

# Additional Welding Courses

These additional welding courses are also designed for incoming students with little or no welding experience. These two courses are shorter in length and more specific in scope than our career-level programs. They are also designed for the student who wants to learn the basic techniques for depositing sound welds on carbon steel plate only (no pipe).

## GENERAL SHOP WELDING (500 HOURS):

**DESCRIPTION:** The General Shop Welding course is very specific and limits its scope to Shielded Metal Arc Welding ("Stick") only. It consists of the basic techniques required to deposit sound welds on carbon steel plate. Shop projects include various joint designs in all positions on plate. Several electrode types and sizes are used on both AC and DC welding machines. Theory is taught which covers safety, proper machine setting adjustments, basic metal knowledge and welding symbols.

**OBJECTIVES:** Upon graduation, the student should be able to perform tests in accordance with American Welding Society (AWS) Structural Welding Code and should enter the field as a production or maintenance shielded metal arc welder on an entry level. Specifically, the graduate should be able to:

1. Understand & follow safety practices in the welding shop.
2. Cut using Plasma/Oxyacetylene processes.
3. Basic knowledge to set up and operate different types of stick welding machines.
4. Understand and discuss basic welding theory.
5. Weld carbon steel plate in flat, horizontal, vertical and overhead positions using Shielded Metal Arc.

### COURSE OF STUDY:

Plasma/Oxyacetylene Welding/Cutting.....	50 hours
Electric Arc Flat Position.....	100 hours
Electric Arc Horizontal Position.....	75 hours
Electric Arc Vertical Position.....	100 hours
Electric Arc Overhead Position.....	50 hours
Theory.....	75 hours
Testing (certification additional charge).....	50 hours

**TOTAL = 500 hours**

## PRACTICAL SHOP WELDING (600 HOURS):

**DESCRIPTION:** The Practical Shop Welding course consists of metal cutting using the Oxyacetylene torch and utilizing commonly employed, basic welding techniques in "Stick," "Mig," and "Flux Cored" to deposit sound welds on carbon steel plate. Shop projects include various joint designs in all positions on plate. In Shielded Metal Arc Welding ("Stick"), several electrode types and sizes are used on both AC and DC welding machines. Theory covers safety, proper machine setting adjustments, basic metal knowledge and welding symbols.

**OBJECTIVES:** Upon graduation, the student should be able to perform tests in accordance with American Welding Society (AWS) Structural Welding Code in Shielded Metal Arc Welding, Gas Metal Arc Welding and Flux Cored Welding on carbon steel plate. The graduate should enter the field as a production or maintenance welder on an entry level using any process covered in this program.

- 1-5. Meet all objectives of the General Shop Courses (above).
6. Weld carbon steel plate in flat, horizontal, vertical and overhead positions using and Gas Metal Arc Welding.
7. Weld carbon steel plate in flat, horizontal, vertical and overhead positions using Flux Cored Welding.

### COURSE OF STUDY:

Plasma/Oxyacetylene Welding/Cutting.....	60 hours
Electric Arc Flat Position.....	100 hours
Electric Arc Horizontal Position.....	75 hours
Electric Arc Vertical Position.....	100 hours
Electric Arc Overhead Position.....	50 hours
Gas Metal Arc Welding (MIG).....	60 hours
<i>(Short Circuit/Globular/Spray Transfer Modes)</i>	
Flux Cored Arc Welding.....	30 hours
<i>(Self-shielded/Gas-shielded)</i>	
Theory.....	75 hours
Testing (certification additional charge).....	50 hours

**TOTAL = 600 hours**

### ! Not sure which program is right for you?

Ask our School Administrator to talk with you about the advantages of each program. It is important to note that these two shorter, courses of study ARE NOT eligible for financial aid. Students who intend to apply for financial aid should select a career-level program of study on previous pages.