

CERTIFICATE IN WELDING FOUNDATION

At a Glance

Faculty

www.kpu.ca/trades (<http://www.kpu.ca/trades/>)

Area of Study:

www.kpu.ca/trades/welding (<http://www.kpu.ca/trades/welding/>)

Academic Level:

Vocational

Credential Granted:

Certificate

Intake Type:

- Limited

Minimum Credits Required:

27

Curriculum Effective Date:

01-Jan-2014

Welding Foundation is a 28 week program that prepares students for employment at the entry level. Students will develop the necessary skills and knowledge to work safely and effectively using a variety of welding processes and procedures. Welders operate welding equipment to weld ferrous and non-ferrous metals.

At the end of the Foundation program students will write the Welder Certificate of Completion exam. Students who complete the Foundation program and exam are eligible for SkilledTradesBC credit in Welder Level 1 and Level 2 apprenticeship and 300 work-based hours.

Taking a foundation program can build the skills that employers are looking for. To progress as an apprentice you will need to find an employer who will sponsor your apprenticeship and register with SkilledTradesBC (<https://skilledtradesbc.ca/>). When you are ready for career advancement; KPU delivers Welder Apprenticeship (<https://calendar.kpu.ca/apprenticeships/welding-apprenticeship/>) in-school technical training level 3 and Specialty Metals Endorsement.

Apprenticeship and Modular Pathways

There are two pathways for progression beyond the Welding Foundation. Students with an employer sponsor will progress to Welder Apprentice Level 3, followed by the Specialty Metals Endorsement. To apply for Level 3, see Apprenticeship Programs (<https://calendar.kpu.ca/apprenticeships/>). Students without an employer sponsor will progress to Welder Level B (<https://calendar.kpu.ca/programs-az/trades-technology/welding/welding-level-b-citation/>) followed by Welder Level A (<https://calendar.kpu.ca/programs-az/trades-technology/welding/welding-level-a-citation/>).

Please see [kpu.ca/trades](http://www.kpu.ca/trades) (<http://www.kpu.ca/trades/>) for schedule information.

Who Studies Welding?

This program is suited for individuals that have good math, are detailed oriented, and have good hand-eye coordination. Physical demand can vary; there is a considerable amount of standing, lifting, bending. Additional information is available at: kpu.ca/trades/welding (<http://www.kpu.ca/trades/welding/>)

Career Opportunities

This program prepares graduate for employment by companies that manufacture structural steel and platework, boilers, heavy machinery, aircraft and ships and other metal products, and by welding contractors and welding shops. With additional training welders may specialize in certain types of welding such as custom fabrication, ship building and repair, aerospace precision welding, pressure vessel welding, pipeline construction welding, structural construction welding, or machinery and equipment repair welding.

Requirements

Admission Requirements

The following program admission requirements apply:

- English:
 - English 10 with a minimum grade of 'C' (or equivalent), or
 - Composition 10 with a minimum grade of 'C' (or equivalent), or
 - Creative Writing 10 with a minimum grade of 'C' (or equivalent), or
 - Literary Studies 10 with a minimum grade of 'C' (or equivalent), or
 - English First Peoples Writing 10 with a minimum grade of 'C' (or equivalent), or
 - English First Peoples Literary Studies 10 with a minimum grade of 'C' (or equivalent), or
 - Communications 11 with a minimum grade of 'C' (or equivalent), or
 - KPU's Vocational Trades English Reading Assessment Part II with a minimum score of 50%.
- Mathematics:
 - Any Math 10 with a minimum grade of 'C' (or equivalent), or
 - KPU's Vocational Trades Mathematics Assessment with a minimum score of 20%.

Accessibility Services (Accommodations): Students seeking accommodations for a disability should contact Accessibility Services to explore options to remove potential barriers to their learning experience. Prospective students and applicants are encouraged to reach out for support as early as possible as some services require advance planning. An Accessibility Advisor or Learning Specialist will review the course essential skills and abilities and determine what, if any, accommodations could support your education.

Curricular Requirements

Our welding program is based on British Columbia Provincial modular training and is consistent with all other training providers in BC. It is designed to combine welding theory and practical skills. Hands-on shop experience is the basis on which skills are developed in the program. The program is designed to accommodate past experience; credit and/or advancement will be given to students who can demonstrate learned skills plus theoretical knowledge.

Students must achieve a minimum grade of B- in all required courses:

| Code | Title | Credits |
|----------------------|-------------------------------------|-----------|
| WELD 1010 | Worksite Safety and Orientation | 1 |
| WELD 1115 | Oxy Fuel Welding and Cutting | 4 |
| WELD 1120 | Basic Shielded Metal Arc Welding | 4 |
| WELD 1130 | Basic Gas Metal Arc Welding | 4 |
| WELD 1140 | Material Handling | 1 |
| WELD 1200 | Air Arc and Plasma Arc Cutting | 1 |
| WELD 1210 | Advanced Shielded Metal Arc Welding | 4 |
| WELD 1220 | Read Technical Drawings | 1 |
| WELD 1230 | Advanced Semi-Automated Welding | 4 |
| WELD 1240 | Basic Metallurgy | 1 |
| WELD 1250 | Stationary Shop Equipment | 2 |
| Total Credits | | 27 |

Other Information

Special Equipment

Students will require appropriate personal safety clothing and CSA approved steel toed boots. Safety glasses, hearing protection, leather gloves, leather jacket or apron, welding helmet and cutting goggles are also required. A list of required tools, equipment or supplies will be provided by the instructor at the start of the program.

Credential Awarded

Upon successful completion of this program, students are eligible to receive a **Certificate in Welding Foundation**.

KPU will report your in-school technical training completion information to SkilledTradesBC in order for SkilledTradesBC to determine credit towards your designated apprenticeship.