

Welding

Career Studies Certificate

Program Coordinator: Eddie Fultz • efultz@vhcc.edu • 276-492-2065

Length: One-Two Semesters

Purpose: This program is designed to provide students training in blueprint/symbols reading, SMAW, FCAW, GMAW, and GTAW. Upon completion of Welding Career Studies Certificate, graduates will be prepared for employment as a basic welder.

Occupational Objectives: The Welding Career Studies Certificate provides the basic skills necessary to secure an entry level job as a manual or semiautomatic welder. Students will develop the basic skills necessary to read blueprints, and perform steel welds in 1F, 2F, 3F, 1G, 2G, and 3G positions. These will be accomplished in three different weld processes.

Program Notes: Along with the Career Studies Certificate in Welding, graduates will also obtain the OSHA-10-hour General Industry certification.

Track 1: (Day)

| Course Number | Course Title | Lecture Hours | Lab Hours | Credits |
|---|-----------------------------------|---------------|-----------|-----------|
| First Semester (Fall) | | | | |
| WEL 120 | Introduction to Welding | 1 | 2 | 2 |
| WEL 123 | Shielded Metal Arc Welding (SMAW) | 2 | 3 | 3 |
| SAF 130 | Industrial Safety – OSHA 10 | 1 | 0 | 1 |
| WEL 150 | Welding Drawing & Interpretation | 3 | 0 | 3 |
| WEL 160 | Gas Metal Arc Welding (GMAW) | 2 | 3 | 3 |
| WEL 161 | Fluxed Cored Arc Welding (FCAW) | 2 | 3 | 3 |
| WEL 164 | Gas Tungsten Arc Welding (GTAW) | 2 | 3 | 3 |
| Total Credits for Career Studies Certificate | | 13 | 14 | 18 |

Track 2: (Evening)

| Course Number | Course Title | Lecture Hours | Lab Hours | Credits |
|------------------------------|-----------------------------------|---------------|-----------|-----------|
| First Semester (Fall) | | | | |
| WEL 120 | Introduction to Welding | 1 | 2 | 2 |
| WEL 123 | Shielded Metal Arc Welding (SMAW) | 2 | 3 | 3 |
| SAF 130 | Industrial Safety – OSHA 10 | 1 | 0 | 1 |
| WEL 150 | Welding Drawing & Interpretation | 3 | 0 | 3 |
| WEL 160 | Gas Metal Arc Welding (GMAW) | 2 | 3 | 3 |
| Total | | 9 | 8 | 12 |

| Course Number | Course Title | Lecture Hours | Lab Hours | Credits |
|---|---------------------------------|---------------|-----------|-----------|
| Second Semester (Spring) | | | | |
| WEL 161 | Fluxed Cored Arc Welding (FCAW) | 2 | 3 | 3 |
| WEL 164 | Gas Tungsten Arc Welding (GTAW) | 2 | 3 | 3 |
| Total | | 4 | 6 | 6 |
| Total Credits for Career Studies Certificate | | | | 18 |