

ELECTRONIC EQUIPMENT TECHNICIAN, SENIOR

Job Code	Pay Grade
17248	CL18

Nature of Work

This is the advanced level for the Electronic Equipment Technician. This position is responsible for performing a variety of tasks. Work specializes in the installation, repair, modification and maintenance of electronic instrumentation, and control systems with knowledge of the functions including electronic, electrical, chemical, and mechanical equipment and related computerized telemetry systems and electronic hardware involved in water and/or wastewater plant or traffic and intelligent transportation control systems. Work may require utilization of knowledge in various trades such as electrical, plumbing, and other skills. The incumbent locates and corrects malfunctions and makes improvements in operation, monitoring, maintenance, and/or repair of control systems. These systems may include county properties, facilities, equipment, and lines or devices in public utilities or transportation systems; electronic, electrical and mechanical equipment used in production treatment and transmission of potable water, wastewater and distribution of reclaimed water as they relate to utilities projects or traffic signals, fiber optic communications, vehicle detection systems and Intelligent Transportation Systems (ITS). Incumbent may operate light to medium equipment within the operations divisions requiring manipulative ability, as well as utilizes job-acquired skills in specialized fields. The incumbent experiences cross training and performs the full range of technical assignments. Additionally, the wide variety of equipment utilized is more complex and specialized, requiring adaptability and ability to work independently. Incumbents may be required to perform at different duty locations within the same class from project to project, as operational needs and skills match. Progression to this level is via competitive route. The incumbent is supervised by a manager, plant operations supervisor, operations manager or designee.

Minimum Qualification Requirements

- 5 years experience in electronics maintenance and repair, plus 1 year of supervisory experience or training; or
- An equivalent combination of education, training and/or experience.

Appointing Authority May Also Require

- 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 obtain and possess certification in designated areas according to area of assignment.
- Other highly desirable knowledge, skills, abilities, and credentials relevant to a position.

Illustrative Tasks (These are examples and are not all inclusive.)

- Manages or supervises all plant and equipment installation, repair, modification, calibration and maintenance on electronic and electrical instrumentation, equipment and controls.
- Develops, implements and maintains section's Preventive Maintenance Program.
- 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.
- Performs complex lead bench work in the repair, rebuild, modification and programming of electric, electronic and electro-mechanical equipment, down to the component level.
- Provides troubleshooting, testing and repair of all traffic signal related equipment in the field or electronics shop. On call by phone 24/7 to assist traffic signal technicians with troubleshooting field malfunctions.
- Troubleshoots, repairs, and programs new ITS equipment such as fiber and wireless IP based communications equipment, various vehicle detection systems and dynamic message boards.
- Directs and supervises monitoring and forecasts all maintenance and repair activities for a designated utilities service area.
- Operates light to medium equipment within the plant operations divisions.

ELECTRONIC EQUIPMENT TECHNICIAN, SENIOR (continued)

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Illustrative Tasks (continued)

- May be responsible for electronic traffic control and equipment for the design, placement and maintenance of traffic control safety devices utilized under extremely heavy traffic and during inclement weather.
- Utilizes complex work management systems for project tracking.
- May prepare cost estimates and cost/benefits analyses.
- Reviews and comments on traffic signal intersection design plans.
- Trains and supervises subordinate staff.
- Keeps records and communicates effectively, orally and in writing.
- Performs related work as assigned or required.

Knowledge, Skills, and Abilities

- Knowledge of the principles, practices and procedures of electronic and electrical repair work.
- Knowledge of preferred methods and techniques relevant to repair and maintenance of electronic and electrical equipment.
- Knowledge of methods, practices, techniques, materials, tools and equipment pertinent to installation, maintenance and repair of electronic and electro-mechanical traffic signal systems and controls.
- Knowledge of the principles, practices, methods, materials, equipment and tools used in the construction of traffic signal control intersections and installation of traffic signals, control equipment, electrical lines and interconnect systems.
- Knowledge of traffic control systems and ITS communications equipment and processes.
- Knowledge of potable water production and wastewater treatment processes.
- Knowledge in controlling the production and distribution of potable water or wastewater treatment processes.
- Knowledge of types of potable water and wastewater handling equipment (motors, valves, pumps, electronic sensors, etc.)
- Knowledge of complex installation, modification, fabrication, repair and maintenance of electronic, electrical or mechanical equipment used in water plant and/or wastewater plant operations.
- Skill in utilizing a wide variety of tools, equipment and devices typical to electronic and electrical service tasks.
- Ability to lead, manage and direct subordinates in potable water and/or wastewater treatment systems maintenance and repairs.
- Ability to interpret and communicate, both verbally and in writing, data from engineering plans, diagrams and complex reports.
- Ability to create and write sometimes complex administrative reports as well as a wide variety of work orders.
- Ability to troubleshoot, maintain and repair and replace complex electronics equipment and control systems associated with utilities water and wastewater treatment as well as directing others in same.
- Ability to perform and lead or direct others in performing a combination of skilled trades tasks such as electronic, electrical, mechanical, welding, plumbing and other related tasks required to maintain, repair and improve water and wastewater operations.
- Ability to adjust and regulate a variety of automatic or manually controlled auxiliary equipment to ensure safe operations.
- Ability to anticipate and adjust systems due to changing factors, e.g., water quality, weather, etc.
- Ability to apply computer applications and software.
- Ability to assign, supervise, guide, direct and evaluate the work of assigned subordinate personnel.
- Ability to establish and maintain effective working relationships with managers, supervisors, employees and others.

For official use only

Revised	EEOC Code	Overtime Code
8/15	Technicians	Classified