# **SPARK A BRIGHT FUTURE** WITH AN IN-DEMAND CAREER lechno [MANUFACTURING]

Welding is the most common method of permanently joining or cutting metal surfaces. In this career, you might set up, operate or tend welding, soldering or brazing machines. Welders also operate laser cutters or laser-beam machines. Employers report difficulty in finding qualified welders, so let us put you first in line for an in-demand job.

SHBURNTECH

# **Build your** best self.

TALK TO AN ADMISSIONS **COUNSELOR TODAY!** 

# 785.670.2200

#### LEARNING AT WASHBURN TECH

This program will prepare you to apply technical knowledge and skills when bonding or cutting metal parts. Instruction, both formal and self-paced, includes shielded metal arc welding, gas metal arc welding, flux cored arc welding, gas tungsten arc welding and cutting processes. Emphasis also is placed on quality assurance and control, print reading, safety and workplace skills. Students begin by pursuing a Cert A of 26-credit hours and may continue to earn a Cert C which is 50-credit hours. Attending half-day, you can complete the Cert A program in two semesters. Upon completion of a Cert C, you will be eligible to complete an associate degree or more advanced degrees at Washburn University.

#### **JOB AND SALARY OUTLOOK**

Good career opportunities are expected for highly-skilled workers, especially for those trained in the latest technologies. According to the Kansas Department of Labor, the average

#### **CAREERS IN WELDING**»

- + manufacturing + underwater welder
- + shipfitter
- + pipefitter + weld educator + boilermaker
- + ironworker + weld inspector

salary for an entry-level welder is \$19.35 an hour or \$40,257 annually. The average wage is \$25.36 an hour or \$52,746 annually.

#### ENTRY REQUIREMENTS

For dual-credit high school students submission of an application, official partial transcript, and consent to enroll form are required. Adult students must complete an application and submit an official copy of all transcripts. Please see an admissions counselor for details.

#### **CERTIFICATIONS**

- + AWS 1F, AWS 1G, AWS 2F
- + OSHA-10



WASHBURN UNIVERSITY INSTITUTE OF TECHNOLOGY | 5724 SW HUNTOON STREET | TOPEKA, KANSAS 66604 | WASHBURNTECH.EDU

## [MANUFACTURING]

# Welding Technology

## **COURSE DESCRIPTIONS**

#### **OSHA-10 OR OSHA-30**

Focuses on job/site safety and precautions, determine the uses of personal protective equipment (PPE)

#### WELDING BLUEPRINT READING

Teaches a basic understanding of welder's math and the symbols used on blueprints

#### **OXY-FUEL/CUTTING PROCEDURES**

Covers the cutting of ferrous and non-ferrous materials with manual, motor-driven and oxy-fuel shape cutting equipment; plasma-arc cutting and carbon-arc cutting

#### **SHIELDED METAL ARC WELDING I**

Explores shielded metal arc welding (SMAW) process

#### SHIELDED METAL ARC WELDING II

Continuation of introductory course

#### **GAS METAL ARC WELDING I**

Explores gas metal arc welding (GMAW)

**GAS METAL ARC WELDING II** 

Continuation of introductory course

#### **GAS TUNGSTEN ARC WELDING**

Introduces gas tungsten arc welding (GTAW); learn the safe and correct set-up of the GTAW work station

#### FLUX CORED ARC WELDING

Designed to teach the student the correct techniques to weld in all positions with an emphasis on safety

#### **\*TECHNICAL MATH I**

Gain confidence with the use of basic math, measurements, and signed numbers

#### **\*WELDING METALLURGY**

Develop basic metallurgy skills

#### \*GAS TUNGSTEN ARC WELDING II

Additional positions, metals, and metal alloys

#### \*GAS METAL ARC WELDING- PLATE

Course will follow requirements identified for SENSE Level II GMAW-Plate processes

#### **\*WORKPLACE SKILLS AND SAFETY**

Introduces communication concepts, skills and behaviors, and safety practices for the workplace

#### **\*WELDING LAYOUT**

Emphasis on structural shapes

#### **\*WELDING INSPECTION & QUALIFICATIONS**

Learn proper measurement tools and their application

\* Indicates Cert C courses

#### **APPLICATION CHECKLIST**



#### 2025-2026 PROGRAM COSTS - CERT A (Estimated)

|                | HIGH SCHOOL | ADULT   |
|----------------|-------------|---------|
| Tuition        | *\$0        | \$4,290 |
| All other fees | \$638       | \$1,641 |
| TOTAL          | \$638       | \$5,931 |

\*Tiered courses are paid by Excel in CTE. Non-tiered courses are paid by the student.

#### ADDITIONAL CHARGES (Estimated)

|             | HIGH SCHOOL | ADULT |
|-------------|-------------|-------|
| Tools/Books | \$417       | \$417 |

#### 2025-2026 PROGRAM COSTS - CERT C (Estimated)

|                | HIGH SCHOOL | ADULT    |
|----------------|-------------|----------|
| Tuition        | *\$990      | \$7,755  |
| All other fees | \$810       | \$1,569  |
| TOTAL          | \$1,800     | \$10,648 |

\*Tiered courses are paid by Excel in CTE. Non-tiered courses are paid by the student.

#### ADDITIONAL CHARGES (Estimated)

Statistics (NCES) CIP Code 48.0508: Welding

Technology/Welder. A program that prepares individuals to apply technical knowledge and skills to

join or cut metal surfaces. Includes instruction in arc

welding, resistance welding, brazing and soldering,

cutting, high-energy beam welding and cutting, solid

state welding, ferrous and non-ferrous materials,

welding processes and heat treating, structural design, safety, and applicable codes and standards.

oxidation-reduction reactions, welding metallurgy,

|  | HIGH SCHOOL | ADULT |
|--|-------------|-------|
| Tools/Books  | \$451       | \$451 |
| The Washburn Tech Welding Technology program is<br>in alignment with the National Center for Education | MORE INFO » |       |

For more programs, enrollment and course schedule information, please contact Admissions. Financial Aid is available to those who qualify.

CALL 785.670.2200

TO TALK W/ ADMISSIONS COUNSELOR

Washburn University prohibits discrimination on the basis of race, color, sex, religion, age, national origin, ancestry, disability, marital or parental status, sexual orientation/gender identity, genetic information or other non-merit reasons in University programs and activities, admissions, educational program, or activities and employment, as required by applicable laws and regulations. The following person has been designated to handle inquiries regarding non-discrimination policies: Equal Opportunity Director, Washburn University, 1700 S.W. College Ave., Topeka, KS 66621, 785.670.1509, eodirector@washburn.edu.