

## Metro Vancouver Regional District

**Position Description: Digital Control Software Specialist (G420)**

**December 2022**

---

### **PURPOSE OF POSITION:**

Under general direction, this position acts as a control system software specialist for industrial control systems (ICS), including but not limited to, SCADA, DCS, and PLC, for various water and waste water facilities throughout the region.

**DUTIES:** *(The duties described are intended to be representative of the position and are not to be considered as all inclusive).*

Maintain industrial control systems configurations, graphics, databases and other connected systems.

Maintain standards for ICS.

Participate in the implementation of advanced software applications and automatic control strategies including network modeling.

Assists in the evaluation of new equipment, software, and procedures by carrying out functional and maintenance checks on the equipment / procedures.

Prepare software problem reports and coordinate with system software supplier to resolve problems.

Monitor ICS system computer utilization and maintain maximum performance of the system.

Maintain security of ICS systems.

Maintain historical database and service requests for data.

Develop applications reports which utilize historical data.

Provide training for operators and other users of the ICS systems.

Coordinate with other departments concerning applications for integration of ICS data with Metro Vancouver network servers and users.

Purchase minor materials and equipment. Follows purchasing and accounting procedures as relevant for job.

Assists operating and other maintenance personnel in the safe and effective use of equipment.

Co ordinate work with other departments and trades, reports on work progress.

Keep up to date with current level of technology and apply to new work methods, techniques and safety regulations.

Attend training courses and seminars relevant to duties of the job in areas such as safety, new or revised software, new equipment and work methods.

Prepare and maintain neat and accurate records and record systems such as, equipment acceptance tests, setting sheets, program listings and documentation, maintenance records, trouble reports and drawings.

Assists in the evaluation of new equipment, software, and procedures by carrying out functional and maintenance checks on the equipment / procedures.

Assists in the preparation of approval, checkout and close out of relevant forms.

Other related duties, as required.

### **REQUIREMENTS:**

Bachelor degree in computer science, mathematics or related field, with 3 years experience in real time systems operations in a plant process or manufacturing environment, system design, modifications and

analysis, or two year technology diploma in computer systems, with 5 years applicable experience in a real time systems operations environment.

Requires knowledge of, and experience with, operating systems such as Microsoft Office Suite and related support systems. Demonstrated ability in the use of computer applications and systems related to the position and duties such as ABB (Bailey) INFI90 block programming, 800xA and AC800M configuration, Emerson DeltaV programming, Panelview HMI programming, Allen Bradley PLC5, SLC500, and Control Logix 5000 programming.

Good working knowledge of, and experience with, current applicable communication protocols related to the position and duties, such as Modbus/TCP, Ethernet/IP, and DeviceNet, communication and equipment, OPC and Foundation Fieldbus. Good working knowledge of, and experience with, current applicable computer operating systems related to the position and duties. Programming and application experience with programs/standards such as SQL Server, VB, C, C++, Python or scripting languages, TCPIP, and Ethernet.

Ability to communicate effectively verbally and in writing.

Demonstrated initiative and ability to work independently using sound judgement to make decisions.

Ability to read and interpret detailed engineering drawings.

Demonstrated analytical and problem solving skills.

Knowledge of the occupational hazards and safety precautions and regulations applicable to the position's area of work.

Willingness and ability to work shift work and/or stand-by/on call basis as required.

Willingness and ability to undertake additional training relating to the duties of the position.

Valid Class 5 BC Driver's License.

This position requires working at different Metro Vancouver sites, as required.