

**WELD 1110 OCCUPATIONAL ORIENTATION AND SAFETY (2 CREDITS)**

---

An introduction to the occupation of welding including facility layout, policies, safety and health procedures, information and practice concerning basic safety, safe operation of hand and power tools, materials handling and maintenance of a safe working environment. Students are also introduced to safe welding practices, communication skills, and essential workplace skills.

**PREREQUISITES:** Complete all appropriate entrance placement tests and campus registration requirements. Unless OSHA approved safety training documentation can be produced, credit should “NOT” be granted for this course. Exit Notice: Students may be required to pass course proficiency tests before proceeding to other program content.

**WELD 1210 OXYFUEL SYSTEMS/ CUTTING PROCESSES (3 CREDITS)**

---

An introduction to the principals of thermal cutting with an Oxy-fuel (OFC) apparatus, plasma cutter and air carbon arc, cylinder and equipment safety, proper handling and setup including practice cutting mild steel using both the manual and machine process.

**PREREQUISITES:** Weld1110 and the consent of the Instructor/Advisor. Exit Notice: Students may be required to pass course proficiency tests before proceeding to other program content.

**WELD 1410 SMAW BASIC BEADS/FILLET WELD (4 CREDITS)**

---

An introduction to the principals of Shielded Metal Arc Welding (SMAW), component and consumable identification including the safe setup of equipment and practice of welding stinger beads, weave beads, and overlapping beads in various positions using various electrodes.

**PREREQUISITES:** WELD1110 AND THE CONSENT OF THE INSTRUCTOR/ADVISOR. EXIT NOTICE: STUDENTS MAY BE REQUIRED TO PASS COURSE PROFICIENCY TESTS BEFORE PROCEEDING TO OTHER PROGRAM CONTENT

**WELD 1412 SMAW V-GROOVE BU/GOUGE (3 CREDITS)**

---

Safely setup and operate Shielded Metal Arc Welding (SMAW) equipment with practice of single and multi-pass fillet welds in the flat, horizontal, vertical, and overhead positions using various electrodes.

**PREREQUISITES:** Complete all appropriate entrance placement tests and campus registration requirements. Unless OSHA approved safety training documentation can be produced, credit should “NOT” be granted for this course. Exit Notice: Students may be required to pass course proficiency tests before proceeding to other program content.

**WELD 2110 FCAW BASIC FILLET W (4 CREDITS)**

---

Safely setup and operate Shielded Metal Arc Welding (SMAW) equipment with practice of single and multi-pass fillet welds in the flat, horizontal, vertical, and overhead positions using various electrodes.

**PREREQUISITES:** COMPLETE ALL APPROPRIATE ENTRANCE PLACEMENT TESTS AND CAMPUS REGISTRATION REQUIREMENTS. UNLESS OSHA APPROVED SAFETY TRAINING DOCUMENTATION CAN BE PRODUCED, CREDIT SHOULD “NOT” BE GRANTED FOR THIS COURSE. EXIT NOTICE: STUDENTS MAY BE REQUIRED TO PASS COURSE PROFICIENCY TESTS BEFORE PROCEEDING TO OTHER PROGRAM CONTENT

**WELD 2310 GMAW BASIC FILLET WELD/GROOVE (4 CREDITS)**

---

Safely setup and operate Shielded Metal Arc Welding (SMAW) equipment with practice of single and multi-pass fillet welds in the flat, horizontal, vertical, and overhead positions using various electrodes.

**PREREQUISITES:** Complete all appropriate entrance placement tests and campus registration requirements. Unless OSHA approved safety training documentation can be produced, credit should “NOT” be granted for this course. Exit Notice: Students may be required to pass course proficiency tests before proceeding to other program content.

WELD 1120 *BASIC BLUEPRINT, METALLURGY, AND WELD SYMBOLS (3 CREDITS)*

This course provides instruction and review of basic construction mathematics, weld symbol interpretation, reading welding detail drawings, basic metallurgy, metal identification, and heat treatment of metals.

**PREREQUISITES:** WELD1110 plus meets minimum approved Math entrance score, and consent of the Instructor/Advisor. Exit Notice: Students may be required to pass course proficiency tests before proceeding to other program content.

WELD 1420 *SMAW V GROOVE OPEN (4 CREDITS)*

Safely setup and operate Shielded Metal Arc Welding (SMAW) equipment with practice of single and multi-pass fillet welds in the flat, horizontal, vertical, and overhead positions using various electrodes.

**PREREQUISITES:** Complete all appropriate entrance placement tests and campus registration requirements. Unless OSHA approved safety training documentation can be produced, credit should "NOT" be granted for this course. Exit Notice: Students may be required to pass course proficiency tests before proceeding to other program content.

WELD 1130 *WELDING INSPECTION AND TESTING (2 CREDITS)*

An introduction to codes, standards, and agencies regulating the welding industry, a review of weld quality standards, concepts in proper visual and destructive testing methods, and a study of proper base metal preparation and joint fit-up.

**PREREQUISITES:** WELD1110 and the consent of the Instructor/Advisor. Exit Notice: Students may be required to pass course proficiency tests before proceeding to other program content

WELD 2210 *GTAW BASIC MULTI-JOINT (3 CREDITS)*

An introduction to the principals of Gas Tungsten Arc Welding (GTAW), component and consumable identification including the safe setup of equipment and practice of welding beads (fillet welds), and groove welds in the flat, vertical, horizontal, and overhead positions using carbon steel consumables.

**PREREQUISITES:** Complete all appropriate entrance placement tests and campus registration requirements. Unless OSHA approved safety training documentation can be produced, credit should "NOT" be granted for this course. Exit Notice: Students may be required to pass course proficiency tests before proceeding to other program content.

WELD 2230 *GTAW ALUMINUM MULTI-JOINT (3 CREDITS)*

An introduction to the principals of Gas Tungsten Arc Welding Aluminum (GTAW-A), component and consumable identification including the safe setup of equipment and practice of welding fillet and groove welds in the flat, horizontal, vertical, and overhead positions.

**PREREQUISITES:** Complete all appropriate entrance placement tests and campus registration requirements. Unless OSHA approved safety training documentation can be produced, credit should "NOT" be granted for this course. Exit Notice: Students may be required to pass course proficiency tests before proceeding to other program content.

JOBS 2450 *JOB SEEKING SKILLS (2-0-2)*

This course is required of all Technical Diploma and Associate Degree students and should be taken during their last semester of enrollment prior to completion of diploma/degree requirements. This course assists students in making immediate and future decisions concerning job choices and educational growth by compiling résumés, evaluating job offers, and outlining information essential to finding, applying for, and terminating a job.

**PREREQUISITES:** Successful completion of 15 Hours in a major program.