (FCAW) in all positions on fillet and groove welds. (Depending on the students progress and class time limitations, the student may need more than on GMAW course to master these skill sets.)

Welding GRAW (TIG)

Students will train in material preparation and in selecting and preparing tungsten. In addition to getting familiar with different torches and filler metals, they will learn to weld carbon steel, stainless steel and aluminum.