

# **HVAC Controls Technician**

Position | Qualifications

#### OVERVIEW

The HVAC Controls Technician reports to the Mechanical Department Foreman and has a strong background on boilers, chillers, heating, ventilation, and air conditioning systems, with both electronic and pneumatic controls. HVAC Controls Technician installs, designs, services and balances HVAC equipment and controls including computerized direct digital control (DDC) systems throughout the school district. HVAC Controls Technician will program all DDC controls to ensure HVAC equipment is operated efficiently and to create a comfortable work environment for students, and staff. The HVAC Controls Technician will assist with the maintenance and repairs of roof top ventilation units, forced air units, cooling plants and associated equipment as well as calibrate and repair pneumatic and electronic controls and thermostats.

#### **POSITION DESCRIPTION HVAC Controls Technician**

# HCT – 1

Troubleshoots, maintains, inspects, and repairs heating, ventilation systems and equipment including boilers, air handlers, hydronic systems fans and motors.

# HCT – 2

Monitors and corrects problems with the HVAC systems throughout the DDC systems and is responsible for the operation of all DDC systems. Maintains, repairs, calibrates, and modifies all electronic controls and thermostats.

#### HCT – 3

Responsible for the operation, maintenance and repair of HVAC system infrastructure and all types of heating control systems (i.e., pneumatic, electronic, and digital, etc.) Maintains and modifies all DDC programming.

#### HCT – 4

Installs new HVAC controls or repair existing units including installing panels and the wiring that connects them to the HVAC system, thermostats, and other sensors.

# HCT – 5

Responsible for working with computers to automate the climate control processes. Installation may include setting up and configuring programmable logic controllers (PLCs).

# HCT – 6

Works with the Energy Manager to conduct statistical analysis of energy use and efficiency of DDC controlled HVAC systems.

# HCT – 7

Assists in ongoing product analysis of DDC systems and automated HVAC systems.

# HCT – 8

Diagnoses problems and/or failures in heating systems for the purpose of identifying repair and replacement needs necessary to maintain equipment and systems. Researches, orders, receives, and inventories related supplies and equipment.

# НСТ – 9

Reads and interprets schematics, blueprints, service manuals and other reference material to facilitate the installation, repair, maintenance and diagnosis of electrical wiring, circuitry, hardware, and ancillary devices related to DDC systems.

#### HCT – 10

Creates, implements, maintains, and provides training for departmental webbased control of Facilities DDC infrastructure

# HCT – 11

Liaises with employees, contractors, regulatory agencies, and other trades as required.

# HCT – 12

Maintains service records, manuals, and system drawings.

#### HCT – 13

Performs other assigned duties when required.

#### QUALIFICATIONS FORM HVAC Controls Technician

EDUCATION	TECHNICAL REQUIREMENTS
	Certificate of Red Seal Apprenticeship as a Refrigeration and Air Conditioning Mechanic as issued or recognized by the Province of BC or a Certificate of Trade Qualification in as a Refrigeration and Air Conditioning Mechanic as issued or recognized by the Province of BC
	Grade 12 certificate or an equivalent combination of education, training, and experience.
	Valid Class 5 British Columbia Driver's License.
	Must possess a valid applicable trade qualification as issued or recognized by the Province of B.C.
EXPERIENCE	<b>TECHNICAL REQUIREMENTS</b> Preference for up to four (4) years HVAC Controls experience as journey person on heating systems
	Thorough knowledge of HVAC codes and regulations WSBC, WHMIS regulations, etc.
	Knowledge of computer hardware and software
	Additional knowledge and experience in BAS hardware installation and commissioning work would be an asset.
	Direct experience working effectively with stakeholders (staff, parent groups, engineers, and vendors) in a leadership role.

Current knowledge of the standards, practices including safety methods, materials, tools, and equipment used for the design, installation, repair and maintenance of HVAC and DDC systems.	KNOWLEDGE	TECHNICAL REQUIREMENTS
		including safety methods, materials, tools, and equipment used for the design, installation, repair and maintenance of HVAC and DDC

SKILLS AND ABILITIES	THE CANDIDATE MUST POSSESS A DEMONSTRATED ABILITY TO:
	Maintain a cooperative working relationship with other workers, suppliers, administrators, supervisors, teaching staff, students, and the public.
	Adapt to changing circumstances and flexibility to adapt plans and schedules to meet unforeseen circumstances.
	Read and interpret plans and specifications.
	Understand and carry out written and oral instructions.
	Communicate clearly and effectively with workers and non-construction related personnel, both verbally and in writing.
	Perform duties in compliance with all safety regulations.
	Effective written and oral communication skills and the ability to request and convey information in a diplomatic manner.
	Strong mechanical, diagnostic and analytical skills to diagnose problems and repair equipment.
	Ability to prioritize work for self to meet department objectives and service levels.

	Ability to perform job related repair techniques using hand tools, test equipment and be competent at fine point soldering.
	Ability to read and interpret schematics, clarification of information or provide advice and instruction in a calm, courteous and professional manner.
	Ability to document, summarize and interpret data for use by other departments.
	Available for emergency calls or maintenance duties outside of assigned hours as required
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WORKING	OCCUPATIONAL REQUIREMENTS
WORKING CONDITIONS	OCCUPATIONAL REQUIREMENTS Sufficient sight and hearing to perform related job duties.
	Sufficient sight and hearing to perform related job
	Sufficient sight and hearing to perform related job duties. Able to lift and carry supplies and equipment required to perform his/her duties in accordance with the Occupational Health and Safety
	Sufficient sight and hearing to perform related job duties. Able to lift and carry supplies and equipment required to perform his/her duties in accordance with the Occupational Health and Safety Regulations. Able to perform related physical and mental

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