

HEAVY EQUIPMENT TECHNICIAN (HDTN)

Cambrian's heavy equipment program produces mechanics ready for industry

With extensive heavy equipment shop instruction from our expert faculty, you'll work on powerful off-road vehicles such as loaders, bulldozers, and scoop trams, always navigating a culture of safety. As a mechanic in the mining or construction industries, this diverse trade provides a wealth of opportunities to service heavy equipment, from basic maintenance, brakes, engine repairs, and hydraulics to electrical and electronics.

Our program features an optional, paid co-op directly related to your program of study where you'll apply your skills in an actual work environment. Required work preparation sessions help you develop an industry-specific résumé and effective interviewing skills. We collaborate with industry partners to focus on in-demand skills so you can start your career upon graduation.

(<http://cambriancollege.ca/field-of-study/skills-and-trades-training/>)

Program highlights

- Diploma equates to 3 levels of required theory towards your apprenticeship Certificate of Qualification
- Optional paid co-op to gain industry training
- Opportunity for select students to participate in the Ontario Technological Skills Competition
- Complete a second diploma in Motive Power Technician – Truck and Coach in just 1 year
- Opportunity for select students to participate in the Ontario Skills Competition

Program of study for 2024-25 Academic Year

Students are required to successfully complete an online Lab Safety course (in Moodle) when starting their program at Cambrian. This course *must* be completed prior to entering the labs (as identified in the table below) in the Schools of Skills Training, Engineering Technology and Environmental Studies.

Semester 1		Credits
ELC 1120	Electrical & Electronics I ¹	4
HDM 1161	Trade Practices & Applications I ¹	5
HDM 1170	Diesel Engines ¹	4
MTH 1010	Trade Math I	3
HDM 1221	Hydraulics	4
Credits		20
Semester 2		Credits
ENG 1002	College Communications	3
HDM 1162	Trade Practices II	4
HDM 1230	Fuel Systems ¹	4
SSB 1100	Suspen/Steer/Brake Sys I Pneumatics ¹	4
PWT 1210	Power Train Systems ¹	4
One General Education course. ²		3
Credits		22

Semester 3

ELC 2300	Electrical & Electronics II ¹	4
ENG 1780	Applied Communication II	2
HDM 2370	Diesel Engines II	4
HDM 2371	Heavy Duty Brakes	4
HYS 2300	Hydraulic Systems I ¹	3
One General Education course. ²		3
Credits		20

Semester 4

DFS 2402	Diesel Fuel Injection Systems	4
ELC 2400	Electrical & Electronics III ¹	5
HYS 2400	Hydraulic Systems II ¹	3
PWT 2401	Power Train Systems II	4
One General Education course. ²		3
Credits		19
Total Credits		81

¹ Course with Lab Component

² For more information regarding General Education courses, click here (<https://cambriancollege.ca/general-electives/>).

Admission requirements

For graduates of the new curriculum (OSS): Ontario Secondary School Diploma (30 credits) or equivalent or mature student status, including:

- Any grade 12 English (C) or (U)
- Any grade 11 mathematics (C), (U), or (M)

Program delivery

2024-2025

Fall term start

SEMESTER 1: Fall 2024
SEMESTER 2: Winter 2025
SEMESTER 3: Fall 2025
SEMESTER 4: Winter 2026

Winter term start

SEMESTER 1: Winter 2025
SEMESTER 2: Spring 2025
SEMESTER 3: Fall 2025
SEMESTER 4: Winter 2026

Registration to practice / additional testing

- After first year, you will be certified to work at entry-level industry positions after successfully challenging the:
 - Gas Technician 3 TSSA exam
 - Oil Burner Technician 3 TSSA exam
 - Gas Pipe Fitter TSSA exam (Optional)
- Upon completion of second year and successfully challenging the Gas Technician 2 and Oil Burner Technician 2 TSSA exams you'll be fully certified enter the workforce as a Heating Systems Technician

Specific program pathways

College or university degree opportunities

If you are a graduate of this program, you may continue your studies at a college or university and you may receive credit(s) for your prior college education. Refer to Cambrian's college and university agreement (<https://cambriancollege.ca/supports-services/articulation-agreements/>) details for further information.

Employment opportunities

Graduates may find employment as apprentices in the forestry, mining, and construction industries as well as heavy equipment manufacturing or in truck shops.

Contacts

Art Pringle

Program Coordinator

705-566-8101, ext 6240

arthur.pringle@cambriancollege.ca

INTERNATIONAL ADMISSIONS

mailboxadmissions@cambriancollege.ca