

Welding Foundation: Certificate

Faculty of Trades and Technology	kpu.ca/trades
Welding	kpu.ca/trades/welding
Program Type	Vocational
Credential Granted	Certificate
Offered At	Cloverdale
Start Date(s)	Varies
Intake Type	Limited intake
Format	Full-time
Instructional Cycle	Fixed-term
Curriculum Effective Date	01-Jan-2014
How to Apply	www.kpu.ca/admission

DESCRIPTION

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 ITA 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 the Industry Training Authority (ITA). When you are ready for career advancement; KPU delivers Welder 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. Students without an employer sponsor will progress to Welder Level B followed by Welder Level A.

Details on program dates are available on Kwantlen Course Search.

STUDENT PROFILE

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

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.

ADMISSION REQUIREMENTS

The following program admission requirements apply:

- English:
 - English 12 with a minimum grade of 'C' (or equivalent), or
 - Completion of KPU's Trades reading test with a minimum score of 75%
- Mathematics:
 - Apprenticeship and Workplace Mathematics 11 with a minimum grade of 'C' (or equivalent), or
 - Foundations of Mathematics 11 with a minimum grade of 'C' (or equivalent), or
 - Pre-calculus 11 with a minimum grade of 'C' (or equivalent), or
 - KPU's Trades Mathematics test with a minimum threshold percentage of 50%
- Interview by an instructor

Note: International student Applications for Admission require approval of the Dean.

Recommend satisfactory physical health. Prior to applying, prospective students with mental or physical impairments, who may require program accommodations, should contact the Office of the Dean of Trades and Technology to discuss required skills and competencies, and a Disability Advisor at 604.599.3233 to ensure appropriate accommodations can be arranged.

On November 26, 2018 changes to the admission requirements for this program were approved by Senate. Effective September 2019 the following conditions will apply:

- English:
 - English 10 with a minimum grade of 'C' (or equivalent), or
 - Communications 11 with a minimum grade of C, or
 - KPU's Vocational Trades English Reading Assessment Part II with a minimum score of 50%
- Mathematics:
 - Apprenticeship and Workplace Mathematics 10 with a minimum grade of 'C' (or equivalent), or
 - Foundations of Mathematics 10 with a minimum grade of 'C' (or equivalent), or
 - Pre-calculus 10 with a minimum grade of 'C' (or equivalent), or
 - KPU's Trades Mathematics test with a minimum threshold percentage of 20%
- Interview by an instructor

Note: International student Applications for Admission require approval of the Dean.

These changes will appear in the 2019-20 University Calendar to be published in June 2019.

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.

Required Courses:

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

Note: Students must achieve a minimum grade of 70%, which translates to B-, in practical exams and assignments.

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 complete list of tools and equipment will be provided by Admissions upon acceptance to 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 the Industry Training Authority in order for the ITA to determine credit towards your designated apprenticeship.