

## Structural and Pipe Welder

### DESCRIPTION:

This career option covers fundamentals of SMAW, GMAW and GTAW welding processes, plasma arc, air carbon arc, and oxy-fuel cutting processes, metal preparation and heat treatments, as well as, workforce staging, reading blueprints and welding detail drawings. Students will be engaged in hands-on training in the shop approximately 70% of the time.

### CERTIFICATIONS/CREDENTIALS:

- Oklahoma Department of Labor Certification
- MSAW, GMAW, GTAW

### CAREER OPPORTUNITIES:

- Combination Welder
- FCAW Structural Welder
- Entry Level Welder

### SALARY: **NWOK (Avg.)\$47,540**

By utilizing the SOC Code (51.4121) for Structural and Pipe Welder [www.onetonline.org/link/summary/51.4121.06](http://www.onetonline.org/link/summary/51.4121.06) additional information including working conditions, physical requirements, knowledge skills and salary range can be found. Gainful employment is available at <http://www.nwtech.edu/gainful-employment>.

### COST OF ATTENDANCE:

High School In-District Students - No Tuition Charge

| Adult Student Costs                               | Dependent    |              | Independent  |              |
|---|--------------|--------------|--------------|--------------|
|   | ID           | OD           | ID           | OD           |
| Tuition and Fees*                                 | \$ 1,920.00  | \$ 3,840.00  | \$ 1,920.00  | \$ 3,840.00  |
| Books, Course Materials, Supplies, and Equipment* | \$ 630.00    | \$ 630.00    | \$ 630.00    | \$ 630.00    |
| Certification/Licensure Expense*                  | \$ -         | \$ -         | \$ -         | \$ -         |
| Direct Cost of Attendance                         | \$ 2,550.00  | \$ 4,470.00  | \$ 2,550.00  | \$ 4,470.00  |
| Housing & Food**                                  | \$ 5,654.40  | \$ 5,654.40  | \$ 11,925.00 | \$ 11,925.00 |
| Transportation**                                  | \$ 1,225.12  | \$ 1,225.12  | \$ 2,583.75  | \$ 2,583.75  |
| Miscellaneous**                                   | \$ 2,544.48  | \$ 2,544.48  | \$ 5,366.25  | \$ 5,366.25  |
| Estimated Cost with living expenses               | \$ 11,974.00 | \$ 13,894.00 | \$ 22,425.00 | \$ 24,345.00 |

\*Direct costs are items directly related to attending NWTC. \*\*Source: Indirect costs - Southwest Consumer Price Index as of 12/22 - released 1/12/23.

More information on tuition, fees, estimated cost of attendance, estimated living expenses and financial aid for adult students can be found at <https://nwtech.edu/student-services/financial-aid-tuition/>.

NWTC provides equal opportunities to all students without regard race, color, sex, pregnancy, gender, gender expression or identity, national origin, religion, disability, veteran status, sexual orientation, age, or genetic information in the operation of CTE programs, recruitment, admissions, financial aid or employment practices.

### COURSE INFORMATION: 960 Hours

|                                |          |
|--------------------------------|----------|
| SMAW Beads & Fillet Welds      | 180 Hrs. |
| SMAW Open V Groove Welds       | 180 Hrs. |
| Oxy-fuel Cutting               | 30 Hrs.  |
| Precision Grinding             | 75 Hrs.  |
| GTAW Plate and Pipe            | 60 Hrs.  |
| GMAW/FCAW Plate and Pipe       | 90 Hrs.  |
| Welding Blueprints             | 45 Hrs.  |
| Welding Equip. Set Up & Filler | 15 Hrs.  |
| Welding Joint Fit Up & Adjust. | 15 Hrs.  |
| Metal Characteristics & Prop.  | 30 Hrs.  |
| Metal Prep & Heat Treatments   | 30 Hrs.  |
| Fundamentals of Welding        | 135 Hrs. |
| GTAW Low Alloy/SS Pipe         | 30 Hrs.  |
| SMAW Open Root Pipe Welds      | 105 Hrs. |
| Plasma Arc Cutting             | 15 Hrs.  |
| Weld Quality                   | 15 Hrs.  |
| Workforce Staging              | 30 Hrs.  |

### INSTRUCTOR:

J.P. Parker, Instructor  
 jparker@nwtech.edu  
 801 VoTech Drive, Fairview, OK 73737  
 580.227.3708 www.nwtech.edu

*Find Out More On Social Media!*

### SCHEDULES AVAILABLE:

8:20am - 11:20am  
 12:20pm - 3:20pm

Full-time adult students attend both sessions.

### APPLICATION & ADMISSIONS:

Complete an application at <https://nwtech.edu/student-services/enrollment-processes/>.

For Admission Questions or To Schedule a Visit:  
 Call NWTC at 580.327.0344. Financial assistance is available to adult students who qualify.  
 ID=In-District; OD=Out-of-District