



Office of Human Resources  
Electronic Systems Technician III - CJ3313  
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### General Statement of Duties

Performs specialized, professional, and complex work in installing, modifying, diagnosing, programming, designing, configuring and maintaining a wide variety of complex electronic communication infrastructure and access control systems.

### Distinguishing Characteristics

The Electronic Systems Technician III is distinguished from the Electronic Systems Technician II which performs specialized, professional, complex work installing, programming, modifying, troubleshooting, repairing, and maintaining a wide variety of specialized technical equipment and electrical systems. The Electronic Systems Technician III positions are primarily found at DEN and require multiple licenses.

### Essential Duties

Repairs, monitors and maintains electronic systems and equipment such as Closed Circuit TV (CCTV), Video, Emergency Communications (ECS), Airfield Lighting Control and Monitoring (ALCMS), Audio Control, Public Access (PATV), Fire Alarm Monitoring, Telecommunication, Broadband and Access Control systems consisting of security device controllers, fingerprint and facial authentication, biometric readers and card readers.

Troubleshoots, tests, diagnoses, calibrates, and performs bench and field repairs to the component level.

Design, configure and fabricate circuits and related equipment as needed to utilize existing equipment, modify applications, or resolve unusual problems.

Installs and maintains power supplies, video cameras, alarm and signaling equipment, encoders and decoders, computer data systems, and other related communication systems. Performs preventative maintenance for electronic control and communication equipment to minimize repair problems and to meet manufacturers' specifications.

Reviews service contracts, evaluates, and recommends equipment purchasing as assigned.

Provides training and maintenance instructions to operators or installers of specialized systems and equipment.

Operates a variety of computer systems designed to monitor and/or operate specific electronic and electrical systems.

Work with vendors on system installation and partner with user agencies to determine future requirements.

Researches and prepares technical reports.

Maintains records on required and completed repair work.

Responds to service calls regarding the access control or communication systems in person or remotely or refer call to the appropriate IT resource.

By position, writes computer programs compatible with operating systems to expand functions.

By position, participates in snow removal duties.

By position, responds to after hours calls or emergency calls outside of normal scheduled or business hours.

Performs other related duties as assigned.

Employees may be re-deployed to work in other capacities in their own agencies or in other City agencies to support core functions of the City during a City-wide emergency declared by the Mayor.

Any one position may not include all of the duties listed. However, the allocation of positions will be determined by the amount of time spent in performing the essential duties listed above.

### **Competencies**

**Attention to Detail** - Is thorough when performing work and conscientious about attending to detail.

**Decision Making** - Makes sound, well-informed, and objective decisions; perceives the impact and implications of decisions; commits to action, even in uncertain situations, to accomplish organizational goals; causes change.

**Reading** - Understands and interprets written material, including technical material, rules, regulations, instructions, reports, charts, graphs, or tables; applies what is learned from written material to specific situations.

**Technical Competence** - Uses knowledge that is acquired through formal training or extensive on-the-job experience to perform one's job; works with, understands, and evaluates technical information related to the job; advises others on technical issues.

**Technical Problem Solving** - Troubleshoots diagnoses, analyzes, and identifies system malfunctions to determine the source and cause of the problem.

**Technology Application** - Uses machines, tools, or equipment effectively; uses computers and computer applications to analyze and communicate information in the appropriate format.

**Written Communication** – Composes, reviews, edits, and issues written materials for diverse audiences and communicates purpose in a succinct and organized manner that is appropriate for context, time, and place.

### **Knowledge & Skills**

Knowledge of circuit boards, processors, chips, and computer hardware and software, including applications and programming.

Knowledge of electronic theory, circuits, components, and material properties (excluding computers).

Knowledge of electrical equipment, components, instruments, and systems, including their design, installation, testing, uses, repair, or maintenance.

Knowledge of safety hazards and necessary safety precautions sufficient to be able to establish a safe work environment for self and others.

### **Level of Supervision Exercised**

By position, performs lead work.

### **Education Requirement**

Graduation from high school or the possession of a GED, HiSET or TASC Certificate.

**Experience Requirement**

Three (3) years of building and access control experience, configuring and 5 years maintaining electronic communication systems and equipment and making component level repairs and system modifications.

**Education & Experience Equivalency**

Additional appropriate education may be substituted for the minimum experience requirements.

**Licensure & Certification**

This job requires driving. Requires a valid Driver's License at the time of application.

By position, requires a valid Commercial Driver's License (CDL "B") with appropriate endorsements by the end of probation.

For positions in DEN:

- Two (2) or more of the following licenses or certifications are required at the time of application: Mass Notification Systems Installer, Access Control Supervisor Certificate, Fire Alarm License, NICET Certificate (level II or greater), BICSI Technician Certificate, CSI certification, CVT certification, or CSSI certification. NOTE: One (1) of the license certificates MUST be one of the following City and County of Denver issued credentials: Mass Notification Systems Installer, Access Control Supervisor Certificate, or Fire Alarm License.

Licenses and certifications must be kept current as a condition of employment.

**Working Environment**

Potential exposure to temperature changes: variations in temperature from hot to cold.  
Potential exposure to hazards from electro/mechanical/power equipment.  
Potential exposure to cold temperatures, cold enough to cause marked bodily discomfort.  
Potential exposure to heat temperatures, hot enough to cause marked bodily discomfort.  
Potential exposure to toxic chemicals.  
Subject to precarious or high locations.

**Level of Physical Demand**

3-Medium (20-50 lbs.)

**Physical Demands**

(Physical Demands are a general guide and specific positions will vary based on working conditions, locations, and agency/department needs).

Carrying: Transporting or moving an object.

Climbing: Ascending or descending an object or ladder.

Color Vision: Ability to distinguish and identify different colors.

Depth Perception: Ability to judge distances and space relationships.

Field of Vision: Ability to sharply detect or perceive objects peripherally.

Fingering: Picking and pinching, through use of fingers or otherwise.

Lifting: Raising or lowering objects weighing no more than 50 pounds, from one level to another.

Reaching: Extending the hands and arms or other device in any direction.

Repetitive motions: Making frequent or continuous movements.

Standing: Remaining in a stationary position.

Vision Far Acuity: Ability to perceive or detect objects clearly at 20 feet or more.

Vision Near Acuity: Ability to perceive or detect objects at 20 inches or less.

**Background Check Requirement**

Criminal Check  
Employment Verification  
Motor Vehicle Record  
By position, License/Certification

**Assessment Requirement**

None

**Probation Period**

Six (6) months.

**Class Detail**

**Pay Grade: NE-19**

**FLSA Code: N**

**Established Date: 7/4/2021**

**Established By: BM**

**Revised Date: 7/9/2024**

**Revised By: AOF**

**Class History: 8/22/2023- Revised DEN specific License requirement to allow by the end of probation; 7/9/24 – Revised DEN specific licensure & certification requirements.**