

# Welding I



**Prerequisite:** Principles of Manufacturing

**Course:** 1813CA/CB

**Credits:** 2

**Length:** 36 weeks

**Placement:** 10-12

## Course Description

Welding provides the knowledge, skills, and technologies required for employment in metal technology systems. Students develop knowledge and skills related to this system and apply them to personal career development. This course supports integration of academic and technical knowledge and skills. Students will reinforce, apply, and transfer knowledge and skills to a variety of settings and problems. Knowledge about career opportunities, requirements, and expectations and the development of workplace skills prepare students for future success.

## Student Activities

Students will be instructed in advanced skills in the following areas:

- Shielded Metal Arc Welding (SMAW)
- Gas Metal Arc Welding (GMAW)
- Flux Cored Arc welding (FCAW)
- Gas Tungsten Arc Welding (GTAW)
- Oxy-Acetylene cutting and welding
- Plasma cutting
- Project design and fabrication
- Working individually and in groups
- Employability and careers in Manufacturing
- Academic skills used in Welding

## Additional Considerations

Students need fine motor skills and mobility. Students handle sharp objects and use dangerous equipment. If seeking certification, curriculum cannot be modified.

## Organizations/After School/Competition



SkillsUSA is a partnership of students, teachers and industry working together to ensure America has a skilled workforce.