

City of Fort Worth, Texas Job Description

Classification Title	Instrumentation Electrical Apprentice I		
Job Code:	TC5800	Job Family:	Technical/Para Professional
Pay Grade	504	Date Reviewed:	3/28/2023
FLSA Status	Nonexempt	Date Revised:	

GENERAL SUMMARY

Receives training and mentorship related to the Instrumentation and Electrical Technical position. Participates in on-the-job learning and assist technicians with the installation, maintenance and repair of pneumatic, electrical, hydraulic system as related to water and wastewater treatment/system.

ESSENTIAL DUTIES & RESPONSIBILITIES

The intent of this job description is to provide a representative summary of the major duties and responsibilities performed by incumbents of this job. Incumbents may be requested to perform job-related tasks other than those specifically presented in this description.

1. Learns and understands tasks associated with the installation, maintenance, and repair of: pneumatic control systems, programmable logic control systems, water flow monitoring equipment, digital and analog computer control loops, & water process instrumentation.
2. Note and learn tasks associated with design, ordering, and installing electrical components within water productions and wastewater treatment plants, pump stations, lift stations, and customer city metering sites.
3. Interprets information associated with analyzing circuitry, interpreting test data implementing methods for improvement.
4. Acquires on the job training on the process of evaluating reliability and performance levels of installed equipment.
5. Observes and receives training on preventative maintenance for assigned area of responsibility, as well as the tools utilized in the performance of work.
6. Performs other duties as required.
7. Adheres to assigned work schedule as outlined in the Department and City attendance policies and procedures; ensures all behaviors comply with the City's Personnel Rules and Regulations.

KNOWLEDGE, SKILLS & ABILITIES

- **Knowledge of:**
 - Fundamentals and operations of electrical components and electrical theory.
 - Common safety precautions and practices.

- **Skill in:**
 - Operating various hand, power, pneumatic, hydraulic and precision tools.
 - Making observations.
 - Computer skills and data entry.
 - Time management.
- **Ability to:**
 - Communicate clearly and effectively, both orally and in writing.
 - Assist in maintenance and repair work on water or wastewater treatment machinery, equipment and controls.
 - Use and operate hand tools, mechanical equipment and power tools and equipment required for working in a safe and efficient manners.
 - Learn safety precautions and practices as applied to electrical, mechanical, and construction activities.
 - Follow written and verbal instructions.
 - Identify and differentiate between color-coded electrical and electronic components.
 - Establish and maintain effective working relationships.

MINIMUM JOB REQUIREMENTS

High school diploma/GED and no experience required.

WORKING CONDITIONS

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Depending on assignment, positions in this class typically require touching, talking, hearing, seeing, grasping, standing, stooping, kneeling, crouching, reaching, walking, repetitive motions, climbing, balancing, pushing, pulling and lifting; depending on assignment. Incumbents may be exposed to moving mechanical parts, odors, dusts, poor ventilation, chemicals, oils, extreme temperatures, inadequate lighting, intense noises, gases, vibrations, chemicals, oils and workspace restrictions.

PHYSICAL DEMANDS

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Heavy Work – Depending on assignment, positions in this class typically exerting up to 50 pounds of force occasionally, up to 20 pounds of force frequently, and/or up to 20 pounds of force constantly having to move objects.