

# Welding Foundation: Certificate

Faculty of Trades and Technology	kpu.ca/trades
Welding	kpu.ca/trades/welding
Implementation Date	01-Jan-2014
Start Date(s)	Varies
Admission Type	Fixed term
Enrolment Type	Limited enrolment
Program Type	Vocational
Credential Granted	Certificate
Offered At	Cloverdale
Format	Full-time
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 levels 3 and Specialty Metals Endorsement.

## Apprenticeship and Modular Pathways

There are two pathways for progression beyond the Welding Foundation/Welder C level. 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.

## 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](http://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.

## PROGRAM ADMISSION REQUIREMENTS

In addition to KPU's General university admission requirements including the vocational-level English Proficiency Requirement, 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.

## PROGRAM 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	(P-1) Worksite Safety and Orientation	1 credit
WELD 1115	(P-2 & P3) Oxy-Fuel Welding and Cutting	4 credits
WELD 1120	(P-4) Basic Shielded Metal Arc Welding	4 credits
WELD 1130	(P-6) Basic Gas Metal Arc Welding I	4 credits
WELD 1140	(RK-1) Material Handling	1 credit
WELD 1200	(P-5) Air Arc and Plasma Arc Cutting	1 credit
WELD 1210	(P-4) Advanced Shielded Metal Arc Welding	4 credits

WELD 1220	(RK-2) Read Technical Drawings	1 credit
WELD 1230	(P-6) Gas Metal Arc Welding	4 credits
WELD 1240	(RK-3) Basic Metallurgy	1 credit
WELD 1250	(P-1) Stationary Shop Equipment	2 credits

**Note:** Students must achieve 70% (B-) or better 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.