

Expand your welding or metal fabrication skills with advanced training! This course will build on the skills you learned in Welding Level 1 or Precision Metal Fabrication Level 1. This advanced welding career major will build on the processes learned in prerequisite courses. Students will also get an introduction to Gas Tungsten Arc Welding (GTAW), Plasma Arc Cutting and Gouging, Oxy-fuel Gouging, and Carbon Arc Cutting and Gouging. You'll advance your skills with Shielded Metal Arc Welding (SMAW) open root groove welds in all positions with varying thicknesses of plate and pipe. You'll also learn how to perform Gas Metal Arc Welding (GMAW) on Aluminum. Even though you've had to already cover the basics before enrolling in this class, you'll begin the program by covering welding and shop safety, welding symbols, blueprints, detailed drawings and industry mathematics. Level 2 students will be introduced metal characteristics and preparation, as well as fabrication projects. Attention will also be placed on advanced industry credentials with opportunities for students to attain.

Welding Level 1 is a pre-requisite for Welding Level 2. For students who attend part-time, Welding Level 2 can be completed in one year.

How You'll Learn Hands-On

Get out of the classroom and into the real world with projects such as:

- Welding custom trailers
- Designing mobile welding beds

Where it Can Take You

Use the skills you'll learn in this program to find a career you'll love. Possibilities include:

- Pipe Welder
- Combo Pipe Welder
- Welding Supervisor
- Entrepreneur

Course	Hours
Safety in the Welding Shop Level 2	15

Cutting and Gouging - OF, PA, CA	60
Advanced Math for Welders	15
Advanced Industry Credentials	60
GTAW Aluminum	30
GTAW - Fundamentals, Carbon, Stainless, Aluminum	105
Metal Characteristics, Preparation and Fit-Up	60
SMAW Pipe	105
SMAW Open Groove Welds/Pre-Pipe	60
Advanced Blueprints and Drawings	30
Projects and Livework	60
Total	600

Career Readiness Certificate

[WorkKeys®](#), an assessment tool from the ACT® organization, measures skills employers have identified as critical to job success in their industry and are used in hiring and promoting employees. Students are able to earn the ACT®-issued [National Career Readiness Certificate](#) by meeting the score requirements for their job field on three WorkKeys® assessments.

Matching the right employees with the right job creates employee job satisfaction, increased self-confidence and the best wages possible for the employee. The employer benefits with reduced turnover and training, increased productivity and overall company success. To learn about the WorkKeys® scores needed for your future career field visit [Job Profiles](#).

The required WorkKeys scores for this career major are:

Applied Math - 3

Workplace Documents - 3

Graphic Literacy - 3

Graduation Requirements

In order to be successful in a career, students will need to meet all technical and academic standards related to their career of choice at Meridian. Meridian offers rigorous programs

of study designed in cooperation with business and industry to ensure students are fully prepared for the demands of the workplace.

Meridian's Career Ready Credential

When a student completes all standards as set forth in their program of study, they will be considered a graduate of Meridian and receive the Career Ready Credential. Students who do not meet these standards will not be considered graduates of Meridian. Students should have:

- Completed all courses in a career major with a grade of "C" or above and achieved required industry-based certifications for the career major
- Achieved WorkKeys® scores at or above the level required for the career major or earned an ACT® composite score of 19 or greater (Students may substitute equivalent scores on SAT, ACCUPLACER or other approved assessments.)

Additional Endorsements

Students earning a Career Ready Credential may also earn the Postsecondary Ready Endorsement, Citizenship Ready Endorsement and the National Career Readiness Certificate (CRC).

Postsecondary Ready Endorsement

- Earned, or was on track to earn, a high school diploma or GED at the time of Meridian graduation
- Achieved a subscore of 19 or greater on the ACT® in math, English, reading and science (Students may substitute equivalent scores on SAT, ACCUPLACER or other approved assessments.)

Citizenship Ready Endorsement

- Completed employment profile, résumé, job application, cover letter, mock interview and job search training through OKJobMatch.com
- Documented active membership in a [CareerTech Student Organization](#) or professional association related to the program of study
- Documented 20 hours of volunteerism or service in a community activity

National Career Readiness Certificate (CRC)

- Completed WorkKeys® assessments in Applied Math, Graphic Literacy and Workplace Documents and received a silver, gold or platinum National [Career Readiness Certificate](#) through the Oklahoma Department of Career and Technology Education.

Get Started

Apply for [admission as a high school student](#). Apply for [admission as an adult](#). Contact the Career Planning Center with questions at [405.377.3333](tel:405.377.3333).

Welding Fundamentals and Certification Short Courses

Already working and just need a welding fundamentals or certification short course that meets twice a week in the evenings? Go to our [short course listings](#) and enter “welding” in the search bar to see when our next classes start.