



## **Electronic Equipment Technician 1**

**Category:** Classified  
**Pay Grade:** C21  
**Job Code:** 17244

*To perform this job successfully, an individual must be able to perform the essential job functions satisfactorily. Reasonable accommodations may be made to enable individuals with disabilities to perform the primary job functions herein described. Since every duty associated with this position may not be described herein, employees may be required to perform duties not specifically spelled out in the job description, but which may be reasonably considered to be incidental in the performing of their duties just as though they were actually written out in this job description.*

### **JOB SUMMARY**

Performs full performance level work as an electronic equipment technician; specializes in the installation, repair, and maintenance of electronic instrumentation and control systems in a Utilities Division for County properties, facilities, equipment, and lines or devices in public utilities systems and electronic equipment used in production treatment and transmission of potable water, wastewater, and distribution of reclaimed water; operates light to medium equipment within the utilities plant operations divisions, often requiring manipulative ability as well as utilizing job-acquired skills in specialized fields.

### **ESSENTIAL JOB FUNCTIONS (examples, not all inclusive)**

- Performs installation, maintenance, modification, calibration, and repair of electronic and electrical instrumentation, equipment, and control systems;
- Exercises lead responsibility over others on project basis or as assigned;
- Detects causes of electronic and electrical failures, interprets and ensures compliance with established codes, calculates data necessary for wiring instrument systems, and requisitions supplies and materials needed to complete tasks;
- Inspects instrumentation and equipment to determine operating conditions and needed repairs and/or modifications;
- Designs and implements testing station for water quality;
- Performs bench work repairs and overhauls and rebuilds complex electronic or electrical equipment;
- Performs emergency and routine field servicing of complex equipment and performs tests on parts, modules, or assemblies;
- Prepares purchase orders to obtain parts for repairing equipment and arranges for repairs beyond the scope of County facilities;
- Monitors and orders various chemicals for sensors used in water testing application;
- Assists more senior levels of Electronic Equipment Technicians in electronic projects;
- Assists with operation and maintenance of lift stations;
- Performs basic recordkeeping;
- Operates light to medium, occasionally heavy, automotive equipment within the Utilities Construction and Maintenance Division;
- May be responsible for electronic traffic control and equipment for the design, placement, and maintenance of traffic safety devices utilized under extremely heavy traffic and during inclement weather;
- Performs preventive maintenance to water and wastewater treatment equipment;
- Performs other related job duties as assigned.

## QUALIFICATIONS

### **Education and Experience:**

Completion of a two-year certification program in a directly related vocational or technical training program, or two (2) years of highly automated computer-based electronics instrumentation installation, maintenance, and repair experience; or an equivalent combination of education, training, and/or experience.

### **Special Qualifications** (May be required depending on area of assignment):

- Florida Driver's License or Florida Commercial Driver's License and endorsement, if any.
- Assignment to work a variety of work schedules including compulsory work periods in special, emergency, and/or disaster situations.
- Candidate to demonstrate more advanced proficiency, competency, and satisfactory completion of regularly assigned work in an independent manner. Appointing Authority retains discretion to employ an incumbent at this level or advance the incumbent non-competitively or competitively, after a candidate meets the minimum qualifications to an in-line career ladder position within the same organization or department.
- Employee to acquire and maintain certification in designated areas according to area of assignment.
- Other knowledge, skills, abilities, and credentials required for a specific position.

### **Knowledge, Skills and Abilities:**

- Knowledge of the principles, procedures, and practices of electronic and electrical repair work;
- Knowledge of preferred methods and techniques relevant to electronic and electrical repair and maintenance work;
- Knowledge of installation, modification, fabrication, repair, and maintenance of electrical and/or heavy mechanical equipment used in water plant and/or wastewater plant operations;
- Knowledge of potable water production and wastewater treatment processes;
- Knowledge of types of potable water and wastewater handling equipment (motors, valves, pumps, electronic sensors, etc.);
- Knowledge of controlling the production and distribution of potable water or wastewater treatment processes.
- Ability to independently maintain, troubleshoot, and repair complex electronic equipment and control systems used in utilities operations such as pumps, SCADA, or similar radio/telemetry devices, control panels, generators, transfer equipment, switch gear systems, and similar apparatus;
- Ability to perform a combination of skilled trades tasks which may require knowledge of electrical, plumbing, mechanical, welding, and other trades required to maintain, repair, and improve potable water and wastewater operations;
- Ability to adjust and regulate a variety of automatic or manually controlled auxiliary equipment or systems to ensure safe operations;
- Ability to anticipate and adjust systems due to changing factors, e.g., water quality, weather, and other factors;
- Ability to repair and replace electronics controls, filters, pumps, valves, generators, mixers, filling machines, and equipment used in monitoring and handling potable water and wastewater processes and operations;
- Ability to understand and follow oral and/or written instructions;
- Ability to operate a personal computer and other automated systems to enter and retrieve data;
- Ability to establish and maintain effective working relationships with managers, supervisors, employees, others;
- Ability to use or repair small, medium, and heavy equipment and machinery.

## PHYSICAL/MENTAL DEMANDS

The work is medium work which requires exerting up to 50 pounds of force occasionally, and/or up to 30 pounds of force frequently, and/or up to 10 pounds of force constantly to move objects. Additionally, the following physical abilities are required:

- **Balancing:** Maintaining body equilibrium to prevent falling while walking, standing or crouching on narrow, slippery, or erratically moving surfaces. The amount of balancing exceeds that needed for ordinary locomotion and maintenance of body equilibrium.
- **Climbing:** Ascending or descending ladders, stairs, scaffolding, ramps, poles and the like, using feet and legs and/or hands and arms. Body agility is emphasized.
- **Crawling:** Moving about on hands and knees or hands and feet.
- **Crouching:** Bending the body downward and forward by bending leg and spine.
- **Feeling:** Perceiving attributes of objects, such as size, shape, temperature or texture by touching with skin, particularly that of fingertips.
- **Fingering:** Picking, pinching, typing, or otherwise working, primarily with fingers rather than with the whole hand as in handling.
- **Grasping:** Applying pressure to an object with the fingers and palm.
- **Handling:** Picking, holding, or otherwise working, primarily with the whole hand.
- **Kneeling:** Bending legs at knee to come to a rest on knee or knees.
- **Lifting:** Raising objects from a lower to a higher position or moving objects horizontally from position-to-position. Occurs to a considerable degree and requires substantial use of upper extremities and back muscles.
- **Pulling:** Using upper extremities to exert force in order to draw, haul or tug objects in a sustained motion.
- **Pushing:** Using upper extremities to press against something with steady force in order to thrust forward, downward or outward.
- **Reaching:** Extending hand(s) and arm(s) in any direction.
- **Visual ability:** sufficient to effectively operate office equipment including copier, computer, etc.; and to read and write reports, correspondence, instructions, etc.
- **Hearing ability:** sufficient to hold a conversation with other individuals both in person and over a telephone; and to hear recording on transcription device.
- **Speaking ability:** sufficient to communicate effectively with other individuals in person and over a telephone.
- **Mental Acuity:** Ability to make rational decisions through sound logic and deductive processes.
- **Talking:** Expressing or exchanging ideas by means of the spoken word including those activities in which they must convey detailed or important spoken instructions to other workers accurately, loudly, or quickly.
- **Repetitive Motion:** Substantial movements (motions) of the wrist, hands, and/or fingers.
- **Standing:** Particularly for sustained periods of time.
- **Stooping:** Bending body downward and forward by bending spine at the waist. Occurs to a considerable degree and requires full motion of the lower extremities and back muscles.
- **Walking:** Moving about on foot to accomplish tasks, particularly for long distances or moving from one work site to another.

### **WORKING CONDITIONS**

Work is performed in an environment where decisions could lead to major community or organizational consequences if the appropriate decision is not made at the time.