



# Pre-employment Refrigeration and Air Conditioning

SCHOOL OF CONSTRUCTION

## Overview

Our intensive, 12-week Pre-Employment Refrigeration and Air Conditioning Mechanics program is pivotal for starting an apprenticeship in the heating, ventilation and air conditioning (HVAC) industry.

Our curriculum thoroughly covers the same training a first-year Refrigeration and Air Conditioning Mechanic apprentice would receive, integrating practical skill-building and safety training.

As a student, you will:

- learn the basic principles of refrigeration systems and their applications
- get practical experience with the tools and equipment used in the trade
- learn techniques for diagnosing and troubleshooting system malfunctions
- learn to install various types of refrigeration and air conditioning systems
- learn routine maintenance to ensure system longevity and efficiency
- gain knowledge of environmental controls and regulations pertinent to refrigerants and systems.

Graduates boast a very high employment rate, signifying the demand for skilled mechanics in this field.

## Traits, skills and aptitudes

Refrigeration and air conditioning mechanics tend to be objective, methodical and innovative.

You need:

- mechanical aptitude and interest
- coordination and manual dexterity
- strength and stamina
- the ability to work with others and deal with customers
- the ability to drive a service truck to worksites.

You should enjoy variety, solving problems and working with little supervision.

## Academic path

This program aligns with the first period of Alberta Apprenticeship and Industry Training's (AIT) Refrigeration and Air Conditioning Mechanic curriculum.

Graduates are eligible to register as apprentices and challenge the first-period exam.

Once you pass the exam and complete the necessary training hours with an employer, you may register for SAIT's Refrigeration and Air Conditioning Mechanic apprenticeship program beginning in period two.

## Credentials

Upon successful completion of the program, you'll receive a SAIT Pre-Employment Refrigeration Pre-Employment Certificate.

## Admission requirements

### Applicants educated in Canada

Applicants must demonstrate [English language proficiency](#) and completion of the following courses or equivalents:

- Math 30-1, Math 30-2 or Math 30-3, and
- English Language Arts 30-1 or English Language Arts 30-2, and
- Physics 20 or Chemistry 20.

SAIT accepts [high school course equivalents](#) for admission for applicants educated outside Alberta.

## Applicants educated outside of Canada

All applicants who were educated outside of Canada must demonstrate [English language proficiency](#) and provide proof they meet the program admission requirements with an international document assessment. [Find accepted educational documents and assessment options.](#)

SAIT may also accept courses completed at certain [international post-secondary institutions](#).

## Costs

### 2024/25 tuition and fees

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

#### Domestic Students

| Year               | Number of semesters | Tuition fees | Additional fees | Total per year    |
|--------------------|---------------------|--------------|-----------------|-------------------|
| 1                  | 0.5*                | \$5,626.50   | \$159           | \$5,785.50        |
| <b>Total cost:</b> |                     |              |                 | <b>\$5,785.50</b> |

The estimated total cost of tuition and fees for domestic students is based on the recommended course load per year.

\*Less than a full semester of 16 weeks.

### Books and Supplies

Books and supplies are approximately \$1,000 - \$1,500 per full-time year.

This is a bring-your-own-device program with a standard computer hardware and software requirement. See the specific requirements on our [computers and laptops page](#).

Find your booklist on the [SAIT Bookstore's](#) website. The booklist will be available closer to the program start date.

Can't find your program or course? The bookstore didn't receive a textbook list. Contact your program directly to determine if they're still refining course details or if you're in luck; no textbook purchase is required this term.

### Required personal protective equipment (PPE)

- Steel toe or equivalent work boots
- Leatherwork gloves
- Safety glasses
- Ear/hearing protection (if you prefer non-disposable types. SAIT provides disposable hearing protection.)