

## Welding Technology

### Description

Given its role in building and repairing everything from pipelines to spacecraft, welding provides increasing job opportunities as the demand for skilled craftsmen grows. Tulsa Tech's Welding Technology program provides training in the following processes of welding: Shielded Metal Arc, Gas Metal Arc, Flux Cored Arc, and Gas Tungsten Arc welding. Under the direction of experienced professionals, you will develop skills in the areas of oxyacetylene cutting, air carbon arc cutting, and plasma arc cutting. You will study properties of materials and principles of testing, non-destructive and destructive testing, blueprint reading, layout, design and fit up. Additionally you'll learn electrode identification and math applications for welding. You will be required to pass several simulated industrial welder qualification tests for successful completion of this program. You may then confidently enter the workforce and/or apply credit toward an associate degree and beyond.

- Develop professional techniques & skills in the welding industry utilizing various cutting & welding processes
- Interpret blueprints, specifications & welding symbols used by industry professionals in the welding environment
- Analyze the properties of materials & the principles of non-destructive & destructive testing

### College Credit

College credit may be available through TCC, RSU, or OSU-Institute of Technology. For more details call the college relations office at 918-828-5205. All college credit is awarded by the college/university.

### Career Majors/Courses

#### Combination Welder

##### Courses

Intro to Welding & Cutting Processes  
Metal Preparation & Heat Treatments  
Welding Blueprints  
Metal Characteristics & Properties  
Weld Quality  
SMAW Equipment & Set-up  
SMAW Electrodes  
SMAW Beads & Fillet Welds I  
Welding Joint Fit-Up & Adjustment  
SMAW Beads & Fillet Welds II  
Welding Detail Drawings  
SMAW Open V-Groove Welds I  
SMAW Open V-Groove Welds II  
Plasma Arc Cutting  
Air Carbon Arc Cutting and Gouging  
GMAW/FCAW Equipment & Set-Up  
FCAW Plate  
GMAW Plate  
SMAW Open Root Pipe Welds  
Workforce Staging  
GTAW Equipment & Filler Materials  
GTAW Plate  
GTAW Aluminum Plate  
FCAW Pipe  
GTAW Carbon Steel Pipe

### Credential/Industry Certifications

American Welding Society (AWS) Certification

### Application Process

Apply ON-LINE at [www.tulsatech.edu/apply](http://www.tulsatech.edu/apply). Applications can also be obtained in the counseling offices on any of the campuses; at the Career Services Center located on the Memorial Complex; or by calling 918-828-5200.

### Area Salary

For information concerning working conditions, physical requirements, employment and job outlook please refer to the Occupational Outlook Handbook (OOH), 2010-11 Edition at <http://www.bls.gov/oco/>.

Salary information can be found at The Occupational Information Network (O\*NET) Resource Center at <http://www.onetonline.org/>. O\*NET-SOC Code: 51-4121.06

### Who Can Attend?

High school students / Adults

### Tuition/Fees/Books

- Tuition: \$2,887.50\*
- Lab & Required Fees: \$272.50\*
- Additional Required Costs: \$548\*\*
- Optional Fees: \$293

*\*High school students living in the Tulsa Tech school district are not charged tuition, fees & books.*

*\*\*Additional required costs: books, equipment, tools, uniforms & supplies.*

### Scheduling Information

#### H.S. / 2 school years:

August - May

#### H.S. sessions:

7:45 - 10:45 A.M. / 11:50 - 2:50 P.M.

#### Adults / 9-12 months Adult sessions:

Day: 7:45 A.M. - 2:50 P.M.

Check with Admissions Office at 918-828-5260 for start dates.

### Financial Aid

Financial assistance is available through several options at Tulsa Tech. For the most up-to-date information, call 918-828-5280 or visit [www.tulsatech.edu](http://www.tulsatech.edu). Some career majors are eligible for federal financial aid. To apply, go to: [www.fafsa.ed.gov](http://www.fafsa.ed.gov).

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### Campus Location

**Lemley Campus** (Adult students only)

3420 South Memorial Drive

Tulsa, OK 74145-1390

(918) 828-1000

FAX (918) 828-1009

**Peoria Campus** (H.S. & returning Peoria

Adult students only)

3850 North Peoria

Tulsa, OK 74106-1619

(918) 828-2000

FAX (918) 828-2009

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### Employment Opportunities

Tulsa Tech's Career Placement Services team builds partnerships with Tulsa area businesses & industry to create opportunities for work-based experiences and job placement. Job search assistance is provided before and after graduation. Services include with employment information, resume building, refining interview skills and life-time access to the Tulsa Tech Job Connect database. Call Career Placement Services at 918-828-5270 or visit [www.tulsatech.edu/jobconnect](http://www.tulsatech.edu/jobconnect) / email [jobconnect@tulsatech.edu](mailto:jobconnect@tulsatech.edu).

2010-2011 year completion & placement data per Oklahoma Department of Career and Technical Education guidelines:

- Total Enrolled: 100
  - Completion: 42%
  - Completed on-time: 98%
  - Job Placement: 76%
  - Returning Students to 2nd Year: 23%
  - OPE ID: 005311 / CIP: 48.0508
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