Agricultural Equipment Technician

SCHOOL OF TRANSPORTATION

Overview

Learn to repair, overhaul and maintain agricultural equipment, including tractors, tillage, seeding and harvesting equipment.

If you enjoy precise work, problem-solving and working with your hands, you'll enjoy a career as an agricultural equipment technician. SAIT offers apprenticeship education for periods two and four.

You may specialize in service and repair of fuel injection pumps and injectors, engine overhaul, hydraulic systems, power shift transmissions or specific types of equipment (combines, forage harvesters, tractors, etc.).

In general, you'll:

- service and repair engines, transmissions, hydraulic systems and the electrical and electronic systems of agricultural equipment
- pinpoint problems by discussing equipment operation with owners
- visually check and listen to machinery in operation
- use testing equipment
- take defective units apart
- repair or replace broken, worn-out or faulty parts
- reassemble, adjust, lubricate and test repaired units
- assemble and adjust new agricultural equipment
- learn and apply precision farm technologies such as automated steering systems.

Agricultural equipment technicians must keep up-to-date with new developments in the agricultural equipment field.

Traits, skills and aptitudes

Agricultural equipment technicians are skilled tradespeople who are motivated and enjoy diagnosing various complex mechanical, hydraulic and electrical problems. This line of work is most fulfilling for mechanically inclined people who enjoy working with their hands.

To succeed in this trade, you should:

- have mechanical ability and good hand-eye coordination
- have the strength needed to lift heavy machine parts
- be able to read and understand technical information
- be able to work independently with little supervision
- have math, communication and computer skills
- have effective interpersonal skills to meet the challenges of the workplace
- be committed to safe work habits.

Credentials

Upon successfully completing the required working hours and technical training periods, you'll 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) or Canadian Adult Education Credential (CAEC) tests

OR

Passing the 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

2026/27 tuition and fees

The following costs are effective as of July 1, 2026.

Period	Number of weeks	Tuition fees	Additional fees	Total
2	8	$1,256	$357.50	$1,613.50
4	8	$1,256	$357.50	$1,613.50
			Total cost:	**$3,227**

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

Books and Supplies

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

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

We recommend 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.