

## TECHNICAL COMPUTING SPECIALIST

### GENERAL DESCRIPTION OF CLASS

Under the direction of an administrator or manager, the incumbent(s) in the Technical Computing Specialist classification performs the essential responsibilities related to the level of the classification and the area of assignment. Provides District and department based technical services and support including but not limited to research and selection for purchase, installation, configuration, diagnosis, maintenance, and repair of District computer hardware (desktop, laptop, server, and mobile devices), software (operating systems, server, desktop applications, and systems management tools), network devices, and associated wiring and peripheral hardware.

**BASIC FUNCTION:** The duties of this classification may involve performing 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 within their classification as well as other related duties.

**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 \*.

### Management Systems and Infrastructure

1. Performs tests, diagnostics, and troubleshooting for systems that are connected to core technologies, to include, LAN/WANs, data and telecommunication networks, wireless networks, multimedia accessories, and specialized instruments.\*
2. Utilizes MDM (mobile device management) and MAM (mobile application management) systems, such as JAMF and Intune, and performs functions in Active Directory and Entra under specific guidelines to support endpoints.\*
3. Develops and implements strategies, procedures, and technologies to support, deploy, and secure campus-wide computers, peripherals, virtual devices, and mobile technologies using enterprise-level tools and methods, including, but not limited to, anti-virus, anti-spyware, EDR (endpoint detection and response), imaging solutions, applications, operating system upgrades and patching, and application delivery.\*
4. Monitors technological trends and performs technical testing for hardware and software applications for district-wide implementation.\*
5. Manages software licensing tools and services for various applications.\*
6. May write programs and scripts in support of desktop-related applications and projects to ensure system functionality.\*
7. Maintains a variety of computer applications, network, peripheral and mobile device testing, computer hardware, peripheral equipment, and an array of analysis tools.\*
8. Utilizes VDI and Virtualization technologies to deploy desktop office and lab equipment.\*
9. Supports an array of peripheral devices and specialty equipment including analytical instrumentation, CAD/CAM, virtual and augmented reality technologies, streaming and virtual meeting platforms, and other tools as requested.\*

**Technology Support**

10. Acts as a primary resource for enterprise level technical and/or theoretical questions from faculty, staff, and students; participates, within a team, regarding enterprise level issues, including but not limited to coordinating and performing troubleshooting, documentation development and facilitating required hardware and software repairs to optimize campus computers, applications, and enterprise solutions, etc.\*
11. Advises and assists users in determining needs and evaluating models for technology to support curriculum, programs, and departments. Determines, creates, and maintains technical specifications, resource requirements, and technology standards for assigned area of responsibility. Consult with vendors regarding availability and pricing.\*
12. Coordinates with District Disabled Student Programs and Services (DSPS) to determine products, purchases, tests, and installation of computers, software, and related devices necessary for students and staff with disabilities to receive approved accommodations and adjustments.\*
13. Maintains records of user requests for support that detail hardware and software configurations and any changes that are applied, for all desktop, laptop, mobile systems, and associated hardware; Communicates with users in a timely fashion regarding the status of their requests.\*
14. Prepares and generates reports for management that summarize the status of user requests.\*

**Lifecycle and Asset Management**

15. Plans lifecycle refresh of end-user facing endpoints.
16. Ensures compliance with e-waste and surplus asset policies, and maintaining accurate inventory, documentation, and asset tracking of end-user facing endpoints.
17. Specifies, procures, and maintains a reasonable inventory of spare parts used in offices and computer labs and associated peripherals to assist in the assurance of uninterrupted campus system operations.\*

**Installation and Maintenance**

18. Installs, configures, tests, documents, maintains, performs diagnostics, and repairs computer desktop systems, mobile devices, thin clients, hardware, peripherals, software, and associated components.\*
19. Assists with coordinating the installation or reconfiguration of systems for targeted rooms and/or areas to ensure the capabilities of the facility are maintained with the appropriate requirements for users of the facility; ensures installed systems comply with approved District and department policies, procedures, and standards.\*
20. Performs testing, deployment for patching, and updating of operating systems and applications as determined through research.\*
21. Creates and performs work from plans, sketches, schematics, blueprints, or other forms of instructions or diagrammatic representations pertaining to computer labs and offices; may serve on project and/or technology support teams related to architectural designs for computer labs and offices.\*

**General Responsibilities**

22. Participates on desktop or technical teams in support of enterprise-wide technical projects; Effectively communicates and reports on assigned projects. \*
23. Communicates any issues to supervisor that may cause or are causing poor technology performance.\*

24. Travels to satellite campuses to service, install, and maintain District computers and peripherals. \*
25. Interacts with diverse populations and constituencies in a wide range of situations requiring judgement, tact, and diplomacy.\*
26. Carries out tasks and assignments; strives to provide continuous improvement of technical service support; analyzes the performance of technical support provided within the assigned areas of responsibility; may implement changes in operations, equipment, and/or configurations based on the outcome of the analysis performed.\*
27. May serve on a variety of District committees, as requested.
28. Performs other duties that support the overall objective of the position.

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

- Associate degree\* with coursework in Computer Science, Computer Engineering, or related discipline; **AND**
- Three (3) years of experience in the maintenance and operation of desktop and laptop computers directly related to the duties and responsibilities of the position; **OR**
- Completion of a formal IT related certification program; **AND**
- Three (3) years of experience in the maintenance and operation of desktop and laptop computers directly related to the duties and responsibilities of the position.
- 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.*

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

- Possess and maintain a valid driver license ‘if and when’ travel is required in the course of work.
- May be required to travel for various off-site meetings, trainings, conferences, and/or events in support of the overall objective of the position.

**DESIRED QUALIFICATIONS:**

- Bachelor’s degree in computer science, computer engineering, or related discipline.
- Five (5) years of progressively responsible experience in the maintenance, operation, and administration of endpoints in a managed enterprise environment.
- Experience working with and understanding networking principles, applications, print and file servers, endpoint management tools.
- Possession of industry related certification(s), such as A+.

**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.

- Strategic initiatives, methods, best practices, theories, concepts, and systems pertaining to technology in a higher education environment.
- Practices, strategies, and technology associated with providing support to faculty members.
- Computer software programs and applications, computer hardware, and peripheral equipment related to the area of assignment.
- Mobile devices and applications utilized by the District and/or college.
- System virtualization hardware and management (Citrix, VMware).
- Streaming technologies.
- Computer systems and applications related to security principles and best practices.
- Desktop and mobile management solutions.
- LAN/WAN devices and networking protocols.
- Basic network and wiring installation and maintenance techniques.
- Software applications configured for stand-alone, network (server based), and cloud systems.
- Laws and ordinances pertaining to the specific responsibilities related to the area of assignment.
- Communication strategy skills.
- Information architecture.
- Programming and coding techniques for programming languages.
- Computerized and electronic equipment.
- Troubleshooting techniques.
- Methods and procedures utilized in the maintenance and repair of computer hardware and software applications and associated peripherals.
- Reporting tools.
- Effective communication skills, both verbal and in writing.
- Record-keeping, filing, file sharing, and filing system methods and techniques.
- Proper grammar usage, spelling, vocabulary, and punctuation.
- Basic mathematics.
- Composing, proofreading, and preparing correspondence.
- 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.
- Read, understand, learn, interpret, and apply rules, regulations, policies, and procedures related to the area of the assignment.
- Maintain knowledge and research current, evolving, and emerging technologies and advances in all aspects related to the area of assignment.
- Research and analyze a variety of technology platforms including but not limited to security, hardware, software applications, and campus connected systems.

- Read and perform work from a variety of plans, specifications, and diagrammatic representations.
- Utilize scripting and coding techniques.
- Troubleshoot and diagnose technical problems.
- Analyze data and use strong problem-solving skills.
- Plan, organize, and prioritize workload to meet changing priorities, schedules, and timelines.
- Plan, schedule, and perform complex activities in an organized manner.
- Accurately assess the technical content needs of a department, program, or instructional lab.
- Update and maintain accurate, detailed, and precise records, files, file sharing, and filing systems ensuring confidentiality of information.
- Use initiative, problem-solving, and critical thinking skills to carry out various responsibilities related to the area of assignment.
- Effectively troubleshoot issues, develop, and document solutions, manage priorities, multi-task and coordinate multiple activities simultaneously.
- Demonstrate interpersonal skills using tact, patience, and courtesy.
- Demonstrate work activities to others and provide technical training, as assigned.
- Understand and carry out verbal and written instructions.
- Effectively communicate both verbally and in writing.
- Maintain accuracy and pay close attention to detail in a fast-paced environment of changing priorities.
- Compile, organize, and use various financial information necessary in the preparation and monitoring of budgets.
- Compose correspondence and reports.
- Use discretion and handle students, staff, and faculty in a diplomatic manner.
- Update and maintain records, files, file sharing, and filing systems accurately and with confidentiality.
- Exercise problem solving and critical thinking skills related to the scope of authority.
- Utilize keyboarding skills commensurate with the required functions for this position.
- 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.
- Demonstrate sensitivity to and understanding of the diverse academic, socio-economic, cultural, disability, and ethnic backgrounds of staff and students of a community college.
- Establish and maintain effective and cooperative working relationships with those contacted during 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 subject to occasional lifting of low to moderate weight (up to 50lbs.) items, monitors, CPUs, printers, and other related computer parts; continuous walking, setting up of objects (labs), driving and operation of equipment is required. 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. 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 in 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 in an office and/or lab environment; subject to noise from computer operations; may be required to climb a ladder.

**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.