

# HEATING, VENTILATION & AIR CONDITIONING TECHNICIAN (HVTN)

## Ontario College Diploma | 4 semesters | Barrydowne

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!** (<http://ontariocolleges.ca/apply>)

### Program Delivery

#### 2020-2021

This program will be delivered in the following terms:

#### Fall Term Start

1. SEMESTER 1 Fall 2020
2. SEMESTER 2 Winter 2021
3. SEMESTER 3 Fall 2021
4. SEMESTER 4 Winter 2022

#### Winter Term Start

1. SEMESTER 1 Winter 2021
2. SEMESTER 2 Spring 2021
3. SEMESTER 3 Fall 2021
4. SEMESTER 4 Winter 2022

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

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 <sup>1</sup>	4
HVA 1101	Trade Practices	4
HVA 1102	HVAC Controls I <sup>1</sup>	4
HVA 1103	Fuel Fundamentals and Codes <sup>1</sup>	3
RAC 1100	Refrigeration I <sup>1</sup>	4
	Credits	22
Semester 2		
ENG 1002	College Communications	3
HVA 1201	Gas Pipe Fitter	4
HVA 1202	HVAC Controls II <sup>1</sup>	4
HVA 1203	Appliance Efficiency <sup>1</sup>	3
HVA 1204	Burners & Combustion Chambers <sup>1</sup>	3
RAC 1200	Refrigeration II <sup>1</sup>	4
	One General Education course. <sup>2</sup>	3
	Credits	24
Semester 3		
ENG 1780	Applied Communication II	2
HVA 2300	Appliance Conversions <sup>1</sup>	4
HVA 2301	Building as a System <sup>1</sup>	3
HVA 2302	Advanced HVAC Controls <sup>1</sup>	4
HVA 2303	Heating Systems <sup>1</sup>	4
HVA 2304	Water Heaters and Combi System <sup>1</sup>	3
	One General Education course. <sup>2</sup>	3
	Credits	23
Semester 4		
HVA 2400	Air Conditioning & Heat Pumps <sup>1</sup>	4
HVA 2401	Forced Air Add-on Devices <sup>1</sup>	4
HVA 2402	Forced Air Systems <sup>1</sup>	4
HVA 2403	Hydronics <sup>1</sup>	3
HVA 2404	Space and Decorative Heaters <sup>1</sup>	4

One General Education course. <sup>2</sup>	3
Credits	22
Total Credits	91

<sup>1</sup> Course with Lab Component

<sup>2</sup> 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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