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# WELDING TECHNOLOGY: PROCESS PIPE WELDING (CERT)

# **CERTIFIATE OF ACHIEVEMENT**

The Process Pipe Welding Certificate Program includes coursework that is specifically designed to teach students how to custom fabricate pipe into real world applications like those found in power plants and oil refineries. Students in this certificate program will learn the technical aspects of pipe welding, pipe layout, and pipe fabrication techniques. Students will complete coursework in technical math skills and blueprint reading used in the welding industry. Students will develop the hands-on skills leading to pipe welding certifications. Students completing this certificate program will obtain the necessary technical knowledge, practical welding skills, and welding certifications required to enter the workforce as a Pipe Welder or Pipe Fitter. Various municipalities, fabrication companies, and local unions seek capable graduates with this training to construct and maintain pipe systems and related components.

### **Program Student Learning Outcomes**

- Students will be proficient in the identification of industrial pipe including: Sizes, specifications, schedules, grades, tensile strengths, and alloys.
- Students will be proficient in the identification of industrial pipe fabrication components including: Pipe flanges, pipe fittings, and various valve types.
- Students will use manual Oxyacetylene Flame Cutting Equipment to fabricate the correct pipe welding joint geometry before welding with an acceptable appearance.

## **Program Requirements**

Code Number	Course Title	Units
Core Requirements		
WELD 149	Welding Shop Math	4.0
WELD 159	Blueprint Reading for the Welding Trades	4.0
Required Courses		
WELD 153	Pipe Layout	2.0
WELD 210L	Advanced Arc Welding Laboratory	2.0
WELD 252L	Pipe Welding Level 1	2.0
WELD 254L	Pipe Welding Level 2	2.0
Total Units		16