Position Description

JOB ID:	6195
Position Number:	02024952
UC Path Position #	40340807
Dept:	IET COMMUNICATIONS RESOURCES - 061420
Position:	AV Engineer
Approved Payroll Title Code:	7355
Approved Payroll Title:	AV IT ENGR 4
Approved MSP Salary Grade:	
Approved PSS Salary Grade:	PSS21
POSITION DETAILS	
Job Summary:	Under the general supervision of the Network Services Engineering (NSE) AV Engineering Services Supervisor, this position will be responsible for planning, designing, coordinating and engineering the campus' diverse multimedia infrastructure. The role of this position is to serve as a technical lead and engineer in the installation, maintenance and support of campus multi-media systems. This position is responsible for designing and implementing multimedia systems from initial request to fruition by following campus design guides and campus functional architecture. In this role, this position will work with the campus Design and Construction Management (DCM) Program Managers and act as the project manager for major and minor capital campus multimedia projects. This position will provide consulting services directly to campus clients. As a member of the Enterprise Infrastructure Services team, this position will work with the AV Maintenance and Installation groups coordinating project and service requests as well as working with the NSE Engineering team for all construction projects. This position will also be responsible for programming AV equipment.
Campus Job Scope:	
Department Specific Job Scope:	
Positions Supervised:	N/A
Essential Responsibilities:	50% AUDIO VISUAL ENGINEERING Responsible for the overall system engineering and design of Audio/Visual (AV) equipment in campus buildings. Act as a technical lead for multimedia systems design, testing, programming, and operation of digital multimedia systems for the campus to include academic lecture halls, classrooms, and conference rooms. Conduct needs assessment, surveys of existing facilities, and planning of the upgrades of the multimedia infrastructure. Engineer complex audio/video systems, select cable media, list of materials and

equipment to produce a complete design. Assesses and validates with outside consultants to develop customized designs.

Primarily responsible for programming of AV control devices that may be Crestron, Extron, and DSP systems. Responsible for the control panel layout and device communication changes.

Design and prepare documentation of control system programming and subsequent revisions, inserting comments in the coded instructions so others can understand the program and changes efficiently.

Ensure long-range plans are incorporated with multiple projects simultaneously.

Serves as a system administrator and monitor the remote asset management (Fusion Server) for all General Assignment Classrooms and departments to ensure all multimedia systems are functioning properly. Add and make necessary changes to reflect current applications to users.

Prepare technical engineering drawings and designs to be included in estimates and proposals for installations.

Independently research, design, develop, adapt, modify, diagrams, documents, and upgrades a wide variety of campus digital media equipment, including complex digital control panels, computer/data projection systems, and sound reinforcement systems in accordance with industry and campus standards.

40% PROJECT AND CONSTRUCTION MANAGEMENT
Apply professional project management and AV concepts for departments and campus to manage complex projects.

Review and provide technical comments for design/construction drawings and specifications.

Conduct field inspections and oversight of contractor construction work to ensure compliance to drawings, specifications, and standards.

Coordinate and provide oversight for EIS project installation.

Prepare and follow up on punch lists, review and respond to as-built drawings and multimedia test results.

Oversee preparation and reconciliation of all final project documents.

Conduct post-mortem reviews and recommend/implement changes.

Conduct needs assessment, surveys of existing facilities, and design installations for multimedia systems in support of Minor and Major Capital Projects.

Provide plans, designs, and estimates of cost, route selection plans, and applicable written documentation.

Keep management apprised of projects and assignments' status to include resource needs, schedule changes/delays, completion dates, etc.

10% TECHNICAL CONSULTATION/DOCUMENTATION
Respond to Tier III incidents impacting multimedia issues within the campus classrooms and lecture halls.

Provide instructional support to faculty on equipment usage in the classroom.

Provide updates of Standard Operating Procedures for AV Engineering processes within NSE to Manager for publishing.

Provide the Electronic Equipment Matrix to Operations and Installation Units to ensure current equipment is being ordered and installed.

Respond to technical queries from inter/intra departmental staff and design consultants regarding communications plant, equipment, and networking.

Coordinate with the engineering team to identify technical and procedural changes required to keep business practices current and participate in updating campus standards and EIS Standard Operating Procedures.

Physical Demands:	Lift and move materials weighing up to 50 pounds.
Work Environment:	May require occasional after hours and weekend work.
	Participate in the Department of Motor Vehicles (DMV) Pull Notice System.
	Valid CA driver's license required.

	Occasional travel required. Travel between campus and off-campus locations. Vacation is restricted during peak periods. Adhere to workplace safety practices, read information communicated about workplace safety, complete required safety training on time, and report any workplace safety issues promptly to their supervisor or the designated safety coordinator. This position is a critical position and subject to a background check. Employment is contingent upon successful completion of background investigation including criminal history and identity check. UC Davis is a smoke and tobacco free campus. Smoking, the use of smokeless tobacco products, and the use of unregulated nicotine products (e-cigarettes) will be strictly prohibited on any UC Davis owned or leased property, indoors and outdoors, including parking lots and residential space.
Background Check:	Yes
QUALIFICATIONS	
Minimum Qualifications:	-Extensive experience with the design, application, estimating, engineering and installation of multimedia systems, infrastructure and control systems (e.g. projection, control systems, videoconferencing, IP addressing, and audio systems). -Experience gathering requirements, needs assessments, budgeting, and managing multiple AV projects of varying complexity and scope with clients and technical teams. -Experience developing complex test plans and commissioning systems. -Technical knowledge of Crestron, DSP, and Extron products, system configurations and design. Experience validating, changing, and modifying existing codes and incorporating new equipment/systems into existing configurations. -Experience in remote asset management (Crestron and Extron) for maintaining and monitoring AV equipment on live systems. -Knowledge of EIA/TIA and AVIXA standards, National Fire Protection Code including the National Electric Code, grounding, bonding, power, and protection of multimedia equipment.
Preferred Qualifications for Selection:	-Experience programming on Crestron and Extron Control Systems to implement new and modify existing configurations. (Certifications preferred.) -Experience in assessing AV designs, installations, and maintenance against industry standards to ensure they meet campus design guidelines. -Written and oral communication skills to convey technical information to varying audiences. -Organizational skills to determine priorities, delegate responsibilities, exercise independent judgment, and take appropriate action to resolve problems efficiently.

Expectations

Job Expectations	- Demonstrate commitment and support of the UC Davis Principles of Community. -Design, program, commission, and maintain complex multimedia control systems across campus. -Perform effectively with constant interruptions and work simultaneously on several projects independently, using judgment in determining priorities. -Demonstrate strong communication skills to interact with clients in a manner that is consistent with accepted university standards. - Accountability for the safekeeping of resources in the employee's care and custody and for following and implementing the cyber-safety guidelines. - Establish priorities, organize tasks, and direct effective implementation of tasks in a demanding work environment. - Willingness to learn and apply new technology and willingness to develop skills to promote professional growth. - Willingness to routinely stay in communication with technical staff at other organizations to stay abreast of computing developments and resources available over the network. - Demonstrate excellent communication (oral, written, presentation, documentation) and interpersonal skills, using tact and diplomacy for interactions with clients and vendors. - Constantly remain abreast of the media and distribution equipment currently available, their capabilities, cost effectiveness, and compatibility with other campus systems as well as staying focused on emerging technologies in this industry. - Independently follow projects through to successful completion with a high degree of quality.