Heavy Equipment Technician

SCHOOL OF TRANSPORTATION

Overview

Learn how to maintain, repair and overhaul heavy vehicles, transport trailers, heavy-duty off-road vehicles and industrial equipment.

If you enjoy mechanics, precise work and problem-solving, you'll enjoy working as a heavy equipment technician. You'll interpret orders and diagnose faults and malfunctions before adjusting equipment or repairing and replacing defective parts or systems.

In Alberta, you may specialize as a transport-trailer mechanic, truck and transport mechanic, heavy-duty equipment mechanic (off-road) or an overall heavy equipment technician.

To work in this trade, certification is required. This means that you must either be a registered apprentice who is working under the guidance of a certified journeyperson or you must be a certified journeyperson yourself.

Traits, skills and aptitudes

Heavy equipment technicians are skilled tradespeople who are motivated and comfortable working alone or collaborating with others. This line of work is most fulfilling for those who enjoy working with their hands and are mechanically inclined.

To succeed in this trade, you should:

- have good vision, hearing and sense of smell to diagnose problems
- have the strength and stamina for working with heavy equipment
- be willing to work in cramped or awkward positions
- be comfortable working alone or with a team
- have mechanical ability and an interest in all types of machinery, engines, electronics and precision equipment
- have problem-solving skills and can think logically
- enjoy keeping up to date with changes in technology
- have a valid driver's license to operate equipment for testing purposes
- be committed to safe work practices.

Credentials

Upon successfully completing the required working hours and technical training periods, you'll be awarded an educational credential in addition to journeyperson status by Alberta's Apprenticeship and Industry Training.

Educational credential earned per specialization:

- Heavy Equipment Technician: Advanced Diploma
- Heavy Duty Equipment Mechanic (Off-Road): Diploma
- Transport Trailer Mechanic: Certificate of Achievement
- Truck and Transport Mechanic (On-Road): Diploma

Heavy equipment technicians and their select specialties are Red Seal Endorsed trades – 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

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 20 OR Chemistry 20 OR Science 20
- Related career and technology studies (CTS) courses

Costs

2026/27 tuition and fees

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

Heavy Equipment Technician (Alberta Only)

Period	Number of weeks	Tuition fees	Additional fees	Total
1	8	$1,256	$357.50	$1,613.50
2	8	$1,256	$357.50	$1,613.50
3	8	$1,256	$357.50	$1,613.50
4	8	$1,256	$357.50	$1,613.50
			Total cost:	**$6,454**

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

Heavy Equipment Technician - Heavy Duty Equipment Mechanic (Off-Road)

Period	Number of weeks	Tuition fees	Additional fees	Total
1	8	$1,256	$357.50	$1,613.50
2	8	$1,256	$357.50	$1,613.50
3	8	$1,256	$357.50	$1,613.50
			Total cost:	**$4,840.50**

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

Heavy Equipment Technician - Transport Trailer Mechanic

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

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

Heavy Equipment Technician - Truck and Transport Mechanic (On-Road)

Period	Number of weeks	Tuition fees	Additional fees	Total
1	8	$1,256	$357.50	$1,613.50
2	8	$1,256	$357.50	$1,613.50
4	8	$1,256	$357.50	$1,613.50
			Total cost:	**$4,840.50**

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.