PMT - PRECISION METAL TECHNOLOGY

PMT 0070 Welding Assistant 1
Clock Hours: 0
Prerequisites: Limited Access Program
Lab Fee: Yes
The Welder Assistant 1 course prepares students for entry into the welding industry. Students explore career opportunities and requirements of a professional welder. Content emphasizes beginning skills key to the success of working in the welding industry. Students study workplace safety and organization, basic manufacturing processes, metals identification, basic interpretation of welding symbols and oxyfuel gas cutting practices.

PMT 0071 Welding Assistant 2
Clock Hours: 0
Prerequisites: PMT 0070 with a grade of "C" or higher
Lab Fee: Yes
The Welder Assistant 2 course is designed to build on the skills and knowledge students learned in Welder Assistant 1 for entry into the welding industry. Students explore career opportunities and requirements of a professional welder. Content emphasizes beginning skills key to the success of working in the welding industry. Students study drawings and welding symbols, intermediate oxyfuel gas cutting practices, plasma arc cutting principles and basic shielded metal arc welding (SMAW).

PMT 0072 Welder SMAW 1
Clock Hours: 0
Prerequisites: PMT 0071 with a grade of "C" or higher
Lab Fee: Yes
The Welder SMAW 1 course prepares students for entry into the welding industry as a basic Shielded Metal Arc Welder. Students explore career opportunities and requirements of a professional welder. Content emphasizes beginning skills key to the success of working in the welding industry. Students study basic shielded metal arc welding (SMAW), Carbon Arc Gouging (GAC) principles, and visual examination skills.

PMT 0073 Welder SMAW 2
Clock Hours: 0
Prerequisites: PMT 0072 with grade of "C" or higher
Lab Fee: Yes
The Welder SMAW 2 course is designed to build on the skills and knowledge students learned in Welder SMAW 1 for entry into the welding industry as a basic Shielded Metal Arc Welder. Students explore career opportunities and requirements of a professional welder. Content emphasizes beginning skills key to the success of working in the welding industry. Students study employability and welding careers, and intermediate shielded metal arc welding (SMAW).

PMT 0074 Welder
Clock Hours: 0
Prerequisites: PMT 0073 with a grade of "C" or higher
Lab Fee: Yes
The Welder course builds on the skills and knowledge students learned in the Welder Assistant and Welder shielded metal arc welding (SMAW) courses. Students explore career opportunities and requirements of a professional welder. Content emphasizes skills key to the success of working in the welding industry. Students study basic and intermediate Gas Metal Arc Welding (GMAW), basic and intermediate Flux-Core Arc Welding (FCAW), basic and intermediate Gas Tungsten Arc Welding (GTAW), and a basic understanding of pipe welding.

PMT 0101 Welding Symbols and Blueprint Reading
Clock Hours: 0
This course introduces the student to weld symbol interpretation in accordance with American Welding Society (AWS) standards. Welding details with symbols layout provide a systematic approach to blueprint reading. Fundamentals of drawing elements, scales, layouts, and title blocks are included.

PMT 0104 Fundamentals of Metallurgy
Clock Hours: 0
This course provides basic principles of metallurgy. Emphasis is placed on metallurgical terms for metal structures common to the science of materials. Understanding the distinctions between metallic properties of strength, hardness, and ductility provides insight for managing desirable material properties. Differences between ferrous and nonferrous metals are covered in simple definitions, diagrams, and charts highlighting standard industry terms and practices related to metal.

PMT 0121 Shielded Metal Arc Welding Principles
Clock Hours: 0
This course addresses principles related to Shielded Metal Arc Welding (SMAW) including SMAW power supplies, electrode holders, equipment set-up, joint configuration, layout, electrode selection, electrode manipulation, arc control, finished bead characteristics, and safety.

PMT 0131 Gas Tungsten Arc Welding Principles
Clock Hours: 0
This course provides students with the fundamentals of gas tungsten arc welding (GTAW). Emphasis is placed on power sources, controls, polarity settings, and high frequency usage concepts. Lectures will focus on GTAW torch components, setup, and safety.