

THE RIGHT SKILLS ► A PROVEN ADVANTAGE

CERTIFIED HEATING TECHNICIAN

Credential Issued:

ITA Certificate of Qualification (Certified Heating Technician with trade endorsement(s): Forced Air and/or Hydronics).

(Persons completing a formal apprenticeship also receive a Certificate of Apprenticeship)

Occupational Description:

“Certified Heating Technician” means a person who performs construction related tasks in the residential market dealing with the design, installation and servicing of heating, ventilation and cooling systems through forced air or hydronic means, often including either sheet-metal/duct work and/or piping installation.

Program Duration & Structure:

The program will be delivered in a variety of formats combining in-school and work-based training, all designed to meet the competency standards and profile defined by the industry, and will generally take 2 years to complete. The program includes:

- In-school:
 - Level 1: Common Core – 180 hrs (6 weeks)
 - Level 2: Trade Endorsements:
 - Hydronics 250 hrs (8 weeks)
 - AND/OR
 - Forced Air 220 hrs (7 weeks)
- Work-based: Hydronics 3000 hrs
AND/OR
Forced Air 3000 hrs

Program Completion Requirements:

- Successful completion of core in-school technical training – practical assessment and written examination. (Requirement can be met through challenging the level exam where available.)
- Successful completion of in-school technical training towards a minimum of one endorsement – Hydronics or Forced Air. (Requirement can be met through challenging the level exam where available.)
 - Hydronics Endorsement – practical assessment and written examination
AND/OR
 - Forced Air Endorsement – practical assessment and written examination
- Completion of 3000 workplace hours per endorsement.
- Recommendation for Certification signed by the Sponsor and a Certified Heating Technician or equivalent.
- BCSA Class B Gasfitter license.

Program Challenge Requirements:

- 4500 documented hours per endorsement of directly related work experience are required to challenge BC Certificate of Qualification examination.
- BCSA Class B Gasfitter license.
- During the transition period which expires June 30, 2011, in lieu of writing the Certificate of Qualification examination to obtain a Certified Heating Technician Certificate of Qualification, ITA will accept the following experience and training as proof of trade knowledge:
 - 6000 work based hours (documented through ROE and/or Employer(s))
AND
 - BCSA Class B Gasfitter License
AND
 - One of the following endorsements:
 - Forced Air endorsement
(valid TECA Quality First “Forced Air Guidelines” number, TECA Quality First “Ventilation Guidelines” number , credit for TECA’s Quality First “Basics of Air”
AND/OR
 - Hydronics endorsement
(valid TECA Quality First “Ventilation Guidelines” number and “Hydronic Design” number)

Program Pre-requisites:

- Recommended Education: English 11 and Mathematics 11, or equivalent proficiency tests

Assessment Methods:

- In-school assessments (practical and written exams)
- Work-based assessments (practical)
- ITA Certificate of Qualification Exam
- **Level 1 and Level 2** exams available for challenge

Linkages to Other Credentials:

<i>Cross Program Credit</i>
<ul style="list-style-type: none"> ▪ Apprentices who have completed the Sheet Metal Worker Level 2, Plumber Level 2, Refrigeration Mechanic Level 2 or Domestic/Commercial Gas Fitter Level 2 apprenticeship will, upon registration with the ITA as a Certified Heating Technician apprentice, receive credit for Level 1 technical training and 500 workplace training hours. ▪ Apprentices with technical training credit for Level 1 Certified Geothermal Technician, upon registration with the ITA as a Certified Heating Technician trainee, will receive Level 1 technical training credit towards the CHT program and 50% of logged workplace hours to maximum of 1000 workplace hours already credited towards Certified Heating Technician. ▪ Apprentices already holding a Certified Heating Technician Certificate of Qualification with a Forced Air or Hydronics endorsement may pursue the second endorsement by applying their Level 1 technical training credit and using a maximum of 1000 workplace hours already logged on the first endorsement towards the second endorsement.

Prior Learning Assessment:

Credit for industry training programs (Thermal Environmental Comfort Association; Canadian Hydronics Council; Canadian GeoExchange Coalition) will be available through a PLAR process and credit matrix.

Program Standards Documentation:

- Program Outline (2009)

Industry Program Standards Mechanism:

Residential Construction Industry Training Organization (RCITO) info@ritobc.ca

Program Providers:

Institution-based component of the program is delivered by public post-secondary institutions, private training institutions, and secondary schools that have been approved by ITA.

Technical Training Content:**Level 1: Common Core****Common Core**

Residential Heating Industry
Trades Math
Workplace Safety
Safe Use and Care of Tools
Plan Reading
Perform Basic Drafting
Basics of Framing
Insulation, Vapour Barriers and Building Envelope
Fundamentals of Heat Loss/ Heat Gain
Basics of Electrical & Wiring
Ventilation
Job Skills

Level 2: Trade Endorsements**Hydronics**

Hydronic System Design
Heat Recovery Ventilator (HRV)
Installation Practices
Control
Cross Connection Control
Servicing and Troubleshooting

Forced Air

Heat Loss & Heat Gain Theory
Heat Loss/Heat Gain Calculation & Appliance Selection
Equipment – Heating & A/C
Equipment - Other
System Controls
Refrigeration Basics
Basics of Airflow
Duct Layout & Sizing
Duct Installation
Wiring
Ventilation
Equipment Commissioning
Municipal Permit Applications
Service & Troubleshooting

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