

HEATING, VENTILATION AND AIR CONDITIONING TECHNICIAN (HVTN)

Ontario College Diploma | 4 semesters | Barrydowne Campus

With Cambrian's Technical Standards and Safety Authority (TSSA) accredited program, you'll prepare to challenge TSSA exams for Natural Gas Technician and Oil Burner Technician certifications. Theory and practical lab training are combined to develop a solid understanding of heating systems (natural gas, propane, and fuel oil) as well as air conditioning, refrigeration principles, sheet metal fabrication, and heat loss/heat gain design considerations. You'll also be introduced to the skills required for the installation, service, and troubleshooting of residential and light commercial heating and cooling applications.

Program Highlights

- 2 years – 4 semesters
- Program accredited by the Technical Standards and Safety Authority (TSSA)
- One of only 2 colleges in Ontario to offer Oil Burner Technician training
- Hands-on training in the College's state-of-the-art HVAC labs
- 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

Capped Enrolment

Quick Links

How to Apply (<http://cambriancollege.ca/apply/>)

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

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)

APPLY NOW! (<https://www.ontariocolleges.ca/en/apply-now/>)

Program Delivery

2023-2024

This program will be delivered in the following terms:

Fall Term Start

1. SEMESTER 1 Fall 20223
2. SEMESTER 2 Winter 2024
3. SEMESTER 3 Fall 2024
4. SEMESTER 4 Winter 2025

Winter Term Start

1. SEMESTER 1 Winter 2024
2. SEMESTER 2 Spring 2024
3. SEMESTER 3 Fall 2024
4. SEMESTER 4 Winter 2025

For specific term start/end dates and other key dates/deadlines, please see the Academic Schedule (<http://cambriancollege.ca/apply/how-to-apply/academic-schedule/>) on our website.

Program of Study for 2023-24 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
MTH 1010	Trade Math I	3
ELC 1111	Electrical Fundamentals ¹	4
HVA 1101	Trade Practices ¹	4
HVA 1102	HVAC Controls I ¹	4
HVA 1103	Fuel Fundamentals and Codes	3
RAC 1100	Refrigeration I ¹	4
ENG 1002	College Communications	3
Credits		25
Semester 2		Credits
HVA 1201	Gas Pipe Fitter ¹	4
HVA 1202	HVAC Controls II ¹	4
HVA 1203	Appliance Efficiency ¹	3
HVA 1204	Burners & Combustion Chambers ¹	3
RAC 1200	Refrigeration II ¹	4
One General Education course. ²		3
Credits		21
Semester 3		Credits
ENG 1780	Applied Communication II	2
HVA 2300	HVAC Control Labs ¹	4
HVA 2301	Space Heating and Conversions	3
HVA 2302	Advanced HVAC Controls	4
HVA 2303	HVAC Appliance Labs ¹	4
HVA 2304	HVAC Appliances	3
One General Education course. ²		3
Credits		23
Semester 4		Credits
HVA 2400	HVAC Heating Systems Lab ¹	4
HVA 2401	HVAC Heating Lab ¹	4
HVA 2402	Forced Air Systems	4
HVA 2403	Hydronics and Water Heaters	3
HVA 2404	Air Conditioning Heat Pumps	3

One General Education course. ²	3
Credits	21
Total Credits	90

¹ Course with Lab Component

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

Fees

Tuition and Ancillary Fees

Please see our fees page (<http://cambriancollege.ca/fees/>) for the breakdown of tuition and mandatory ancillary fees by program and semester for both domestic and international students.

Books & Supplies

The cost of books and supplies for Year 1 is approximately \$1,400. This is the best information available at the time of publishing to the website and is subject to change.

Graduate Options

Employment Opportunities

Graduates who have met TSSA certification requirements may find employment as natural gas, propane, and oil burner technicians. They may also pursue OCOT (Ontario College of Trades) journey person apprenticeship within the refrigeration, air conditioning, plumbing, or sheet metal fabrication industries. Graduates are also prepared for employment opportunities as sales or maintenance personnel in commercial, institutional, and industrial areas.

College/University Degree Opportunities

Graduates from this program may continue their studies at college/university and may receive credit for their prior College education.

Refer to College/University Agreements (<http://www.cambriancollege.ca/agreements/>) for further information.

Contacts

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INTERNATIONAL ADMISSIONS

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