

Course discipline/number/title: WELD 1003: Oxy-Fuel Welding, Cutting and Braze Welding

- A. CATALOG DESCRIPTION
1. Credits: 1
 2. Hours/Week: 2
 3. Prerequisites (Course discipline/number): None
 4. Other requirements: WELD 1001
 5. MnTC Goals (if any): NA
- B. COURSE DESCRIPTION: This course is designed to teach students the safe operation of oxyfuel cutting and welding equipment. Students will gain hands-on experience in the proper maintenance of high-pressure gas cylinders, hoses, and regulators. They will also demonstrate the safe use of the torch to weld and cut metals of varying thicknesses in the flat position.
- C. DATE LAST REVISED (Month, year): February, 2025
- D. OUTLINE OF MAJOR CONTENT AREAS:
1. OFC, OFW
 2. Welding/cutting Joints
 3. Quality Assurance
- E. LEARNING OUTCOMES (GENERAL): The student will be able to:
1. Demonstrate the proper procedures for safely setting up, shutting down, and maintaining all oxyfuel cutting and welding equipment.
 2. Understand proper torch techniques for cutting and welding.
 3. Identify common equipment issues and develop appropriate solutions.
 4. Understand basic OFW/OFC terminology and make informed equipment selections.
 5. Demonstrate proper inspection of finished welds to determine their compliance with industry standards.
- F. LEARNING OUTCOMES (MNTC): NA
- G. METHODS FOR EVALUATION OF STUDENT LEARNING. Methods may include but are not limited to:
1. Daily Lab Assignments
 2. Final Exam
- H. RCTC CORE OUTCOME(S). This course contributes to the following RCTC Core Outcome(s):
- Critical Thinking. Students will think systematically and explore information thoroughly before accepting or formulating a position or conclusion.
- Personal and Professional Accountability. Students will take responsibility as active learners for achieving their educational and personal goals.
- I. SPECIAL INFORMATION (if any): None