

Area of Interest: Transportation

## Commercial Vehicle and Equipment - Apprenticeship

Not Applicable

Program Code: 0529C01FWO

8 Weeks

Ottawa Campus

### Our Program

#### **Fulfill the in-class requirements for your Commercial Vehicle and Equipment Apprenticeship.**

The Commercial Vehicle and Equipment Apprenticeship program serves as the basic level in-class portion for four motive power trades: truck and coach technician, farm equipment mechanic, heavy duty equipment mechanic and powered lift truck technician. The curriculum is based on the skills and competencies common to these related occupations.

Applicants to the Commercial Vehicle and Equipment Apprenticeship program must:

- be currently employed in the trade
- be formally registered as apprentices with the Ministry of Labour, Training and Skills Development (MLTSD)
- have a valid Offer of Classroom Training from the Ministry of Labour, Training and Skills Development that includes your Ministry Client ID and approved Class Number

Truck and coach technician, farm equipment mechanic, heavy duty equipment mechanic and powered lift truck technician are all compulsory trades which require a certificate of qualification to work in Ontario.

If you are considering a future in this field, you may find a career as an automotive service technician. You may also be employed in:

- small garages
- truck dealerships
- farm and equipment dealerships
- equipment supply firms

If you are not an apprentice, but want to learn more about apprenticeships, visit <http://www.ontario.ca/page/skilled-trades> for detailed information.

#### **For registered apprentices:**

During the eight-week term, you study topics including trade practices, fluid power systems, engine systems, electrical systems, fuel systems, drive train systems, wheel end assemblies and brake systems. More than half of your class time is spent in theory, with the remaining time spent learning practical, hands-on skills in the College's shops.

#### **SUCCESS FACTORS**

This program is well-suited for apprentices who:

- Enjoy a hands-on approach to learning about the motive power industry.
- Have strong observational and analytical skills.
- Can work independently.

## Employment

Graduates may be employed as automotive service technicians. Opportunities exist in small garages, truck, farm and equipment dealerships, equipment supply firms, construction, private industries and government.

## Program of Study

Level: 01	Courses	Hours
TRK8307	Engine Systems I	40.0
TRK8308	Trade Practices	40.0
TRK8309	Fluid Power Systems 1	24.0
TRK8310	Drive Train Systems 1	32.0
TRK8311	Wheel End Assemblies and Brake Systems	32.0
TRK8312	Fuel Systems 1	24.0
TRK8313	Electrical Systems 1	48.0

## Fees for the 2023/2024 Academic Year

Tuition Fees: \$400 per level.

Incidental Fee: \$150 per level.

Information Technology Fee: \$43.86 per level.

Students are responsible for supplies, including textbooks, safety footwear, safety glasses, and parking and locker fees, as applicable.

## Admission Requirements for the 2024/2025 Academic Year

### Program Eligibility

- Applicants must be formally registered as apprentices and be released by their sponsor to attend the College.
- Eligibility is determined by the Ministry of Labour, Training and Skills Development.

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## Application Information

**COMMERCIAL VEHICLE AND EQUIPMENT - APPRENTICESHIP**  
Program Code 0529C01FWO

Registration for Apprenticeship programs takes place through the Ministry of Labour, Training, and Skills Development.

For further information, contact:

Ministry of Labour, Training, and Skills Development  
347 Preston Street, 3rd Floor, Suite 310  
Ottawa, ON K1S 3H8

<http://www.ontario.ca/page/start-apprenticeship>

Telephone: 613-731-7100

Toll-free: 1-877-221-1220

## Contact Information

### Program Coordinator(s)

- Martin Restoule, <mailto:restoum@algonquincollege.com>, 613-727-4723, ext. 5153

## Course Descriptions

### TRK8307 Engine Systems I

Apprentices are introduced to the operating principles and construction features of diesel engines pertaining to the various commercial vehicles and equipment trades. Topics include engine operating and component fundamentals, engine system identification, maintenance and service procedures. Approximately 60 per cent of the course is dedicated to theory instruction, the remaining 40 per cent centres on practical applications.

Prerequisite(s): none

Corequisite(s): TRK8308 and TRK8309 and TRK8310 and TRK8311 and TRK8312 and TRK8313

### TRK8308 Trade Practices

Apprentices are introduced to trade practices and procedures in the repair and service of commercial vehicles and equipment and are prepared for a variety of commercial vehicle trades. Topics include occupational health and safety, precision measuring tools, fastening devices and torquing procedures, bearings, seals, and sealants. Approximately 60 per cent of the course is dedicated to theory instruction, the remaining 40 per cent centres on practical applications.

Prerequisite(s): none

Corequisite(s): none

### TRK8309 Fluid Power Systems 1

Apprentices are introduced to fluid power systems pertaining to the various commercial vehicles and equipment trades. Topics include fluid power fundamentals, components, graphic symbols, principles of operation, hydraulic fluids and filters, conductors and connectors and maintenance schedules. Approximately 60 per cent of the course is dedicated to theory instruction, the remaining 40 per cent centres on practical applications.

Prerequisite(s): none

Corequisite(s): TRK8307 and TRK8308 and TRK8310 and TRK8311 and TRK8312 and TRK8313

### TRK8310 Drive Train Systems 1

Apprentices are introduced to the operating principles and construction features of drive train systems pertaining to the various commercial vehicles and equipment trades. Topics include push-type clutch and flywheel assemblies, gearing fundamentals, single countershaft manual transmissions, drive shafts, power take-off shafts, universal joints and single reduction drive axle assemblies. Approximately 60 per cent of the course is dedicated to theory instruction, the remaining 40 per cent centres on practical applications.

Prerequisite(s): none

Corequisite(s): TRK8307 and TRK8308 and TRK8309 and TRK8311 and TRK8312 and TRK8313

**TRK8311 Wheel End Assemblies and Brake Systems**

Apprentices are introduced to the operating principles and construction features of brake systems pertaining to the various commercial vehicles and equipment trades. Topics include purpose, fundamentals, principles of operation, maintenance, and the servicing of hydraulic and air brake systems. Approximately 60 per cent of the course is dedicated to theory instruction, the remaining 40 per cent centres on practical applications.

Prerequisite(s): none

Corerequisite(s): TRK8307 and TRK8308 and TRK8309 and TRK8310 and TRK8312 and TRK8313

**TRK8312 Fuel Systems 1**

Apprentices are introduced to the operating principles and construction features of fuel systems pertaining to the various commercial vehicles and equipment trades. Topics include fundamentals of diesel fuel systems, diesel fuel injection principles, diesel fuel injection sub-systems and diesel hydraulic injection. Approximately 60 per cent of the course is dedicated to theory instruction, the remaining 40 per cent centres on practical applications.

Prerequisite(s): none

Corerequisite(s): TRK8307 and TRK8308 and TRK8309 and TRK8310 and TRK8311 and TRK8313

**TRK8313 Electrical Systems 1**

Apprentices are introduced to the operating principles and construction features of electrical systems pertaining to the various commercial vehicles and equipment trades. Topics include introduction to electricity, electrical laws, test equipment, circuits and calculations, circuits and protective devices, circuit repair, electromagnetic devices and battery fundamentals. Approximately 60 per cent of the course is dedicated to theory instruction, the remaining 40 per cent centres on practical applications.

Prerequisite(s): none

Corerequisite(s): TRK8307 and TRK8308 and TRK8309 and TRK8310 and TRK8311 and TRK8312