



THE RIGHT SKILLS ► A PROVEN ADVANTAGE

DOMESTIC/RESIDENTIAL CERTIFIED HEATING TECHNICIAN

Credential Issued:

ITA Certificate of Qualification (Domestic/Residential Certified Heating Technician with endorsements – Forced Air or Hydronics)

Persons completing a formal apprenticeship also receive a Certificate of Apprenticeship

Occupational Description:

“Domestic/Residential 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:
 - Core:
 - Module A - 180 hrs (6 weeks)
 - Module B – 120 hrs (4 weeks) BCSA Class B Gasfitter
 - Endorsements:
 - Module C - Hydronics 250 hrs (8 weeks)
 - Module D - Forced Air HVAC 220 hrs (7 weeks)
- Work-based:
 - Hydronics 3000 hrs
 - OR
 - Forced Air (HVAC) 3000 hrs

Program Completion Requirements:

Completion of 3000 workplace hours per endorsement:

- Sponsor attestation

Completion of core 300 hours of in-school technical training; and endorsement in-school technical training – Hydronics 250 hours or Forced Air 220 hours. (Requirement can be met through challenging a module exam where available.)

- Module A - (6 weeks) practical assessments and written module examination
- Module B - (4 weeks) practical assessments and BCSA Class B Gasfitter written exam
- Module C – (8 weeks) Hydronics endorsement practical assessment and written module exam
- Module D – (7 weeks) Forced Air (HVAC) endorsement practical assessment and written module exam

Completion of either Hydronics or Forced Air (HVAC) endorsement

Modules A, B and Module C (Hydronics) or Module D (HVAC) written examinations

Program Challenge Requirements:

- 4500 documented hours for each endorsement of directly related work experience are required to challenge BC Certificate of Qualification examinations.
- BCSA Class B Gasfitter License Exam.

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)
- Final Assessment (Modules A, B, and either C or D written examination)
- Modules A, C, and D exams available for challenge
- Module B exam available from BCSA for challenge

Linkages to Other Credentials:

Cross Program Credit

- Holders of a BC Certificate of Qualification in Domestic/Residential Certified Geothermal Technician, Domestic/Commercial Gas Fitter, Sheet Metal Worker, Plumber, Oil Burner Mechanic and Refrigeration Mechanic may be eligible to receive practical experience credit and technical training credit.

Prior Learning Assessment:

n/a

Program Standards Documentation:

- Occupational Analysis Chart (2006)
- Program Outline (tba)

Industry Program Standards Mechanism:

Residential Construction Industry Training Organization (RCITO) apprenticeship@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:

Module A – 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

Module B: Common Core - Class B Gasfitter

BCSA License Exam

Module C – Hydronics Endorsement

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

Module D – Forced Air (HVAC) Endorsement

Calculate Heat Loss/Gain According to “Quality 1st
Forced Air Guidelines”
Equipment
Heating System Design
Ventilation Requirements
Installation and Sheet Metal
System Controls
Servicing & Troubleshooting Systems

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