

Welding Technician - Advanced Level

Levels: Grades 11-12
Units of Credit: 1 Year (1.0)
CIP Code: 480510
Prerequisite: Welding Technician, Entry Level

COURSE DESCRIPTION

Students will learn more advanced skills in the welding processes that will prepare them to apply technical knowledge and skill in the workplace and in project construction. This course is based on the American Welding Society (AWS) task list. (The standards for Welding Technician, Advanced Level are listed as numbers 10 through 14. For test reporting purposes for the skill certification test they will be reported as standards 01 through 05.)

CORE STANDARDS, OBJECTIVES, AND INDICATORS

STANDARD

480508-10 Student will use flux cored arc welding processes. (01)

- 480508-1001 Student will perform safety inspections of equipment and accessories.
- 480508-1002 Student will set up for flux core arc welding operations on plain carbon steel.
- 480508-1003 Student will operate flux core arc welding equipment.
- 480508-1004 Student will make fillet welds, flat position, on plain carbon steel.
- 480508-1005 Student will make groove welds, flat position, on plain carbon steel.

STANDARD

480508-11 Student will use gas tungsten arc welding processes. (02)

- 480508-1101 Student will perform safety inspections of equipment and accessories.
- 480508-1102 Student will set up for gas tungsten arc welding operations on plain carbon steel.
- 480508-1103 Student will operate gas tungsten arc welding equipment.
- 480508-1104 Student will make fillet welds, flat position, on plain carbon steel.
- 480508-1105 Student will make groove welds, flat position, on plain carbon steel.

STANDARD**480508-12 Student will use air carbon arc cutting processes. (03)**

- 480508-1201 Student will perform safety inspections of equipment and accessories.
- 480508-1202 Student will set up for air carbon arc cutting operations on plain carbon steel.
- 480508-1203 Student will operate air carbon arc cutting equipment.
- 480508-1204 Student will perform straight cutting operations on plain carbon steel.
- 480508-1205 Student will perform shape-cutting operations on plain carbon steel.
- 480508-1206 Student will perform bevel-cutting operations on plain carbon steel.

STANDARD**480508-13 Student will use plasma arc cutting processes. (04)**

- 480508-1301 Student will perform safety inspections of equipment and accessories.
- 480508-1302 Student will set up for plasma arc cutting operations on plain carbon steel.
- 480508-1303 Student will operate plasma arc cutting equipment.
- 480508-1304 Student will perform straight cutting operations on plain carbon steel.
- 480508-1305 Student will perform shape-cutting operations on plain carbon steel.
- 480508-1306 Student will perform bevel-cutting operations on plain carbon steel.

STANDARD**480508-14 Student will understand and use employment skills. (05)**

- 480508-1401 Student will develop a list of work standards to follow at school and on the job.
- 480508-1402 Student will evaluate your personal ethics against acceptable workplace ethics.
- 480508-1403 Student will build a job search network and find job leads.
- 480508-1404 Student will write a resume and create a job portfolio
- 480508-1405 Student will complete a job application.
- 480508-1406 Student will write a business letter and memo.
- 480508-1407 Student will participate in an actual or simulated job interview.

* Skills USA-VICA PDP requirements - optional but recommended