

# WELDING (WELD)

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## WELD-105 BASICS OF WELDING

**0.50 credit hours, 0.67 contact hours (0.67 Lab Hours Per Week)**

Course will review welding shop safety rules, American Welding Society specifications for the welding joint numbering system and how to properly use a square and tape measure in accordance with industrial standards. \*.5 credit hours/0.67 billed contact hours\*

## WELD-110 OXYACETYLENE WELDING

**2 credit hours, 2.47 contact hours (2.47 Lab Hours Per Week)**

Modules will provide students with a basic knowledge of the oxyfuel welding process including how to properly set up an oxyfuel welding station, establish a welding puddle with and without filler rod and production of basic welds in the flat position using the oxy-fuel gas welding process in accordance with the American Welding Society standards. \*2 credit hours/2.47 billed contact hours\*

Fee: \$50.00

## WELD-115 CUTTING PROCESSES

**1 credit hour, 1.27 contact hours (1.27 Lab Hours Per Week)**

Modules will review oxy-fuel cutting process and fundamental skills necessary in production and non-production settings. Students will also further develop oxy-fuel cutting techniques to cut materials and review the plasma cutting process to be used in production and non-production settings. \*1 credit hour/1.27 billed contact hours\*

Fee: \$50.00

## WELD-120 BRAZING AND SOLDERING

**1 credit hour, 1.47 contact hours (1.47 Lab Hours Per Week)**

Modules will include knowledge and skills necessary to set up brazing and soldering station, perform basic brazing techniques, perform a braze weld on 1/4" plate, identify and silver-braze copper to stainless steel, and solder copper fittings using 95-5 solder as defined by the American Welding Society. \*1 credit hour/1.47 billed contact hours\*

Fee: \$60.00

## WELD-125 SHIELDED METAL ARC WELDING

**4 credit hours, 6.4 contact hours (6.40 Lab Hours Per Week)**

Modules will include a basic understanding of the history and fundamentals of the shielded metal arc welding process, the electrode numbering system as established by the American Welding Society, as well as striking the arc and running stringer beads E6010 and E7018 electrodes. Materials will also overview the characteristics that allow operators to produce quality welds in order to meet the American Welding Society standards. \*4 credit hours/6.4 billed contact hours\*

Fee: \$75.00

## WELD-130 ADVANCED ARC WELDING

**6 credit hours, 9.2 contact hours (9.20 Lab Hours Per Week)**

Modules include knowledge and skills for student to effectively complete various advanced arc welding functions including the vertical, horizontal and overhead tee joints and butt joints to meet the specific standards as determined by the American Welding Society. \*6 credit hours/9.2 contact hours\*

Fee: \$125.00

## WELD-135 WELDING METALLURGY

**1.50 credit hours, 2 contact hours (2 Lab Hours Per Week)**

Modules contain an introduction to metallurgy, including blue-print reading, the differences between non-ferrous and ferrous metals, the numbering systems associated with metals, repairing cast iron, repairing stainless steel and the weld testing procedures as determined by the American Welding Society. \*1.5 credit hours/2 billed contact hours\*

Fee: \$50.00

## WELD-140 GAS METAL ARC WELDING

**3 credit hours, 4.47 contact hours (4.47 Lab Hours Per Week)**

Modules contain information necessary to acquire the knowledge and skills students need to effectively perform gas metal arc welding in accordance with standards set by the American Welding Society. Modules will explain the GMAW, arc run beads, all positions of weld joints and GMAW of aluminum. \*3 credit hours/4.47 billed contact hours\*

Fee: \$100.00

## WELD-145 GAS TUNGSTEN ARC WELDING

**5 credit hours, 8 contact hours (8 Lab Hours Per Week)**

Modules will consist of teaching the basics of the gas tungsten arc welding process including the TIG process and equipment maintenance, welding aluminum in the flat position (GTAW), and the knowledge and skills necessary to run beads in three positions when welding the four basic joints: but, tee, lap and corner. \*5 credit hours/8 billed contact hours\*

Fee: \$110.00

## WELD-150 PIPE WELDING

**4 credit hours, 7 contact hours (7 Lab Hours Per Week)**

Modules in this course contain knowledge and practice to equip students to accurately identify all aspects of pipe welding techniques and applications. Students will develop the skills to produce various quality pipe welds in accordance with the American Welding Society. \*4 credit hours/7 billed contact hours\*

Fee: \$90.00

## WELD-155 SPECIAL APPLICATIONS

**2 credit hours, 2.67 contact hours (2.67 Lab Hours Per Week)**

Modules will provide a comprehensive knowledge of special welding applications including fabricating a project, cast iron repair, hardsurfacing, and tool and die welding. \*2 credit hours/2.67 billed contact hours\*

Fee: \$60.00

## WELD-190 APPLIED WELDING FOR SKILLED TRADES

**4 credit hours, 4 contact hours (4 Lecture Hours Per Week)**

This course provides basic welding skills for students in the skilled trades programs (such as Automotive and Agricultural Equipment Technology). American Welding Society specifications and proper selection and use of welding processes for specific trade applications are covered.

Fee: \$60.00