

Network Engineer Page 1 of 3

**Reports to:** Director of Technology-Network/Infrastructure/Communication

School/Department: Technology Services Division

**Pay Grade:** Technology/TC5

Work Days: 226 Wage/hour status: Exempt

**Created/revised:** September 2022

### **Primary Purpose:**

The Network Engineer will plan, design, engineer, and maintain Local Area Networks, instructional and administrative needs. The incumbent will support the Technology Services Division in network availability and connectivity of sites throughout the district.

#### **Qualifications:**

#### **Education/Certification/Licensure:**

- Associate's degree in Business, Information Technology, or closely related field from an accredited college or university recognized by the US Department of Education.
  - Degree may be substituted for an equivalent combination of applicable education, training, and experience as approved by HR.
- Network and/or Microsoft certification
- Must have a valid driver's license and good driving record to travel to sites in the Humble ISD area

## **Special Knowledge/Skills:**

- Advanced Local Area Network (LAN) knowledge to include Ethernet, hubs, switches, and network configurations.
- Knowledge of computer hardware, peripherals, and network operating systems.
- Knowledge of OSI network layer protocols such TCP/IP, <del>IPX</del>, SMTP, SNMP, UDP, DHCP, DNS, and routing protocols such as OSPF, IS-IS
- Knowledge of virtualized and cloud-based network environment
- Knowledge of network access control and wireless 802.11 standards and frequencies
- Skill in Extreme, HPE-Aruba, Avaya, Cisco network operating system, Windows, Apple Mac/iOS, and Chrome device operating system
- Skill in project planning management and implementation of systems on a large scale.
- Skill in communicating effectively with diverse groups, verbally and written, utilizing professionalism, poise, tact, and diplomacy.
- Ability to prioritize tasks and coordinate multiple projects to meet specific deadlines
- Ability to perform duties with attention to detail, speed, accuracy, follow-through, courtesy, cooperativeness, and work with minimum supervision
- Ability to maintain the confidentiality of privileged and sensitive information
- Ability to comprehend complex systems and technical information and explain them effectively to various stakeholders.
- Ability to manage multiple tasks simultaneously and independently to meet deadlines.
- Ability to maintain effective working relationships with a wide variety of District personnel and outside organizations.

#### **Experience:**

- Five years of experience working with computer systems.
- Two years experience supporting or maintaining a large-scale organization to, include:

**Network Engineer** 

Page 2 of 3

- Managing large-scale networks supporting local, wireless, and wide-area networks.
- Installation, and maintenance of enterprise routers and switches.
- Demonstrated knowledge of voice and data communications networks, including routing protocols, VoIP, and firewall management.
- Experience in antennas and components.
- Experience in maintaining telephone systems in a voice-over IP environment.

# **Major Area of Responsibility**

- 1. Utilize the IT Service Management system to track device and network support provided to the campus and provide documentation of corrective action for each trouble ticket.
- 2. Maintain network cabling, equipment, and MDF/IDF wiring closets. Patch in data, voice, and video drops adhering to Humble ISD Telecommunications Standards.
- 3. Assist with troubleshooting and repairing network, data/voice, and wireless.
- 4. Install, configure, and assist in the maintenance and replacement of network switches, routers, access points, uninterruptible power supply, firmware, and software updates.
- 5. Maintain and provide troubleshooting support for district-wide internet filtering and firewall system. Maintain database, patches, updates, and reporting functions
- 6. Prioritize and schedule trouble calls to ensure that network support is delivered efficiently and within established service timelines
- 7. Assign trouble tickets to the appropriate department
- 8. Provide first-level support for network infrastructure, network devices, IoT device connectivity, IP security cameras, and software using network tools and packet capture tools
- 9. Work with technology department staff and district users with network troubleshooting, device connectivity, and projects
- 10. Provide input and feedback to Department supervisors concerning support issues and quality of service
- 11. Maintain up-to-date documentation and labeling of network equipment inventory, network maps, and change requests.

### **School/Organizational Climate**

- 1. Promote a positive image that supports the vision and mission of the District.
- 2. Maintain a positive and effective relationship, good judgment, and decision-making with coworkers, supervisors, other district personnel, outside agencies and organizations, parents, and the community.

#### Policy, Reports, and Law

- 1. Comply with all applicable federal and state laws, Board of Education rules, and local board policy and regulations.
- 2. Compile, maintain and file all reports and other documents as required.

Network Engineer
Page 3 of 3

#### Other

- 1. Work, perform maintenance/updates, or respond to on-call rotation support on evenings or weekends.
- 2. Maintain confidentiality of privileged and sensitive information when received and distributed to appropriate designees
- 3. Attend professional growth activities to keep abreast of innovations in the related industry and remain current on new and emerging technologies.
- 4. Attend training on various software/hardware that is being supported by Humble ISD and maintain a working knowledge of the same.
- 5. Promote a positive image that supports the mission of the district; work with all District personnel to continually improve the professionalism of the total department.
- 6. Perform other duties as assigned.

## **Supervisory Responsibilities:**

1. None.

# **Working Conditions:**

Reviewed by

### Mental Demands/Physical Demands/Environmental Factors:

Maintain emotional control under stress

Frequent prolonged and irregular work hours

Frequent interruptions

Deadline driven workload

Prolonged use of equipment and computer with repetitive hand motions

Frequent district-wide travel with occasional travel outside school boundaries

Requires tasks sitting, standing, bending, walking, and climbing with regular use of hands and bends wrists, neck, back, and arms

Work positions include squatting, extended reach above head to 18 inches, extended reach in front to 30 inches

Lift and carry equipment weighing up to 50 pounds for a distance of 100 feet

Requires handling equipment weighing up to 50 pounds while pushing, pulling, lifting, twisting, and reaching while lifting

Extended or non-business hours may be required for necessary system upgrades, system failures, and system maintenance to not interfere with or lessen impact on district operations.

Operate a van or pickup on state and city highways up to possible 50 miles per day to maintain the service schedule

Daily attendance and punctuality are essential functions of the job.

1 6	I purpose and responsibilities assigned to this job and are not an es that may be assigned or skills that may be required.
Approved by	Date

Date