

# WELD 230 : Advanced Welding and Metal Fabrication III

**Credits** 15

**Quarter Offered** Spring

Continuation of welding program designed to increase skills and provide preparation for several welding processes including AWS Pipe Welding certification. Learn to layout, cut, prepare, fit-up, and weld together metal to repair parts and fabricate projects. This class may include students from multiple sections.

This class has a \$200 welding lab supplies course fee.

**Prerequisites**

[WELD 220](#); enrollment on space-available basis

**Course Outcomes**

- List characteristics of aluminum.

- Prepare an aluminum joint for welding with the GMAW and GTAW process.

- Demonstrate proper techniques of welding aluminum with the GMAW and GTAW process.

- Explain power supplies, gases, electrodes, and techniques for ACHF welding on aluminum.

- Identify procedures for GTAW practice and production.

- Prepare and weld a 6" pipe according to ASME sect 9 with TIG or SMAW root.

- Prepare and weld a 8" pipe according to ASME sect 9 with TIG or SMAW root.

- Prepare and weld an aluminum pipe to ASME sect 9.

- Prepare and weld a stainless pipe to ASME sect 9.