



HOWARD COLLEGE

Career and Technical Education

HOWARD COLLEGE Introduction to Welding

FALL 2026

Instructor: Zach Cook
Office Location: Kelton 103
Office phone: (325) 659-3400
Office hours: Email: Monday-Friday
2:14 - 3:02 pm thomas.cook@saisd.org
Prerequisites: None
Class Meeting Dates: Monday-Friday

I. Course Description:

An introduction to the fundamentals of equipment used in oxy-fuel and arc welding, including welding and cutting safety, basic oxy-fuel welding and cutting, basic arc welding processes and basic metallurgy.

II. Instructional Materials: State adopted text

Required Text: None

III. Course Requirements:

Notebook, appropriate welding attire including shirt, boots (must have closed toed shoes at all times), work in hot and cold environment.

IV. Program Outcomes: The Howard College Welding Program prepares students for successful entry into the welding industry. Graduates will be able to *communicate* effectively with employers, engineers, inspectors, and customers as students are taught welding terminology, presentation skills, and proper tools and equipment. Students will demonstrate industry recognized *skills competencies*. Howard College uses the National Center for Construction Education and Research (NCCER) curriculum, which provides standardized national instruction certification, competency-based training, performance testing, and a standard form of recognition through the National Registry. Students will use *critical thinking* by applying their understanding of welding fundamentals to be able to see the whole picture and complete a job from the information given to them whether a blueprint, a few measurements, a conversation or an idea. Graduates will be trained in *professional growth and development* through the classroom curriculum and lab performance. Upon completion of the Welding Certificate, students are equipped with the required communication skills, skills competencies, and critical thinking needed to succeed as a welder.

V. Student Learning Outcomes: Demonstrate safety procedures associated with oxy-fuel and arc process; perform basic welds using oxy-fuel and arc welding equipment; and identify ferrous and nonferrous metals.

VI. Attendance Policy/Makeup Work: Will follow SAISD attendance and makeup work policies. VII.

Class Assessment/Grading: Will follow SAISD assessment and grading policies.

VIII. Course Content and Rigor: College-level courses may include controversial, sensitive and/or adult material. Students are expected to have the readiness for college-level rigor and content.

IX. Confidentiality in Courses: Any personal information shared by students in college-level courses, either written or verbal, face-to-face or online, is not considered confidential nor does it fall under FERPA guidelines. Students should refrain from sharing information they do not wish to make public knowledge. The instructor reserves the right to report pertinent information to the appropriate administration if s/he feels that the student may be a danger to him/herself or others.

X. ADA Statement: Any student who requires special accommodations due to a documented disability under the provisions of the Americans with Disabilities Act is encouraged to contact the Site Coordinator prior to classes beginning but no later than the end of the first two weeks of class.

XI. Course Calendar: <http://tea.im.tamu.edu/AFNR/ScopeandSequence.aspx>

XII. Smoking and eCigarettes: Smoking or other use of tobacco products and use of electronic cigarette devices is prohibited in all Howard County Junior College District facilities and vehicles.