



**TELEVISION SYSTEMS ENGINEER**

**SALARY GRADE:** [C1-64](#)

**DEFINITION:**

Under the direction of an assigned supervisor, plan, coordinate and direct service and support engineering for the successful production and delivery of television programming; design and implement systems utilized for media productions; perform maintenance and repair of video analog and digital equipment; train and provide work direction to assigned personnel.

**EXAMPLE OF DUTIES AND RESPONSIBILITIES:**

Depending upon assignment, duties may include, but are not limited to, the following:

1. Plan, coordinate and direct service and support engineering for the successful production and delivery of television programming for Creative Arts Division, Distance Learning, Public Access, teleconferencing and Television Center productions.
2. Design and implement systems utilized for media productions; perform additions and upgrades to the system to accommodate the changing campus requirements.
3. Design system flow diagrams utilizing the Computer Aided Design systems (CAD); manage equipment and cabling requirements utilizing databases, spreadsheets and word processor applications; prepare and maintain documentation of projects.
4. Perform maintenance and repair of video analog and digital equipment including broadcast videotape recorders, cameras, linear and non-linear edit systems, video switchers, lighting systems and other related equipment; identify vendors and order parts as necessary; send equipment to outside contractors for repairs as needed.
5. Train and provide work direction to assigned personnel; assist in identifying and assigning jobs; assist with evaluation of personnel as assigned.
6. Provide computer hardware and software support as needed; identify operator errors or repair damaged software programs; perform hardware diagnostic and software backup functions as necessary.
7. Operate a variety of equipment including a computer, plotter, modems, oscilloscope, various hand tools, video switchers, audio boards, video-audio routing systems and other related equipment.
8. Prepare and maintain a variety of records and reports related to assigned activities.
9. Communicate with faculty and services groups to meet campus multimedia requirements.
10. Attend a variety of meetings and committees to identify and meet engineering requirements.
11. Perform related duties as assigned.

**EMPLOYMENT STANDARDS:**

**Knowledge of:**

1. Broadcast television analog and digital video systems.
2. Cable television distribution systems.
3. Satellite up-link and down-link systems.

4. Computer hardware, software and network systems and operations.
5. Operation of various audio and video equipment.
6. Oral and written communication skills.
7. Interpersonal skills using tact, patience and courtesy.
8. Principles of training and providing work direction.
9. Record-keeping techniques.
10. Technical aspects of field of specialty.

**Ability to:**

1. Demonstrate understanding of, sensitivity to, and respect for the diverse academic, socio-economic, ethnic, religious, and cultural backgrounds, disability, and sexual orientation of community college students, faculty and staff.
2. Design and implement systems utilized for media production.
3. Perform maintenance and repair of video analog and digital equipment.
4. Create documentation for broadcast systems.
5. Train and provide work direction to others.
6. Provide computer hardware and software support as needed.
7. Communicate effectively both orally and in writing.
8. Establish and maintain cooperative and effective working relationships with others.
9. Maintain current knowledge of technological advances in the field.
10. Maintain records and prepare reports.
11. Meet schedules and time lines.
12. Work independently with little direction.
13. Plan and organize work.

**Education and Experience**

Any combination equivalent to:

1. Bachelor's degree in broadcast engineering, electronic engineering or related field
2. Four (4) years related experience.

**WORKING CONDITIONS:**

**Environment:**

1. Office work environment.

**Physical Abilities:**

1. Hearing and speaking to exchange information in person and on the telephone.
2. Dexterity of hands and fingers to operate computer keyboard and audio and video equipment.
3. Seeing to read various materials and monitor and repair equipment.
4. Standing for extended periods of time.
5. Reaching overhead, above the shoulders and horizontally.
6. Bending at the waist, kneeling or crouching.
7. Pushing or pulling equipment carts and dollies.
8. Climbing ladders to repair equipment and systems.
9. Lifting, carrying, pushing or pulling heavy objects up to 60 lbs.

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