

## DATA NETWORK/TELECOMMUNICATIONS SYSTEMS SPECIALIST

### GENERAL DESCRIPTION OF CLASS

Under direction of an administrator or manager, has the primary responsibility for organizing and directing the District's data network and telecommunication infrastructure and operations, including the installation, maintenance and support for the District's data network, telephone, and voice communications systems' cabling and/or wiring, peripheral hardware, and associated software; and provides long-range planning, operation, maintenance and support of the District's data and telecommunications systems and infrastructure, including performing telephony and data networking adds, moves and changes for users, programs and departments.

**REPRESENTATIVE DUTIES:** The duties recorded below are representative of the duties of the class and are not intended to cover all the duties performed by incumbent(s) of any particular position. The omission of specific statements of duties does not exclude them from the position if the scope of work is similar, related or a logical assignment to this class. The essential duties of the class are indicated with an asterisk \*.

**BASIC FUNCTION:** The duties of this classification may involve performing the most technical and difficult tasks, requiring specialized or advanced skill in one or more areas of the work assigned. The duties below are not inclusive but characteristic of the type of work associated with the class. Individual positions may do all or some combination of the duties listed below as well as other related duties.

1. Configures, assembles, and installs, or oversees the configuration, assembly, and installation, of the District's data network and telecommunications equipment and software, including connecting, testing, or adjusting lines, wiring, switching equipment, routers, wiring frames, power apparatus, and associated equipment; prioritizes installation orders for new District data network and telecommunications needs; procures required parts and equipment and transports to installation field site(s) as necessary; pulls cable through conduit, molding, walls, ceiling, attics, and under buildings to meet industry standards for cabling and cable terminations; makes cable connections on blocks, jacks, and terminals; makes cross connections, tags, and/or marks cable designation strips, blocks and jacks; sets up, installs, and programs devices and equipment, including digital, analog and emergency telephones and/or data communication equipment. \*
2. Manages, monitors, tests, and analyzes the performance of the District's inter and intra building fiber optic and copper telecommunications and data networking infrastructures and systems to ensure that services are available to District staff; identifies the causes of data network connectivity and telecommunications problems using a variety of diagnostic equipment and software; performs corrective and preventative maintenance as necessary; identifies and recommends changes to the District data network and telecommunications infrastructure, including determining whether adjustments will need to be made and where changes will need to be made in the future, and the hardware or software requirements related to such changes. \*
3. Diagnoses and resolves data network connectivity or telecommunications problems for users or groups on all campus sites. \*
4. Functions as the District's data network and telecommunications project leader, works directly with institutional and management staff, contractors, or vendors; participates in the planning, implementation, and coordination of District projects, including the

- development, review, and evaluation of data network and telecommunications systems' work plans, sketches, schematics, blueprints, or other forms of diagrammatic representations related to the configuration of equipment and services for installation, repair, or changes to the District's data network and telecommunication infrastructure to ensure compliance with District standards and specifications; assigns project tasks and provides oversight to District project team members; monitors and reports on the status of project implementation, progress, and completion; monitors, tests, analyzes, and reviews the work of project team members, vendors, or contractors, and prepares lists of corrections, additions, or adjustments, and verifies that the appropriate changes have been made; attends meetings and conferences as necessary. \*
5. Formulates and develops (or assists in formulating and developing) the District's data network and telecommunications infrastructure standards (including conceptual, logical, or physical data network or telecommunications designs), policies, procedures, and specifications, including network and telecommunications hardware or software requirements (such as platforms, interfaces, bandwidths, or routine schemas), and updates as necessary; prepares (or assists in preparing) Requests for Proposals (RFP) and Requests for Information (RFI) for the data network, telephone, and voice communication needs of District projects, including determining project objectives, resources, and time frames; plans and coordinates projects requiring the addition or modification of data network and/or with telecommunication infrastructures with Plant Services, vendors and outside contractors. \*
  6. Maintains accurate detailed records of work done, materials used, the inventory of spare parts, phones and data cabling and wiring. \*
  7. Maintains, monitors, and keeps accurate records of phone locations for the E911 system. \*
  8. Assists in planning departmental budget for future projects; makes recommendations for purchases; provides estimates for projects and upgrades. \*
  9. Maintains a level of formal and self-training in order to remain effective and knowledgeable with current telecom and network technologies, standards, and codes.\*
  10. Maintains a variety of telecommunications and data network test equipment and analysis tools. \*
  11. Operates a computer to perform basic data entry, access email and District announcements, etc. \*
  12. Interacts with diverse populations and constituencies in a wide range of situations requiring judgement, tact, and diplomacy. \*
  13. May train student assistants, temporary employees, interns, etc. to carry out routine tasks.
  14. May provide work guidance to District employees, short-term, and temporary employees on a per project basis, and may direct and/or train student workers.
  15. May serve on a variety of District committees as requested.
  16. Performs other duties that support the overall objective of the position.

**MINIMUM QUALIFICATIONS****EDUCATION/EXPERIENCE:**

- Associate degree\* in Telecommunications, Computer Networks, Computer Engineering (CE), or related discipline; **OR**
- Completion of a formal trade apprenticeship program; **AND**
- Three (3) years of experience directly related to the duties and responsibilities of this class.

- Or, any combination of education and experience which would provide the required qualifications for the position.

\*Associate degree education equivalency is a 1 to 1 equivalency, one year of responsible work experience related to the classification for each full year (24-30 units) of college.

**DESIRED QUALIFICATIONS:**

- Four (4) years of progressively responsible experience with installation, testing process methods, tools and materials used for telephone, data, and security systems, including routing methods and switch configurations.
- Mitel PBX digital and VOIP certified.
- Manufacturer certification in Leviton Structured Cabling Techniques.

**CERTIFICATES, LICENSES, REGISTRATION, SPECIAL AND/OR OTHER REQUIREMENTS:**

- Required to hold and maintain a valid driver license 'if and when' travel is required in the course of work.
- Required to travel to various District sites to perform job duties as needed as well as off-site meetings, trainings, conferences, and/or events in support of the overall objective of the position.

**KNOWLEDGE, SKILLS, AND ABILITIES: *(May be acquired through education, training and/or experience.)***

**Knowledge of:**

- District and college policies, procedures, rules, and regulations related to the area of assignment.
- California Education Code and Title V as it relates to the area of assignment.
- Family Educational Rights and Privacy Act (FERPA).
- Rules, regulation laws, and Board policies, and procedures governing the District.
- Theories, methods and techniques of complex network and telecommunications equipment.
- Telecommunications and network protocols and standards, including the American National Standards Institute (ANSI), and National Electrical Code (NEC), Electronic Industries Alliance (EIA), and Telecommunication Industry Association (TIA) standards.
- Basic electricity and electronics.
- Loading telephone transmission theory.
- Telephone and data wiring, including copper and fiber optic, to current cabling standards, termination, testing specifications, and other wiring to industry standards and practices.
- Computer operation and specialized software applications.
- Reading and usage of electrical/electronic, print/schematic, blueprint and other forms of diagrammatic representations.
- Proper spoken and written English usage.
- Elements of proper grammar usage, spelling, vocabulary, and punctuation.
- Basic mathematics.
- Record-keeping, filing, file sharing, and filing system methods and techniques.
- Effective communication skills both verbally and in writing.

- Computer software programs, applications, databases, and Enterprise Resource Planning (ERP) systems; computer hardware and peripheral equipment related to the area of the assignment.
- Modern office practices, procedures, and equipment including computers, computer hardware and peripheral equipment.
- Microsoft Office Suite (Word, Excel, Outlook).

**Ability to:**

- Independently perform the essential responsibilities of the position.
- Understand and apply District and department policies and procedures.
- Integrate local, state, and federal laws and regulations.
- Ensure compliance with all laws, regulations and policies through effective office supervision and leadership.
- Read, understand, learn, interpret, and apply rules, regulations, policies, and procedures.
- Safely operate a motor vehicle during the course of work and throughout employment with the District.
- Organize and sequence steps that enable production of reports, special projects, and meetings.
- Maintain currency of knowledge on technical advances in all areas of responsibility.
- Apply the ANSI, NEC, EIA, and TIA standards as they are related to structured cabling.
- Use initiative and problem-solving and critical thinking skills in carrying out responsibilities.
- Perform skilled technical work in the installation of telephone and data wiring.
- Observe safety practices and procedures.
- Compose correspondence and reports.
- Plan, organize, and prioritize workload to meet schedules and timelines.
- Independently apply good judgment in making decisions.
- Utilize keyboarding skills commensurate with the required functions for this position.
- Utilize computer software programs, applications, and databases; computer hardware and peripheral equipment related to the area of assignment.
- Communicate with students, staff, and the public in person and via a variety of communication modalities using various technology resources.
- Function effectively under stress from deadlines and timetables.
- Read electrical/electronic prints/schematics and blueprints.
- Independently diagnose technical problems.
- Work independently and collaboratively.
- Develop and implement solutions.
- Make required mathematical calculations accurately.
- Maintain records accurately.
- Exercise tact and diplomacy in dealing with sensitive and complex issues and situations.
- Understand and carry out verbal and written instructions and direction.
- Effectively communicate both verbally and in writing.
- Work with diverse populations.

- Establish and maintain cooperative relationships with those contacted in the course of work.

**RELATIONSHIPS WITH OTHERS:**

The incumbents in this class are in daily contact with department, college, District faculty, staff, administrators, students, vendors, and the public, as needed.

**SUPERVISION EXERCISED and/or RECEIVED:**

The incumbents in this class may provide work direction and/or guidance to lower-level staff, student workers, student assistants, and/or short-term, temporary employees.

The incumbents in this class receive general supervision from the assigned manager or other administrative superiors. Supervision is provided regarding interpretation and application of District, college, and/or department policies and procedures, applicable state and/or federal regulations. Work is usually performed independently and reviewed by supervisors as needed to ensure accuracy, completeness and compliance with practices and regulatory standards. Incumbents in this class follow policies and guidelines as outlined by the District, college and/or departmental procedures, policies, and directives.

**PHYSICAL AND MENTAL DEMANDS:**

The physical and mental demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this class. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

- **Physical Demands**

While performing the duties of this classification, the incumbent is regularly required to sit, walk, and/or stand, speak or hear, both in person and by telephone. Use hands repetitively to finger, handle, feel or operate standard office equipment; reach with hands and arms; and occasionally lift and carry up to 25 pounds. must frequently sit and/or stand for long periods of time; dexterity of hands and fingers to operate a variety of computer and office equipment, The incumbent may be required to bend at the waist, kneel and/or crouch; move about the college or District site(s).

Specific vision abilities required by this job include close vision and the ability to adjust focus and view a variety of computer screens, printed documents, and instructions.

- **Mental Demands**

While performing the duties of this class, the incumbent is regularly required to use written and oral communication skills; read and interpret data, information and documents; analyze and solve problems; observe and interpret people and situations; learn and apply new information or skills; perform highly detailed work on multiple, concurrent tasks; use math/mathematical reasoning; perform highly detailed work under changing priorities and deadlines on multiple concurrent tasks; work with frequent interruptions, and interact with District and/or college faculty, staff, management, administrators, students, educational institutions, and others encountered the course of work.

**WORK ENVIRONMENT AND CONDITIONS:**

- **Work Environment**

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this class. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

The incumbent works under typical office conditions, and the noise level is usually quiet.

- **Working Conditions**

Work is performed primarily indoors where minimal safety considerations exist.

**Butte Glenn Community College District (BGCCD) IS AN EQUAL OPPORTUNITY**

**EMPLOYER:** To accomplish this job successfully, an individual must be able to perform, with or without reasonable accommodation, each essential function satisfactorily. Reasonable accommodation may be made to help enable qualified individuals with disabilities to perform the essential functions.

Butte Glenn Community College District is committed to creating a diverse workforce focused on equity, inclusion, and accessibility for all faculty, staff, administrators, managers, and students. The District is dedicated to building an environment that supports our diverse student populations providing opportunities to mentor, encourage, and prepare our students to be successful in the world and expose them to global perspectives. Our District community of professionals is devoted to enriching our students' lives by bringing to light a variety of ways to engage and discover their individual and collective paths through education.

**BGCCD is** committed to the principles of equal employment opportunity. It is the District's policy to ensure that all qualified applicants for employment and employees have full and equal access to employment opportunities and are not subject to discrimination in any program or activity of the District on the basis of ethnic group identification, race, gender, color, language, accent, citizenship status, ancestry national origin, age, sex, religion, sexual orientation, gender identity, parental status, marital status, veteran status, physical or mental disability or medical condition, or on the basis of these perceived characteristics.