# Southern West Virginia 2022-2023 Southern Academic Catalog Community Technical College

# Welding Technology, A.A.S.

## Purpose

The Welding Technology Program prepares graduates to enter the field of welding. The program educates the graduate in the selection of the correct equipment; selection of filler metals; pre, intermediate, and post-heat treatment of welded metals; and proper weld techniques. The program stresses industry-wide safety procedures and trains the student to read weld symbols and detail drawings.

The Welding Technology Program provides students with a solid foundation which will enable them to achieve American Welding Society Certification in such areas as: Shielded Metal Arc Welding, Gas Metal Arc Welding, Gas Tungsten Arc Welding, and Flux-Core Arc Welding. Skills sets in pipe welding, welding in mining, and plant maintenance are available.

The full Welding Technology Program is available on the Williamson Campus. The Boone/Lincoln, Logan, and Wyoming/McDowell campuses offer the general education/program support courses only.

Program Level Outcomes:

- 1. Prepare students to become safe and competent welders
- 2. Provide opportunities to possess communication and critical thinking skills
- 3. Demonstrate responsible professional conduct and behavior
- 4. Effectively communicate

## **First Semester**

- EN 101 ~ English Composition I 3 Credit Hours
- <u>OR 105</u> Orientation to Technical Programs 1 Credit Hours (E)
- <u>WL 100 Oxyacetylene Welding (OAW)</u> 4 Credit Hours
- <u>WL 102 Fundamentals of Welding</u> 4 Credit Hours (E)
- <u>WL 103</u> <u>Blueprint Reading and Metallurgy</u> **3 Credit Hours** (E)

#### **Credit Hours: 15**

#### Second Semester

- <u>MT 105 Practical Math for Industrial Occupations</u> 3 Credit Hours
- <u>SP 103 ~Speech Fundamentals</u> 3 Credit Hours
- <u>WL 104 Shielded Metal Arc Welding (SMAW)</u> 3 Credit Hours (E)
- <u>WL 202 Gas Tungsten Arc Welding (GTAW)</u> 3 Credit Hours
- <u>WL 210 Commercial and Industrial Welding Practices</u> 3 Credit Hours

#### **Credit Hours: 15**

# **Third Semester**

- <u>CS 102 Computer Literacy</u> **3 Credit Hours** (E)
- <sup>1</sup>Management Elective **3 Credit Hours**
- <sup>2</sup>Social Science Elective **3 Credit Hours**
- WL 201 Gas Metal Arc Welding (GMAW) 3 Credit Hours
- <u>WL 203 Flux-Core Arc Welding (FCAW)</u> 3 Credit Hours

#### Credit Hours: 15

### **Fourth Semester**

- <u>WL 298 Welding Capstone</u> 3 Credit Hours
- <sup>3</sup>Specialization Courses **12 Credit Hours**

#### **Credit Hours: 15**

## **Total Credit Hours: 60**

~ Designates courses on the statewide Core Coursework Transfer Agreement.

<sup>1</sup>Choose from <u>MG 262</u>, <u>MG 264</u>, <u>MG 266</u>, or <u>MG 272</u>.

<sup>2</sup>Choose from any Psychology (PY) or Sociology (SO) course.

<sup>3</sup>Specialization Courses (minimum of 12 credit hours): Students must complete a series of restricted electives. Courses offered to fulfill the electives will be structured around current business and industry demands. Courses are limited to Advanced Welding, CAD/CAM for Welding, courses not already required by the program and other related courses as approved by the Dean, Division of Professional and Technical Studies.

This degree program provides students the opportunity to receive credit for their high school EDGE courses (<u>http://careertech.kt2.wv.us/edge/edgeCollege.html</u>) as designated by the (E) within the program sequence.