

## Instrumentation & Control Hardware and Software Tech

FLSA Status: Nonexempt Union Status: AFSCME Salary Range: \$21.54 - 32.32

#### **General Definition of Work**

The Instrumentation and Control Hardware and Software Technician operates, maintains, calibrates and repairs computer hardware, process instrumentation, data logging and telemetry; de-bugs, modifies and updates software; installs, tests, repairs, inspects and maintains metering and recording devices; modifies, maintains and repairs programmable logic controller (PLC) based supervisory control and data acquisition (SCADA) systems.

# <u>Must pass the applicable certification training in all key areas of competency within one year of hire for continued employment with the City.</u>

### **Supervision Received**

Works under the general direction of the assigned supervisor.

## **Supervision Exercise**

None

## **Qualification Requirements**

To perform this job successfully, an individual must be able to perform each essential function satisfactorily. The requirements listed below are representative of the knowledge, skill and/or ability required. A position may not include all of the duties listed and the listed examples are not an exhaustive list of the duties that may be found in a position of this class.

#### **Essential Functions**

- Installs, maintains, repairs, overhauls, calibrates and tests a wide variety of industrial instrumentation that record, control and regulate level, flow, pressure, temperature, position and water analysis
- Troubleshoots telemetry and process control hardware.
- Performs periodic preventive maintenance inspections of all metering control instruments.
- Installs and places into service new metering, control and recording devices and calibrates devices as required.
- Reads and interprets wiring diagrams, mechanical drawings and specifications when installing or performing repair work.
- Modifies computer programs to optimize plant operations. Performs systems upgrades as directed.
- Installs, repairs and configures security systems including access control and video systems.
- Assists in training of systems users in the operation of new or modified computer and/or instrumentation systems.
- Assists systems users in solving data and systems problems and recommends alternative methods of operation.
- Maintains accurate records and updates shop drawings, schematics and wiring diagrams as modifications are made.
- Ensures that an inventory of parts, materials, supplies and equipment used in everyday tasks is maintained.
- Ensures adherence to safe work practices and procedures by adhering to all lock-out tag-out procedures, drawings, job safety procedures, Material Safety Data Sheets, wearing appropriate PPE for the job and following work instructions.

#### Knowledge, Skills, and Abilities

- Knowledge of PLC and SCADA hardware and software; methods, practices, materials and tools of the computer/instrumentation trade
- Theory, terminology, operations, equipment and principles of electronics
- Application program languages; computer operating systems; effective communication techniques; virus protection
- Industry standard security and disaster recovery procedures and equipment
- Safeguards and security procedures for information systems; electrical test equipment including, volt ohm and frequency meters
- IT trends, techniques and emerging technologies; and Internet monitoring software.
- Skill in installing, programming, maintaining, modifying and repairing computer hardware, software, PLC and SCADA system components; installing, calibrating, maintaining and repairing process instrumentation, telemetry, communication systems and other related equipment
- Interpreting, using and updating technical manuals, blueprints and schematics; keeping accurate records
- Communicating clearly, both verbally and in writing; and safely using tools and equipment.
- Ability to communicate effectively
- Establish and maintain effective working relationships
- Maintain accurate, complete records and to prepare reports
- Install, program, modify and repair computer hardware, software, PLC and SCADA system components
- Install, calibrate and repair process instrumentation, telemetry and communication systems
- Read and interpret technical manuals, blueprints, as-built drawings and schematics; and to be a resource to systems users.

## **Education Requirement**

Associates Degree in computer science, electronics or process control/instrumentation.

## **Experience Requirement**

Three (3) years of progressively responsible experience in an industrial facility including experience in operating and maintaining computer and other electronic and electro-mechanical systems, and electronic circuitry repair.

#### **Education and Experience Equivalency**

An equivalent combination of education and experience.

#### Licensure and Certifications

Must possess a valid driver's license and obtain a City of Santa Fe driving permit within three (3) months of hire. (NM driver's license without restrictions for an ignition interlock device is required to obtain City of Santa Fe driving permit.)

## **Special Requirements**

- Must pass WorkKeys<sup>™</sup> skill assessment as a prerequisite for consideration for interview.
- Must pass the applicable certification training in all key areas of competency for continued employment with the City.
- Must have a telephone or an equivalent means of communication. Must be able to comply with respirator and other PPE requirements. May be required to respond to emergency situations.
- Must be available for 24-hour emergency stand-by duties when required. When contacted, the employee is
  expected to report to work unless there are special non-recurring circumstances, regardless of the location
  of the employee's residence.

## **Physical Requirements**

- Work is strenuous and may require extended periods of walking, standing, lifting up to 50 pounds, carrying, bending, stooping, kneeling, crouching, reaching above the head and shoulders, speaking, hearing and good visual acuity.
- May be required to enter and work in confined spaces and climb ladders.
- Work may require irregular work hours, late meetings, travel; and may be called out to address emergency situations.

## **Working Environment**

- Work is performed inside and outside, sometimes in inclement weather or slippery services and in confined spaces.
- Requires exposure to loud noises, vibrations, chemicals (including chlorine), toxic gases and fumes, germs, bacteria and allergens, microwaves, sunlight and oils.
- May be required to use an oxygen monitor in designated areas.
- May be subject to cuts, bruises, punctures, burns, broken bones, insect and/or snake bites.

#### **EEO/ADA Compliance**

The City of Santa Fe is an Equal Opportunity Employer. In compliance with the American's with Disabilities Act, the City will provide reasonable accommodations to qualified individuals with disabilities and encourages both prospective employees and incumbents to discuss potential accommodations with the employer.

## **Veterans' Hiring Initiative**

Pursuant to City of Santa Fe Resolution No. 2013-079, the City of Santa Fe Human Resources Department has implemented a Veterans' Hiring Initiative policy in order to provide opportunities for veterans who meet or exceed the minimum qualifications for city employment to obtain City employment. The Governing Body does not guarantee that a veteran shall be hired for the position being applied for, only that the veteran will be given an interview; and, it does not intend to supersede or modify any collective bargaining agreement that is currently in place with the City of Santa Fe.

Job applicants who are veterans with an honorable discharge from the military or are members of the National Guard or Reserve who have successfully completed basic training, must use the Veterans' Certification Form to identify themselves and then must attach a copy of their DD214 or DD215 and/or their proof of current Active, Guard or Reserve enlistment in order to certify their status for the position in which applying for.

Applications must be submitted online at: https://santafenm.munisselfservice.com/employmentopportunities/

Resumes will not be accepted in lieu of the city application form, unless the position status is at-will. When required of the position, high school diploma/GED, college degree(s), certification(s), or license(s) must be attached at the time of submission of the application. Each applicant is considered only for the current vacancy indicated on the application submitted. It is the responsibility of the applicant to monitor any future openings and to submit a separate application for each position. Incomplete applications will not be considered. Applications become public record upon receipt and may be made available for public inspection upon request. Pre-placement physical exams, and drug and alcohol screenings are required for some positions.

This job announcement is not intended to be inclusive of all functions, responsibilities and qualifications associated with the position, however, representative of the essential job functions and typical criteria considered necessary to successfully perform the position. This position description does not constitute an employment agreement between the employer and employee and is subject to change by the employer as the needs of the employer and requirements of the position change.

Signature:	_ Date:
•	