Welding I & II

BULL A

(Hampton Campus) Course #8672/ 8673 Manufacturing Technology Cluster Two Year Program



About the program:

This is a two-year program where students learn that welding is required by a wide variety of industries. Fusible materials and high heat are needed to manufacture, repair, or alter tools and products. Students are taught to use manual welding, cutting, and electrical arc welding processes to fabricate and join metal parts according to diagrams, blueprints, and specifications. Students will fine-tune their craft and perform welds in various positions, using multiple welding processes. Professional welders are in high demand and can have lucrative career opportunities with local manufacturers upon graduation.

Topics of study:

- Welding Theory & Measurements
- Shielded Metal Arc Welding (SMAW)/Gas Metal Arc Welding (GMAW)/Gas Tungsten Arc Welding (GTAW)
- Tungsten Inert Gas (TIG) Welding &Flux Cored Arc Welding (FCAW)
- Welding w/ Carbon Steel, Stainless Steel, and Aluminum
- Oxyacetylene burning, Carbon arcing, and Plasma Cutting

Certifications:

- American Welding Society (AWS)
- NOCTI Welding
- OSHA 10 Certification

Requirements/Expectations:

- Must have a 2.0 GPA or above
- Good hand-eye coordination, vision, and manual dexterity
- Precision work that requires attention to detail
- Designing, layout, & fabricating items
- Creativity & Innovation
- Maintain proper safety requirements

Career Pathways:

- Welding Foreman
- Welding Engineer
- Welding Inspector
- Aluminum or MIG Welder
- Fabrication Welder or fabricator
- Fitter/Welder