



CISCO COLLEGE

# WELDING TECHNOLOGY

CAREER & TECHNICAL EDUCATION



Professional with welding skills use intense heat to join pieces of metal together. Training in welding technology commonly leads to work as a welder, welding machine operator, boilermaker, as well as other options.

Welders use a variety of techniques, like arc welding (which uses electrified metal clips with an extremely high charge to join metal parts together) in manufacturing and other related settings. These skilled workers are typically employed in manufacturing industries, but they can also be found working in auto body shops, for construction companies or in other industries.

Welding Machine Operators are responsible for using certain programs to monitor the functions of machines or robots that are carrying out the actual welding. They place parts in the welding machines, as well as troubleshoot and fix minor problems during operation. Welding machine operators must be able to read and understand work orders and blueprints, which may include welding-specific symbols.

Boilermakers are responsible for the creation, installation, and repair of large containers which heat fluids or contain gaseous materials. These vessels may be used to store chemicals or liquids, or to create power by heating water or other liquids, according to the BLS. These professionals may be responsible for maintenance of these large containers as well. Apprenticeships are often required.

## WORK ENVIRONMENT

- Occurs on construction sites, factories, or various confined settings designed to control sparks and glare
- Possible outdoor environments on high scaffolding, platforms, or in inclement weather
- Required to lift heavy objects or work in awkward positions while bending, stooping, or standing to work overhead.
- Full-time positions, and overtime, evening, or weekend work is common
- Many manufacturing firms have two or three 8 to 12-hour shifts each day allowing around-the-clock production.

### SALARY DATA

National Median Wage:  
**\$40,240/year**  
(BLS.gov 2017)

There is **NO** special selection criteria for this program

**Abilene Campus**  
717 E. Industrial Blvd.  
Abilene TX 79602  
(325) 794-4400  
[workforce@cisco.edu](mailto:workforce@cisco.edu)

# PROGRAM APPLICATION PROCEDURE

- Complete the Cisco College application.
- Have all official transcripts sent to Cisco College Admissions Office.
- Fill out FAFSA (*Free Application for Federal Student Aid*).
- Set and appointment with the CTE Counselor to discuss planning and learn about the TSI (*Texas Success Initiative*) assessment.
- Participate in student advisement with the Division Chair or Lead Professor prior to applying to the program.

**DAY & EVENING CLASSES**

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**FALL, SPRING, &  
SUMMER SEMESTERS**

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**ABILENE LOCATION**

**\* STUDENTS RECEIVING A DEGREE OR A CERTIFICATE MUST COMPLETE THE CAPSTONE REQUIREMENTS.**

## LEVEL II CERTIFICATE - WELDING TECHNOLOGY

### FIRST SEMESTER - 16 HRS

WLDG 1421 Intro to Welding Fund.	4	▶	1 <sup>ST</sup> 8 WEEKS
WLDG 1435 Intro to Pipe Welding	4		
WLDG 1430 Intro to Gas Metal Arc Weld.	4	▶	2 <sup>ND</sup> 8 WEEKS
WLDG 1412 Intro to FCAW	4		

### SECOND SEMESTER - 16 HRS

WLDG 1317 Intro to Pipe Welding	4	▶	3 <sup>RD</sup> 8 WEEKS
WLDG 1434 Intro to GTAW	4		
WLDG 2451 Advanced GTAW	4	▶	4 <sup>TH</sup> 8 WEEKS
WLDG 2453 Advanced Pipe Welding	4		

### THIRD SEMESTER - 16 HRS

WLDG 2443 Advanced SMAW	4	▶	5 <sup>TH</sup> 8 WEEKS
WLDG 2452 Advanced FCAW	4		
WLDG 2435 Adv. Layout & Fabrication	4	▶	6 <sup>TH</sup> 8 WEEKS
WLDG 1413 Blueprint Reading	4		

## ADVANCED LEVEL I CERTIFICATE - WELDING TECHNOLOGY

### FIRST SEMESTER - 16 HRS

WLDG 2453 Advanced Pipe Welding	4	▶	1 <sup>ST</sup> 8 WEEKS
WLDG 2451 Advanced GTAW	4		
WLDG 2443 Advanced SMAW	4	▶	2 <sup>ND</sup> 8 WEEKS
WLDG 2452 Advanced FCAW	4		

### SECOND SEMESTER - 8 HRS

WLDG 2435 Adv. Layout & Fabrication	4	▶	3 <sup>RD</sup> 8 WEEKS
WLDG 1413 Blueprint Reading	4		

## LEVEL I CERTIFICATE - WELDING TECHNOLOGY

### FIRST SEMESTER - 15 HRS

WLDG 1317 Intro to Layout & Fabrication	3	▶	1 <sup>ST</sup> 8 WEEKS
WLDG 1421 Intro to Welding Fund.	4		
WLDG 1430 Intro to Gas Metal Arc Weld.	4	▶	2 <sup>ND</sup> 8 WEEKS
WLDG 1412 Intro to FCAW	4		

### SECOND SEMESTER - 8 HRS

WLDG 1435 Intro to Pipe Welding	4	▶	3 <sup>RD</sup> 8 WEEKS
WLDG 1434 Intro to GTAW	4		

\*STUDENTS ARE ADVISED TO BEGIN 1<sup>ST</sup> 8 WEEKS

If a student desires the optional procedural testing, it is available at a reduced cost through the AWS (American Welding Society)

