

Job Description

Job Title: **Electronics Engineering Technologist**
 Job Family: **Information Technology Support**
 Pay Program: **Classified**
 Prepared/Revised Date: **June 2021**

Job Code: **031006**
 FLSA Status: **Non-Exempt**
 Pay Range: **G22**
 Typical Work Year: **12 months**

SUMMARY: Responsible for assessing fleets of devices; prioritizing maintenance resource use; developing repair, test, & deployment procedures; and assessing technologies at the systems, device, module, and component level. Perform the repair, testing, programming and maintenance of electronics and information technology systems across the district, including network devices, computers, telecommunications equipment, computer peripherals, sound/audio equipment, sound systems, various audio/visual systems and other specialty electronics infrastructure. Provide leadership, coaching, teaching, and mentoring for the IT and additional staff in regards to electronics, as well as developing instructional materials. Responsible for strategic decisions, and for providing technical guidance to IT management and district leadership with regard to platform choices, technology selections and long-term investments.

ESSENTIAL DUTIES AND RESPONSIBILITIES: *To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skill and/or ability required. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.*

Job Tasks Descriptions	Frequency	% of Time
1. Use technical expertise to analyze, document, test, maintain, troubleshoot, repair and support the district’s electronic systems, including; computer peripherals, network equipment, telephony systems, telecommunications equipment, sound/audio equipment, sound systems, various audio/visual systems and other specialty electronics infrastructure.	D	40%
2. Sets up, calibrates, and performs operational test runs of components, instruments and electronic system assemblies to validate optimal functionality and reliability.	D	20%
3. Improve departmental efficiencies by assessing the districts technology needs and then designing and evaluating solutions; prioritizing and scheduling departmental resources; developing repair, test, and deployment procedures and practices; and maintaining an appropriate support/repair facility including test and maintenance equipment.	D	10%
4. Provide instruction for the IT technical staff and training to customers regarding the installation, operations, repairs and maintenance of the district’s electronic systems, including: computer peripherals, sound/audio equipment, sound systems, various audio/visual systems and other specialty electronic infrastructure.	D	10%
5. Provide strategic guidance to district and IT management regarding device brands, technological solutions, and system proposals.	Q	10%
6. Prepares detailed dashboards and service reports along with summary analysis to IT management and Business Services, allowing for appropriate funding and management of electronics related services and functions.	W	5%
7. Maintain audio/visual and electronic parts systems inventory by ordering and monitoring parts. Recommend stock levels and research parts substitutes.	M	4%
8. Perform other job-related duties as assigned.	Ongoing	1%
TOTAL		100%

EDUCATION AND RELATED WORK EXPERIENCE:

- Associate’s degree or two-year certificate in electronics
- Bachelor’s degree in electronics engineering technology preferred.
- Minimum of 3 years of experience in electronics, audiovisual or media equipment repair.
- Minimum of 1 year experience in a position requiring the training of customers and technical staff regarding procedures, practices, and applied theory of electronics as relevant to district requirements.

LICENSES, REGISTRATIONS or CERTIFICATIONS:

- Criminal background check required for hire.

TECHNICAL SKILLS, KNOWLEDGE & ABILITIES:

- Leadership and mentoring skills in relation to planning of and support for the district’s electronic device fleets and electronic systems. This includes the ability to: make strategic technical decisions regarding devices; provide cogent reports with leverageable analysis; design and present training programs and materials useful for customers and technical staff; and perform empowering research and analysis regarding alternative technical strategies and competitive products.
- Advanced level of understanding of designing, troubleshooting, and tuning of AC/DC circuits, processors, signal systems, telecommunications systems, control systems, and other electronics systems at the component, module, device, and system level.
- Working ability to read and understand schematic diagrams, blue prints, specification sheets, equipment displays and readouts, programming code, etc.
- Expert design, analysis and troubleshooting knowledge of a variety of commodity, professional, and custom electronics devices and systems. Demonstrated ability to analyze, troubleshoot, and develop redesign solutions of electronics devices including but not limited to: sound systems, overhead projectors, video cameras, client-level video editing, TVs, telecommunications systems, telephony systems, broadband cable TV systems, microprocessors and computer/data controlled projection system equipment including network/IP protocol configuration.
- Ability to execute tasks and programs within schedules and requirements.
- Advanced computer skills including Microsoft Office Suite, and databases.
- Ability to promote and follow Board of Education policies, District policies, building and department procedures.
- Ability to communicate, interact and work effectively and cooperatively with all people, including those from diverse ethnic and educational backgrounds. Willingness to contribute to cultural diversity for educational enrichment.
- Ability to recognize the importance of safety in the workplace, follow safety rules, practice safe work habits, utilize appropriate safety equipment and report unsafe conditions to the appropriate administrator.
- Ability to track inventory of a pool of loaner systems, maintaining tracking, and providing reporting and recommendations.
- Ability to frequently travel among district facility locations.
- Ability to keep up-to-date technically and apply new knowledge to your job. Includes adapting to and mastering new system applications and processes as implemented by the district or department.
- Ability to stay current with district policy, standards and training in the areas of data quality, data privacy, and cybersecurity with respect to student and staff data, and related information systems.

MATERIALS AND EQUIPMENT OPERATING KNOWLEDGE:

- Knowledge of digital and analog electronic test equipment, oscilloscope, FFT signal analyzer and other transform-based analyzers, digital multi-meter, laser power meter, various signal generators, toner
- Knowledge of a range of electronics/computer analytical and design tools such as MatLab, MultiSim, various machine language compilers, PLC languages, and higher level languages like C, C++, and Java. This includes the ability to determine when and where to apply these tools on behalf of the district and demonstrate value in their application.
- Setup, use, and deployment understanding of district information technology systems, personal computers, network devices, multimedia devices, and peripherals.
- Operating knowledge of district information technology systems and any other department specific software and equipment required within 2 months after entering position
- Knowledge of and experience with typical office equipment, such as telephones, copier, fax machine, E-mail, etc.
- Troubleshooting knowledge of computer system, telephony equipment, telecommunications device, and network hardware
- Awareness of safety equipment and practices related to electronics testing, inspection, repair, and deployment

REPORTING RELATIONSHIPS & DIRECTION/GUIDANCE:

	POSITION TITLE	JOB CODE
Reports to:	Tech Manager, Field Engineering	090528

	POSITION TITLE	# of EMPLOYEES	JOB CODE
Direct reports:	This job has no direct supervisory responsibilities.		

BUDGET AND/OR RESOURCE RESPONSIBILITY:

- Responsible for ordering of repair parts, supplies and services related to electronics systems for the entire district with special focus on audio visual devices, auditorium and stadium sound systems, network and computer equipment.
- Manage assets for the loaner fleet of audio visual equipment.
- Responsible for tracking parts and developing the parts and equipment cost projections for the electronics function within IT and analyzing that in support of budget planning.

PHYSICAL REQUIREMENTS & WORKING CONDITIONS: *The physical demands, work environment factors and mental functions described below 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.

PHYSICAL ACTIVITIES:	Amount of Time			
	None	Under 1/3	1/3 to 2/3	Over 2/3
Stand			X	
Walk			X	
Sit		X		
Use hands and fingers to handle and/or feel			X	
Reach with hands and arms			X	
Climb or balance		X		
Stoop, kneel, crouch, or crawl			X	
Talk			X	
Hear				X
Taste	X			
Smell		X		

WEIGHT and FORCE DEMANDS:	Amount of Time			
	None	Under 1/3	1/3 to 2/3	Over 2/3
Up to 10 pounds				X
Up to 25 pounds				X
Up to 50 pounds	X			
50 to 100 pounds	X			
More than 100 pounds	X			

MENTAL FUNCTIONS:	Amount of Time			
	None	Under 1/3	1/3 to 2/3	Over 2/3
Compare				X
Analyze				X
Communicate		X		
Copy		X		
Coordinate			X	
Instruct		X		
Compute		X		
Synthesize			X	
Evaluate			X	
Interpersonal Skills		X		
Compile			X	
Negotiate	X			

WORK ENVIRONMENT:	Amount of Time			
	None	Under 1/3	1/3 to 2/3	Over 2/3
Wet or humid conditions (non-weather)	X			
Work near moving mechanical parts			X	
Work in high, precarious places		X		
Fumes or airborne particles			X	
Toxic or caustic chemicals		X		
Outdoor weather conditions	X			
Extreme cold (non-weather)	X			
Extreme heat (non-weather)	X			
Risk of electrical shock				X
Work with explosives	X			
Risk of radiation		X		
Vibration	X			

VISION DEMANDS:	Required
No special vision requirements.	
Close vision (clear vision at 20 inches or less)	X
Distance vision (clear vision at 20 feet or more)	X
Color vision (ability to identify and distinguish colors)	X
Peripheral vision	X
Depth perception	X
Ability to adjust focus	X

NOISE LEVEL:	Exposure Level
Very quiet	
Quiet	
Moderate	X
Loud	
Very Loud	