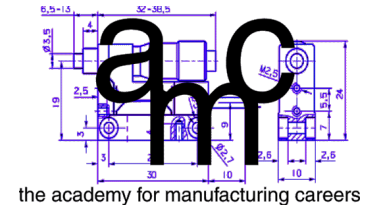


Academy for Manufacturing Careers

Welding Certificate



Industrial Blueprint Reading – 2 credits - 32 hours

This course provides the understanding and interpretation of a variety of mechanical and electrical blueprints. Emphasis is placed on reading and interpreting blueprints found in a manufacturing environment. Student will gain the ability to recognize and identify symbols and specifications common to modern industrial blueprints. Topics include: lines and symbols, views, material, form and position, title blocks, sketching, features, and sections.

Materials & Metallurgy – 2 credits – 32 hours

This course covers the student with a working knowledge of the properties, uses, and treatment methods used to alter the properties of commonly used metals and alloys. This knowledge may be applied to the design, selection, processing and testing of metal parts.

Welding I – 4 credits – 64 hours

This course covers basic theory and fundamental application of welding as required in the metal fabrication industry. The class includes: development of basic skills in preparation, welding and cutting of metal and provides hands-on experience within shielded metal arc welding and oxy-acetylene welding.

Welding II – 4 credits – 64 hours

This course provides GMAW (gas metal arc welding formally known as MIG welding) and GTAW (gas tungsten arc welding formally known as TIG welding) processes and techniques. Topics will include: safety, use of equipment, power sources, shielding gases, filler metals, welding techniques, troubleshooting, weld defects and welding in the flat and horizontal positions.

Welding III – 4 credits – 64 hours

Prerequisite: Welding II

This course covers basic theory and fundamental application of welding as required in the metal fabrication industry. Topics include: development of basic skills in preparation, welding and cutting of metal and provides hands-on experience within GMAW and GTAW, and various positions on aluminum and Stainless.

NOTICE OF NONDISCRIMINATORY POLICY AS TO STUDENTS

The Academy for Manufacturing Careers admits students of any race, color, national and ethnic origin, ancestry, religious creed, age, disability, marital status, sexual orientation, gender, or gender expression to all the rights, privileges, programs and activities generally accorded or made available to students at the school. It does not discriminate on the basis of race, color, national and ethnic origin, ancestry, religious creed, age, disability, marital status, sexual orientation, gender, or gender expression in administration of its educational policies, admissions policies, scholarship and loan programs, and any other school-administered programs.



Jackson Area

Manufacturers Association

Helping Manufacturers Succeed & Grow Since 1937

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