



**Job Title:** Systems Engineer  
**Department:** Technology & Media Department  
**Reports To:** IS Coordinator  
**FLSA Status:** Exempt  
**Salary Schedule:** EC lane 04

## **SUMMARY**

The Systems Engineer designs, maintains, and builds applications, integrations, automations, and other systems. This role requires expertise in systems integration, automation, API development, and specialized work in bi-directional radio amplification systems. The Systems Engineer will work closely with stakeholders, supervisors, and other technology personnel to ensure that all systems and applications meet operational requirements, are secure, and are optimized for performance.

**ESSENTIAL DUTIES AND RESPONSIBILITIES** *may include the following. Regular, reliable worksite attendance and timeliness is an essential job function to perform the essential duties and responsibilities of the position. While this job description attempts to outline all essential duties of the position, the description is not a contract and the job functions are subject to change at the organization's discretion. Other duties may be assigned.*

### **Project Management and Planning:**

- Confirms project requirements by reviewing objectives, input data, and output requirements with stakeholders.
- Develops a comprehensive project roadmap, including task breakdowns, creating database Entity Relationship Diagrams (ERD), and coordinating assignments with the team.
- Regularly updates and revises the project roadmap as necessary.

### **Systems and Software Design:**

- Designs components of applications, including user interfaces, back-end controllers, and logic.
- Develops systems integrations, ensuring that software and hardware components function cohesively.
- Develops and designs APIs for seamless communication between integrated systems.

### **Systems Automation and Programming:**

- Implements automation solutions to optimize workflows and improve system efficiency.
- Engages in integrated systems programming, ensuring that all components work harmoniously within the broader IT environment.

**Development, Deployment, and Testing:**

- Builds and deploys software and systems by implementing designed components according to project requirements.
- Conducts thorough testing, including unit tests, alpha and beta testing, to ensure all systems operate as intended.
- Designs, engineers, maintains, and tests Bi-directional Radio Amplification Systems (BDA) for Law Enforcement Radio Systems, ensuring they meet operational standards.
- Ensures BDAs comply with all relevant certifications and standards, such as FCC (Federal Communications Commission) and UL 2524 (Standard for In-Building 2-Way Emergency Radio Communication Enhancement Systems).

**Ongoing Maintenance and Support:**

- Prepares user documentation and operating instructions to guide end-users.
- Maintains historical records of all development activities and revisions.
- Ensures the ongoing operation of applications and systems by updating dependencies, patching vulnerabilities, and refactoring code as needed.
- Provides ongoing support to ensure systems remain operational, secure, and optimized.

**Confidentiality and Professional Development:**

- Maintains confidence by ensuring all privileged information is kept confidential.
- Stays updated with the latest developments in systems engineering and integration by attending educational workshops, reviewing professional publications, and engaging in professional networks.

**Team Collaboration:**

- Contributes to team efforts by assisting in other assigned projects and tasks.

**SUPERVISORY RESPONSIBILITIES**

This job has no supervisory responsibilities.

**KNOWLEDGE, SKILLS, ABILITIES, AND QUALIFICATIONS** *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. Must demonstrate an acceptable level of maturity, good judgment, and emotional stability.*

Ability to read, write, and communicate effectively in English at a level required for successful job performance. Ability to read and interpret documents such as safety rules, operating and maintenance instructions, and procedure manuals. Ability to write routine reports and correspondence. Ability to speak and communicate effectively before individuals or groups of teachers, principals, or other employees of the District.

Must have a strong understanding and ability to ensure compliance with relevant certifications and standards, such as:

- **FCC (Federal Communications Commission) Certification**
- **UL 2524 Certification** (Standard for In-Building 2-Way Emergency Radio Communication Enhancement Systems)

Must have general programming skills, including information analysis, problem solving, software algorithm design, software performance tuning, attention to detail, software design, software debugging, software development fundamentals, software documentation, and software testing.

Ability to add, subtract, multiply, and divide in all units of measure, using whole numbers, common fractions, and decimals. Ability to compute rate, ratio, and percent.

Ability to apply common sense understanding to carry out essential duties of this position. Ability to troubleshoot, solve practical problems, and deal with a variety of concrete variables in situations where only limited standardization exists. Ability to interpret a variety of instructions furnished in written, oral, diagram, or schedule form. Ability to define problems, collect data, establish facts, and draw valid conclusions.

#### **EDUCATION and/or EXPERIENCE**

Bachelor's Degree in computer science, information technology, or other related field of study and 5 years' experience supporting technology and training staff or a combination of education and work experience.

Experience with HTML, PHP, JavaScript, jQuery, and SQL.

Preferred experience with

- MySQL, MSSQL, Oracle, GIT, Subversion, Project management tracking software, Chart and diagram creation software such as Lucidchart, PowerSchool SIS, customization of the PowerSchool SIS, and Ubuntu Linux Server.

#### **CERTIFICATES, LICENSES, REGISTRATIONS**

Must have and maintain an active Utah Driver's License. Must complete Utah Risk Management Defensive Driver training every two years. (Utah Code R311)

**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.*

While performing the duties of this job, the employee is regularly required to use hands and fingers to handle or feel; reach with hands and arms; talk and hear; and sit. The employee frequently is required to stand and walk. The employee is occasionally required to stoop, kneel, crouch, or crawl. The employee must regularly lift and/or move up to 25 pounds and occasionally lift and/or move up to 50 pounds. Specific vision abilities required by this job include close vision, distance vision, color vision, peripheral vision, depth perception, and ability to adjust focus.

**WORK ENVIRONMENT** *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.*

While performing the duties of this job, the employee is regularly exposed to moving mechanical parts, outside weather conditions, and risk of electrical shock. The noise level in the work environment is usually moderate.

Prepared By: <b>Technology &amp; Media Director II</b>		Date: <b>05/25/2015</b>
Approved By: <b>Executive Director, Human Resources</b>		Date: <b>05/27/2015</b>
<input type="checkbox"/> Reviewed	<input checked="" type="checkbox"/> Revised	By: <b>HR Position Management Specialist</b>
<input type="checkbox"/> Reviewed	<input checked="" type="checkbox"/> Revised	By: <b>Data &amp; Software Systems Coordinator</b>
<input type="checkbox"/> Reviewed	<input checked="" type="checkbox"/> Revised	By: <b>Director of Technology &amp; Media</b>
<input type="checkbox"/> Reviewed	<input type="checkbox"/> Revised	By:
		Date:

**EMPLOYEE ACKNOWLEDGEMENT OF RECEIPT:**

*By signing below, I acknowledge that I have received a district approved position description for my current position. I understand it is my responsibility to review the position description and direct any questions regarding the position description to my department supervisor or the Human Resources Department.*

Print Name:	Date:
Employee Signature:	