

## SYSTEMS ADMINISTRATOR

### GENERAL DESCRIPTION OF CLASS

Under the direction of an administrator or manager, performs a wide variety of moderate to complex duties and responsibilities related to professional-level project organization, computer scripting languages, system development and methodologies, computer operating systems, data communications, networks, database management, and computer-based office productivity.

**DISTINGUISHING CHARACTERISTICS:** The Systems Administrator performs moderate to complex responsibilities in the design, implementation, and administration of the District's networked systems and special project requirements; provides efficient, stable, reliable infrastructures needed for effective operations, applications, and information to administrators, managers, faculty, staff, and students. The incumbent troubleshoots and resolves moderately complex networked systems performance and connectivity issues.

**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. Performs as system administrator with respect to selecting, procuring, and overseeing a variety of hardware and software systems in a digital environment; provides systems software loading and hardware maintenance on the administrative and end-user computing systems, performance tuning and computer operating systems maintenance activities. Travels to various District sites to perform duties \*
2. Performs analysis and design of complex information systems; analyzes business functions, identifies essential components, assesses which components are appropriately automated, manages an iterative process of application design, implementation, and review with end users. \*
3. Performs a variety of assigned tasks related to database management systems and third-party software tools; designs and deploys database applications, reviews and monitors application performance tuning, and database maintenance activities. \*
4. Performs network engineering and administration tasks to support the systems administration of assigned information systems; installs network operating system software, client/server application software, authorizes user accounts, monitors user account security, systems security, and supports end user training. \*
5. Designs, deploys, and manages cloud computing and software-as-a-service applications.\*
6. Troubleshoots, diagnoses, and resolves network and server connectivity and performance issues; administers network standards, including but not limited to a variety of network system protocols; monitors, analyzes, and manages network traffic and other conditions to achieve optimal performance and uptime; analyzes data to minimize network congestion. \*

7. Analyzes system network capacity and growth requirements; recommends network infrastructure upgrades and enhancements to meet long-term District needs. \*
8. Remains current in various technical fields including but not limited to emerging technological trends, computer hardware evolution, computer application architecture, scripting design methodologies, computing infrastructure, scripting languages, computing security and access management, and data communications standards and protocols. \*
9. Serves as a project leader with overall responsibility for overseeing medium to large complex projects; participates in planning and managing project plans through all stages of project implementation; researches and assesses project needs, recommends purchases to the institution and project management team; reviews and analyses project status and identifies any potential issues or concerns and provides alternate actions to mitigate project delays; recommends assignments of project tasks to team members; monitors and reports project status, progress, completion, and accomplishments, and provides project summary upon completion. \*
10. Researches, evaluates, and recommends hardware and software for compatibility, serviceability, design, and performance; develops specifications and recommends the purchase of computer network systems related hardware and software. \*
11. Interacts with diverse populations and constituencies in a wide range of situations requiring judgement, tact, and diplomacy. \*
12. May serve on a variety of District committees as requested.
13. Performs other duties that support the overall objective of the position.

## **MINIMUM QUALIFICATIONS**

### **EDUCATION/EXPERIENCE:**

- Bachelor's degree \* in Computer Science, Computer Information Systems, Management Information Systems, or another technology related discipline; Or, courses, training, or certification in computer operating systems, scripting languages, or related certifications;
- AND**
- Four (4) years of increasingly responsible experience in the analysis, design, development and administration of system and/or network administration.
  - Or, any combination of education and experience which would provide the required qualifications for the position.

\*Bachelor's 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.

### **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.

### **DESIRED QUALIFICATIONS:**

- Cloud computing certifications.
- Certifications related to Operating systems such as Window Server and Linux.
- Certification in Network Engineering.

***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, regulations, laws, and Board policies, and procedures governing the District.
- Operational and interrelated uses of computerized data processing, scripting languages, systems and procedures analysis
- Principles, methods, and techniques for the layout, installation, configuration, integration, and operation of network systems, components, equipment, devices, and software
- Server hardware and operating system architecture, directory services, characteristics, commands, and components applicable to District servers and computer platforms
- Standard network management software, equipment, tools, and utilities
- Methods and techniques for performing connectivity testing, network analysis, and troubleshooting
- Principles, practices, and methods of network administration and maintenance, including configuration, performance tuning, and diagnostic tools
- Principles, practices, and methods of systems administration and maintenance
- Database management systems and software
- Standard scripting languages and utilities applicable to the area of assignment
- Data communications, database management and computer operating systems
- Performance metrics analysis as it applies to system reliability and the user experience
- Methods of applying data processing to educational and administrative computing problems
- Methods and procedures used to evaluate and improve overall computer system performance
- Cloud computing and software as a service systems
- Scripting languages, especially those pertaining to operating systems
- Proper spoken and written English usage
- Elements of proper grammar usage, spelling, vocabulary, and punctuation
- Basic mathematics
- Composing, proofreading, and preparing correspondence
- 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, methods, and techniques
- Microsoft Office Suite (Word, Excel, Outlook, and PowerPoint)

**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
- Department and/or program policies and procedures
- Learn and implement the required policies, procedures, rules, and regulations of the District and the department

- Read, understand, learn, interpret, and apply rules, regulations, policies, and procedures related to the area of the assignment.
- Safely operate a motor vehicle during the course of work and throughout employment with the District.
- Design, configure, manage, and maintain the operations of moderately complex wired and wireless network systems to achieve optimal technical performance and user support
- Troubleshoot moderately complex network hardware, software, and/or connectivity problems and make modifications to resolve issues
- Understand and apply the analysis of functional requirements related to project leadership, implementation, and completion
- Assess needs, set priorities, and allocate resources to effectively meet identified needs in a timely manner
- Prepare and generate clear, concise, and accurate system documentation, reports or work performed, and other project or knowledge articles and written materials
- Plan, schedule, and direct system development projects
- Perform complex system analysis, design, and scripting tasks
- Demonstrate work activities to others
- Lead a project implementation team
- Document business processes
- Update and maintain documents, records, files, and file sharing systems accurately and with confidentiality
- Communicate effectively, clearly, and concisely both verbally and in writing
- Work collaboratively and successfully as a project leader and team member
- Utilize keyboarding skills commensurate with the required functions of the position
- Stay up to date on emerging technologies and changes
- Provide technical training to peers and others
- Design, implement, and maintain cloud computing and software-as-a-service systems
- Understand and carry out verbal and written instructions and direction
- Provide software and equipment purchase recommendations to management for use in budget creation
- Compose correspondence and reports
- Use discretion and handle students, staff, and faculty in a diplomatic manner
- Plan, organize, and prioritize workload to meet schedules and timelines
- Independently apply good judgment in making sound and educated decisions
- Exercise problem solving and critical thinking skills related to the scope of authority
- Effectively and fluently utilize computers to perform advanced-level document production including the complex formatting of documents, creating charts, establishing and maintaining databases and spreadsheets
- 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
- Work with diverse populations
- Establish and maintain an effective and cooperative working relationship 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, contractors, 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, materials, 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**

Incumbents may be required to travel offsite to other District sites.

Work is performed where some safety considerations exist and is subject to noise from computer/server/switch operation. The incumbent performs work on tall (10 foot+) ladders, including work inside ceiling-spaces and outdoor areas installing and maintaining low voltage

signal circuit wiring, mounting equipment, and repairing equipment related to servers and network technology.

**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 accommodations 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.