



# Sheet Metal Worker

**SCHOOL OF CONSTRUCTION**

## Overview

Learn how to design, fabricate, assemble, install and repair sheet metal products required in various industries and settings.

If you desire a career where you will work with your hands and develop special skills, you'll enjoy working as a Sheet Metal Worker.

During your career, you will:

- layout, measure and mark dimensions and reference lines on sheet metal according to drawings or templates
- use laser or plasma cutting equipment, hand and power shears, snips and light metal-working equipment to cut, drill or punch, bend and shape sheet metal
- fasten with bolts, screws, cement, rivets, adhesives, solder or by welding
- install and repair sheet metal products and ensure installations conform to specifications and building codes
- do metal cladding of insulated piping and equipment on industrial sites
- manufacture and install flashing, coping for roofing applications and supply.
- install, service and repair air handling equipment, furnaces, fans, air terminal devices and split system air conditioners.
- install any gas appliance 400,000 BTUs and smaller, such as furnaces, hot water tanks, barbeques, stoves and garage heaters.

You will use many types of metal, including black and galvanized steel, copper, brass, nickel, stainless steel and aluminum, to make products such as:

- pollution control systems, dust collecting and control systems, air-slide, grain spouting material blowing, and other air systems
- heating, ventilating and air conditioning systems
- solar heating and cooling systems and all integral equipment
- metal showcases, display neon and metal sign equipment
- metal cabinets, custom-built tables, counters and fixtures for hospitals, kitchen equipment and items for the foodservice and beverage industry
- electrical panels and related equipment
- dairy, brewery and laboratory equipment
- metal shelving, lockers, window frames, metal doors and frames, toilet partitions
- flashing, coping, troughing and roof drainage systems
- custom or small-run fabrication of a variety of sheet metal items.

This is a compulsory trade - to work in this trade, you must hold a recognized trade certificate or be a registered apprentice.

You will also be credited with a Gas - Class B license at the end of your training, allowing you to install and service all gas appliances 400,000 BTUs and under and install five-ton and under air conditioners.

## Traits, skills and aptitudes

Sheet metal workers are skilled tradespeople who like collaborating with others and working independently.

This line of work is most fulfilling for those who enjoy working with their hands in various environments and developing specialized skills.

To thrive in this career, it is important to have the following traits:

- creative problem solvers
- mechanical aptitude
- good eye-hand coordination, spatial and form perception, good eyesight, strength and stamina to carry heavy tools and manual dexterity
- the ability to visualize a finished product from a document
- a good understanding of practical mathematics, geometry, and document reading
- the ability to stand for long periods

- patience, dependability and accuracy
- the ability to work in a construction or shop environment
- good communication skills
- the ability to work alone or as part of a team
- a commitment to safe working conditions

## Credentials

Upon successfully completing the required working hours and apprenticeship education periods, graduates will be awarded an advanced diploma in addition to journeyperson status by Alberta's Apprenticeship and Industry Training.

This is a Red Seal Endorsed trade – a recognizable standard that allows tradespeople to work across Canada.

## Admission requirements

To enter an apprenticeship, you must have the educational qualifications required or recommended education for the trade to which you apply.

Entrance requirements are monitored and set by Alberta Apprenticeship and Industry Training.

### Minimum requirements

Successful completion of the following courses:

- English 20-2
- Math 20-3
- Science 10

OR

A pass mark in all five Canadian General Educational Development (GED) tests

OR

Alberta Apprenticeship and Industry Training Entrance Exam

### Recommended requirements

Apprentices with an Alberta High School Diploma that includes the following courses:

- English 30-2
- Math 30-3
- Physics 30 OR Chemistry 30 OR Science 30
- Related career and technology studies (CTS) courses

## Costs

### 2024/25 tuition and fees

The following costs are effective as of July 1, 2024.

Period	Number of weeks	Tuition fees	Additional fees	Total
1	10	\$1,440	\$347	\$1,787
2	10	\$1,440	\$347	\$1,787
3	10	\$1,440	\$347	\$1,787

Period	Number of weeks	Tuition fees	Additional fees	Total
4	10	\$1,440	\$347	\$1,787
<b>Total cost:</b>				<b>\$7,148</b>

The estimated total cost of 2024/25 tuition and fees in each period of technical training.

## Books and Supplies

Books or modules, along with other items for classes, are approximately \$600 per period.

It's recommended you don't purchase books or modules ahead of time as they might be outdated by the time you attend classes, and they cannot be returned to the Bookstore.

Personal protective equipment (PPE) will be required for the program, which may be an additional cost to apprentices.

## 2023/24 tuition and fees

The following costs are effective until June 30, 2024.

Period	Number of weeks	Tuition fees	Additional fees	Total
1	10	\$1,320	\$337	\$1,657
2	10	\$1,320	\$337	\$1,657
3	10	\$1,320	\$337	\$1,657
4	10	\$1,320	\$337	\$1,657
<b>Total cost:</b>				<b>\$6,628</b>

The estimated total cost of 2024/25 tuition and fees in each period of technical training.