

WELDING

Course Code:

8672/8673

Course Description: This two-year program introduces students to a wide variety of industries where fusible materials and high heat are needed to manufacture, repair, or alter tools and products. Students will learn 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.

Topics of Study:

Safety

Shielded Metal Arc Welding (SMAW)

Gas Metal Arc Welding (GMAW)

Gas Tungsten Arc Welding (GTAW)

Tungsten Inert Gas (TIG)

Flux Cored Arc Welding (FCAW)

Welding w/ different materials

Oxy Acetylene Burning

Air Carbon Arc Cutting (ACE)

Plasma Arc Cutting (PAC)

Campus Location:

Butler Farm, Hampton

Sessions:

AM and PM

Class Size:

20 students

Credentials:

American Welding Society Certification

Welding NOCTI Certification

OSHA 10 Certification

Career & Technical Student Organization:

SkillsUSA

Work-Based Learning Opportunities:**Course Prerequisites:**

Completed 10th grade English with a grade of "C" or better

Instructor Bio:

Ed Dupree

ed.dupree@nhrec.org

757-766-1100 ext. 3344

21+ years of educational experience at New Horizons

18 years industry experience at Newport News Shipbuilding (NNS)

Earned 35 different welding certifications while working at NNS

Core Curricula Instructor for National Center for Construction Education & Research (NCCER)

Attended American Welding Society (AWS) Instructors Institute

Obtained a welding certification from the National Center for Construction and Education

Pierrette Swan

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757-874-4444 ext 5584

Projected Employment:

About 42,600 openings for welders, cutters, solderers, and brazers are projected each year, on average, over the decade. "Welders" Occupational Outlook Handbook, US Bureau of Labor Statistics, 11 October, 2023.

<https://www.bls.gov/ooh/production/welders-cutters-solderers-and-brazers.htm#tab-6>

Career Pathways:

Welder (Aluminum, Fabrication, MIG, etc.)

Pipefitter

Machinist

Program Flyer: (linked)