



# Bridges Career Academy

## Welding

*Brainerd High School*

Understand the vast number of careers in the welding and manufacturing industries. Experience working with a variety of metals, while designing, welding and building projects. Develop skills in the use of welding MIG, ARC and TIG equipment, power tools, metal cutting and forming equipment, and shop safety. Project based, using real-life activities. Gain entry-level employment or continue education.

### Academic Courses

- Welding I
- ASC Welding II

### Career Experiences

- Learn from industry speakers
- Tour local businesses
- Attend the Bridges Career Exploration Day or other regional career fairs
- Work with real-life industry projects

### Completion Standards

COMPLETE



**Both courses**

GRADES **B** ↑



Earn a **certificate** and **green cord** at graduation



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### Job Skills

In addition to having technical skills, employers expect workers in this industry to have these skills:

- Listening skills
- Manage tools and equipment
- Use critical thinking skills
- Effectively communicate
- Time management
- Team work



# Welding Academy

## Brainerd High School

The Welding Academy provides students with an understanding of the vast number of careers in the welding and manufacturing industries of today. Students will experience working with a variety of metals, while designing, welding and building projects. Skills in the use of welding MIG, ARC and TIG equipment, power tools, metal cutting and forming equipment, and shop safety are essential elements of the courses. The academy is project based, uses real life activities, and allows students to work on both required and personal projects. When completing this academy, students will have skills for entry-level employment and/or transfer credits to higher education program.

### ACADEMY COURSES

#### **Welding I** — 1 High School Credit

This course is an introduction to welding and the metal shop. Students will explore welding and develop basic, traditional welding skills in oxy-acetylene and arc welding through a wide variety of assignments and small projects. Students will learn to safely use all the various hand and power tools in the metal shop. This is a course where students can develop workplace skills (work ethic, problem solving, time management, reliability, honesty, teamwork, etc.). As always, student safety is the priority.

#### **ASC Welding II** — 1 High School Credit and/or 3 College Credits

This is a more in-depth study of welding with a focus on more modern techniques and processes (MIG, TIG, & CNC plasma table). Assignments and projects will feature greater variety and complexity than Welding 1 and greater quality is expected. This is a course where students can further develop workplace skills (work ethic, problem solving, time management, reliability, honesty, teamwork, etc.). Again, student safety is the priority.

### COMPLETION STANDARD

Students wishing to receive a certification must complete all courses, earn a minimum of a '80%' grade. Students will also participate in the ACT National Career Readiness Certificate (NCRC) as part of this academy standard.

### CAREER EXPERIENCES

Students will explore and research careers with industry speakers, attend Bridges Career Exploration Day, tour the local businesses, and work with real life industry projects.

### JOB SKILLS

In addition to having technical skills, employers expect their workers to have other skills such as:

- Listening skills
- Manage tools and equipment
- Use critical thinking skills
- Effectively communicate
- Time management
- Team work

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