

# WELD 166 : Plasma and Air Carbon Arc Cutting

**Credits:** 1

**Class Hours:** 1 lecture

**Prerequisites:** "C" or higher in WELD 117 and WELD 118. "C" or higher or concurrent enrollment in WELD 120.

**Description:** This course introduces plasma-arc cutting systems to students. These topics include safety, proper equipment setup, and operation of plasma and carbon air arc gouging equipment with emphasis on straight line, curve, and bevel cutting.

**Semester Offered:** Spring

**Course Student Learning Outcomes (CSLOs):**

1. Apply personal and environmental safety practices associated with clothing, eye protection, and use of hand tools and power equipment.
2. Properly set up, adjust, tune, and shut down Plasma and Arc gouging equipment.
3. Identify safety considerations of each cutting process.
4. Perform out-of-position welding, which includes vertical and overhead welding.
5. Perform butt, lap, and tee gouge using carbon-arc gouger.
6. Perform cutting process on various thicknesses of metal using plasma arc cutter.