

## Welding Technology Assunpink Center

Over the course of two years, the Welding Technology program will help to develop student skills in the following areas: shielded metal arc welding, gas metal arc welding, gas tungsten arc welding, plasma arc welding, and oxyfuel gas cutting. Students will be able to prepare parts from simple sketches or blueprints, prepare welded joints from welding symbol information, and make minor external repairs to equipment and accessories.

Our Welding Technology program follows the AWS (American Welding Society) SENSE program. Which will provide students with the opportunity to achieve various AWS SENSE certifications. Students can use their acquired skills in many career paths such as Fabrication, Pipe Welding, Industrial Maintenance, Weld Inspector, or post-secondary education. The program involves both hands-on and theory lessons, building the students' knowledge based on math, measurements, welding processes, and design.

All students will have the opportunity to join their respective Career Technical Student Organization, SkillsUSA, and experience local, state, and national competitions. Throughout this program, students will earn stackable credentials on their AWS Certified Welder wallet card. Prior to program completion, in year two (2), students will take the American Welding Society Certified Welder Test and submit an application to AWS in order to qualify and become an AWS Certified Welder.

### Welding Technology I

#### Grade Level: 11 Credits: 20

This course will provide students with an introduction to the welding field. Students will spend time in class studying terminology, safety, set-up, and shut-down of all welding equipment and related tools of the trade. Time will also be spent in the welding shop so students will get hands-on experiences with oxy-acetylene cutting, welding, and brazing along with arc welding. First-year Welding students obtain their OSHA 10 certification and stackable wallet card certificates such as Shielded Metal Arc Welding (SMAW) and Gas Metal Arc Welding (GMAW).

### Welding Technology II

#### Grade Level: 12 Credits: 20

This course will build on skills learned in Welding I. A higher percentage of time will be spent in the shop learning Arc Welding Theory through Gas Tungsten Arc Welding (GTAW) and Gas Metal Arc Welding (GMAW). These welding skills will be developed by progressing from flat, horizontal, vertical, and overhead positions. In addition to this students will learn metal fabrication, pipe welding in the horizontal rolled, horizontal fixed, and vertical fixed position, and mechanical fastening. Students will have the opportunity to earn additional stackable wallet card certificates in Flux-Cored Arc Welding (FCAW), and Gas Tungsten Arc Welding (GTAW). This course will provide students with further opportunities to earn their CNC Thermal Cutting certification and culminate as the students take the American Welding Society Welding Certification Test.



Assunpink Center 1085 Old Trenton Road Trenton, NJ 08690 609.586.57144 Industry Valued Credentials & Certifications OSHA 10 certification AWS Certified Welder



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