

WELDING JOURNAL



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**Preparing to Enter
the Workforce**

**Benefits of Augmented
Reality in Training**

A Look at Today's

WELDER TRAINING

Tulsa Welding School offers students a head start in their careers

According to AWS, the United States will need more than 300,000 welding professionals by 2026 as baby boomers enter retirement and fewer younger welders join the profession (weldingworkforcedata.com). For many industries, this gap could have far-reaching consequences, such as drops in production, the inability to meet customer demands, and lost revenue, to name a few. With new infrastructure plans and goals, construction and clean energy initiatives in particular stand to feel a significant impact.

At Tulsa Welding School in Tulsa, Okla., instructors designed the Professional Welder program to provide students with the skills needed to successfully enter the workforce. Recruitment efforts also encourage entry into this trade by sharing the rewards of building a career in welding with potential students.

“Based on our curriculum at Tulsa Welding School, everything that students learn as they go through the program is going to translate into a real-world aspect,” said Chris Schuler,

director of training and student services. “The majority of the welding positions they learn are going to be on the weld test they’re going to take to gain employment.”

As stated by Schuler, that knowledge and skill gives graduates a leg up on the competition. When they show up for an interview and secure a job, they need very minimal training, if any; employers simply need to review customer preferences with their new hires. The Professional Welder program gives the company a fast track to get work done and makes it easier for the students to adapt as new employees.

Setting the Foundation for Success

During his ten years teaching at Tulsa Welding School, Schuler has seen a wide array of students entering the program. Many times, incoming students have already picked up welding by participating in an agriculture program in high school or a SkillsUSA competition. But more and more,

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students of all ages who have never even touched welding equipment are looking at the opportunities in the industry as a first career or after numerous careers. They see that welding is lucrative and in demand. And an increasing number of women are entering the program.

Regardless of age or gender, however, there are some key factors that Schuler says welding students need to consider to set themselves up for success. He sees these as integral to students entering any welding program, not just at Tulsa Welding School.

Attendance is 100% the main requirement.

Schuler said, “We’d rather have an average welder with perfect attendance vs. a perfect welder with average attendance — because if they show up, we can help them to learn even more. We’ll teach them what they need to know.”

Keeping an open mind is also important. The instructors recognize that students might be nervous but encourage them to be prepared to ask questions and listen. This can help new employees in the workplace, too, when they are asked to learn the company’s way of doing things.

“Our instructors have been hit with every question under the sun. They’re prepared for the questions, and students need to take advantage of that,” explained Schuler. “Our instructors come from the field, so they’ve been in every area of the industry these students want to go work in.”

Schuler and the other instructors meet with local employers twice a year to find out what students should be learning to join their companies and build a viable career. Employer feedback not only helps inform the program’s curriculum and keeps it current but also provides insight into soft skills that can help students succeed. According to these employers, having a positive attitude and being able to communicate clearly are valuable traits they seek in potential hires.

Building a solid relationship between the instructors and students also contributes to the students’ success. Schuler says he wants students to keep an eye on the instructor who’s been where they want to be. The students can then have a mentor and a role model to help them understand what to expect when they get out on the job.

“I think it’s definitely important to have an understanding between the two of why they’re each here. The instructor is here to help the student. The student is here to learn,” said Schuler. “We’re training them to be professionals, so we have to have the answers they need.”

Student Gena Langley appreciates that about the program.

“I only have positive things to say about my instructors and my experience here. Everyone is super willing to help. I have never felt afraid to ask any questions,” she shared. “I had never welded before in my life, but I don’t think that I was treated any differently than somebody who already had an idea of what to do.”

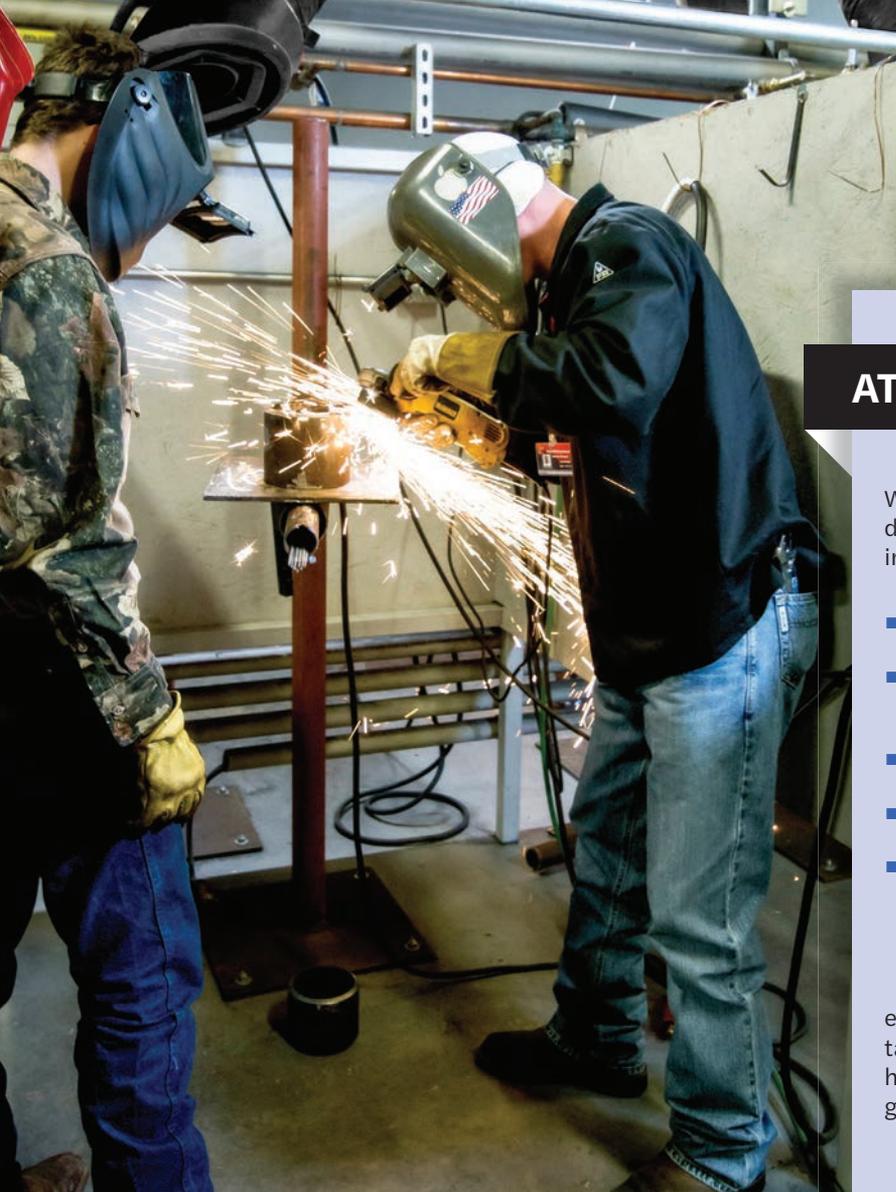


Must-Knows for Welder Training

The Tulsa Welding School’s philosophy is to provide students with a well-rounded curriculum that builds not only their hands-on skills but also their general knowledge of welding. That includes learning proper terminology that will set them up for successful communication with future employers and coworkers.

The first course in the Professional Welder program focuses on welding fundamentals to help build critical skills, inform students of career opportunities, and teach them the best safety practices. These, along with learning to read construction drawings and weld symbols, are must-haves in the students’ education. In this course, they also learn how to set up welding equipment from Miller Electric Mfg. LLC and begin shielded metal arc welding (SMAW) with AWS E7018 electrodes from Hobart. They also learn plasma cutting and carbon arc gouging.

The remaining five welding courses in the program are Gas Metal Arc Welding (GMAW)/Flux Cored Arc Welding (FCAW) Processes, Structural Welding, Basic Pipe Welding, Advanced Pipe Welding, and the Welding Capstone course. This final course is designed to help the students transition from the classroom to the field by focusing on projects that test their welding knowledge and sharpen their skills. They also are challenged to meet production rates that are at industry standards.



AT A GLANCE

The Professional Welder program at Tulsa Welding School is designed to educate students in a thorough yet timely way. The program includes the following:

- Six five-week courses for a total of 30 weeks
- Four days of lab and one day of classroom work each week
- 25 semester credit hours
- 750 contact hours of instruction
- Training in SMAW, GMAW, gas tungsten arc welding (GTAW), high-frequency GTAW, and FCAW

In addition, the school provides all students entering the program with a gear kit that contains such tools as GMAW pliers and a chipping hammer along with PPE that includes safety glasses, a welding jacket, and a welding helmet.

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In addition to the hands-on training, there's even more to the program for Langley.

"For me, once I get here and I get all my PPE on and everything, I'm in the zone. Anything that may be troubling me in regular day-to-day life just goes away. It's like meditation. And I love it, and I love that everyone has been super helpful and encouraging."

Entering the Workforce

Tulsa Welding School instructors can help students achieve their goal of working for a specific employer. Instructors provide additional training to meet that employer's customer recommendations. This also helps support local companies in their recruitment efforts. Graduates enter a variety of fields where they do everything from weld-

ing structural buildings and cell phone towers to building government-contracted submarine parts.

"A lot of the employers we deal with come to us and ask for candidates," said Schuler. "We screen the students, making sure they've had good attendance and have done well in the program. We put them in front of the employer, and often-times they will come in and administer the weld test here on campus."

In addition to offering training to meet company expectations, instructors encourage students to hone their skills in every process — even if they aren't particularly interested in it.

"We have students that may not care for a process and say that they are never going to run it," Schuler said. "We let them know that they need to learn everything because the demand for people right now in the industry is so broad, and they're all doing different things. The goal is to make themselves more marketable. In the end, that helps both them and the industry's demand for new welders." [WJ](#)

HOBART BROTHERS LLC (hobartbrothers.com), Troy, Ohio, is a manufacturer of filler metals, including tubular wires (flux cored and metal cored), solid wires, and SMAW electrodes.