



Cañada College ♦ College of San Mateo ♦ Skyline College

GENERIC POSITION DESCRIPTION

Audio Visual (AV) Systems Engineer

A Classified Professional Position

Grade 210S - Salary Schedule 40

A. General Statement

Under the direction of the Director of Information Technology Support Services, the AV Systems Engineer works as a member of the District-wide technology support team to provide information technology support toward events and throughout the District. An AV Systems Engineer provides support to faculty, staff, students as well as community members and event holders on various computer platforms, multimedia equipment, networks and applications. The AV Systems Engineer is the District's audio / video technical expert and serves the District as resource for information, consultation and recommendations toward multimedia design, security, performance, operation and maintenance. The work involves a variety of technologies and actions, including: installation, operation, configuration, repair, modification, and system administration, electronic components, audio/video/multimedia equipment, software applications, desktop applications, some network servers supporting instructional programs, and other equipment.

Public contact is extensive and includes ITS department staff, other support team members, faculty, staff, students, and technology vendors and suppliers for the purpose of determining, planning and resolving technology requirements toward events, problems, or making improvements. A high degree of independent judgment is required to resolve frequent minor and occasional major problems that occur. Consequences of errors in judgment could be costly in terms of equipment damage, loss of staff time, financial loss and negative customer relations; however, supervisory controls and the ability to rely on the assistance of other members of the technology support team will reduce the risk of serious errors. An AV Systems Engineer leads the work of IT Support Techs, student assistants, and other staff as assigned.

B. Duties & Responsibilities

The duties below are representative of the duties of the classification and are not intended to cover all of the duties performed by the 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 classification.

1. Performs technical work involving District-wide AV planning and design, installation, system integration, configuration, modification, and maintenance of audio/video equipment, desktop computer or mobile devices, and other high end software applications, and local area networks

2. Plays lead role in designing and implementing some of the most challenging and innovative AV solutions within San Mateo CC District
3. Sets up, installs and operates equipment such as microphones, sound speakers, video screens, projectors, video monitors, recording equipment, connecting wires and cables, sound and mixing boards for a variety of events and classroom activities.
4. Ensures that the District's audio/video infrastructure is optimally architected, designed, configured, installed, monitored, and supported.
5. Assumes all audio/video and technology support requirements for all District-wide events, including District Board of Trustees' meetings.
6. Uses diagnostic equipment to test, adjust, modify and repair electronic equipment.
7. Assists in the creation of contractors and builders project punch list to organize and manage the completion of audio/video installations in order to make it effective and successful.
8. Assumes responsibility of all technology setup, upgrade, or maintenance of District-wide conference rooms, smart classrooms, hyflex learning spaces, and board room technologies.
9. Troubleshoots and corrects hardware problems; reports equipment problems or failures and provides necessary documentation; coordinates repair services with external contractors; makes recommendations for improving the life/continued usefulness of existing equipment; provides basic support, including repairs and purchases for audio and video equipment/services
10. Works closely with the client contacts to identify needed repairs, troubleshoot and perform the repair and improvement of the technical conferencing environment.
11. Takes lead role in the analysis, evaluation of existing services/technologies as well as the recommendation of additions, improvements, and changes to all AV services, for classrooms, open or shared instructional areas, and event spaces.
12. Performs regular checks to ensure that relevant and up-to-date technical 'help' documentation or online references are available for usage of classroom technology and conference rooms District-wide.
13. Develop and maintain technical documentation where needed to provide reference for other staff, and operational instructions for more complicated configurations, lab situations or for other purposes.
14. Uses the HelpCenter system to track and monitor work orders and service requests and sets work priorities based on severity and impact, providing responsive and effective support services at all District locations.
15. Communicates with the Director of Information Technology Support Services, faculty and staff, and the other technical support team members regarding work orders, work in progress, and/or support requirements related to the reliable advanced operation of all District audio/video infrastructure, desktop computer systems, instructional servers, digital media capabilities, network services, considerations related to workload and service priorities, equipment supply and storage, planning the purchase of new and upgraded equipment, modifications/renovations and improvements to facilities, responding to customer requests and project timelines, and other matters.

16. Assists staff in the planning, purchasing, and installation of new hardware and software.

17. Performs other duties as assigned.

C. Requirements

- A combination of education and experience equivalent to an Associate degree in computer systems, electronics, or a closely related field
- Formal training in the use of computer hardware, systems software, desktop applications, audiovisual/multimedia and supporting equipment, and a variety of network topologies using a combination of protocols
- Successful work experience that has included determination, isolation, and resolution of problems in computer systems or audiovisual equipment, the installation, configuration, and modification of a variety of operating systems on both desktop workstations and servers, including all versions of Windows, MacOS, Unix and others
- Experience with designing & managing large-scale AV deployments.
- Experience with broadcast systems; audio consoles and routing/distribution, video control and switching, matrix intercom, etc.
- Experience leading the work of others
- Experience providing assistance in planning, designing, and implementing technology-related additions, renovations, remodeling or facilities improvements
- Possession of a valid California Drivers' License and the ability to drive a motor vehicle to off-site or other locations are required
- Demonstrated cultural competence, sensitivity to and understanding of the diverse academic, socioeconomic, cultural, disability, gender identity, sexual orientation, and ethnic backgrounds of community college students, faculty and staff

D. Preferred

- Bachelor's degree in computer systems, electronics, or a closely related field

E. Physical/Other Requirements

This classification requires sitting or standing for prolonged periods of time; dexterity of hands and fingers to operate a computer keyboard, touch screen and mouse; use of hand tools, such as screw drivers, pliers, etc.; the ability to lift equipment up to 40 pounds, crawl on the floor, work under desks and in tight places and work on ladders; and use of a cellular telephone that either can be issued by the District or provided by the employee who will receive the District monthly stipend to cover work use in order to perform the essential functions.

F. Knowledge, Skills & Abilities

1. Knowledge of Macintosh and PC computer hardware, server Operating Systems, Windows Group Policies, Linux server Operating System, software, imaging concepts, network topology and wireless networking.
2. Knowledge and ability to support technologies used in events, including: microphones, sound speakers, video screens, and projectors.

3. Knowledge and ability in performing advanced troubleshooting on any non-functional AV equipment.
4. Skill in the detection and correction of malfunctions in computer systems, servers, and installation of PC, Macintosh and Linux operating systems and desktop/instructional software applications.
5. High level technical problem solving ability.
6. Skill in respectful and sensitive communication with other team members, and people at all levels in an organization who are diverse in their socioeconomic, cultural, disability, gender identity, sexual orientation, and ethnic backgrounds.
7. Skill in designing, installing and maintaining learning space technologies.
8. Skill in installing, configuring, modifying, optimizing performance and problem determination and resolution with servers located in instructional labs.
9. Skill in the use of a variety of computer software to prepare procedures, documentation and reports for use by others as required
10. Skill in preparing procedures and documentation for use by faculty, staff, and students
11. Skill in multi-tasking and prioritizing workloads with similar deadlines
12. Design skills and deployment experience with AV technologies such as room control, room automation, video conferencing, audio processors and digital signage
13. Ability to manage multiple projects simultaneously within the budgeted cost and schedule and ensure that the quality of the delivered systems are maintained
14. Ability to control and maintain necessary project documentation in associated job files