



**Classification Title: Educational Television Engineer**

<b>Department:</b>	Educational Television	<b>EEO6 Code:</b>	5
<b>Employee Group:</b>	Classified	<b>Salary Grade:</b>	25
<b>Supervision Received From:</b>	Manager, Educational Television and KKSM Radio Operations	<b>Date of Origin:</b>	9/2016
<b>Supervision Given:</b>	General Supervision	<b>Last Revision:</b>	9/2016

*Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are not intended to reflect all duties performed by individual positions.*

**JOB SUMMARY.**

Operates, maintains, troubleshoots, repairs and calibrates a wide variety of electronic and computer-related broadcast television equipment; designs television systems and provides technical support to faculty, staff and students in the operation of broadcast television equipment.

**DISTINGUISHING CHARACTERISTICS.**

Educational Television Engineer is distinguished from Media/Broadcast Engineer by the former's responsibility for installing, operating, designing, repairing and maintaining a wide variety of electronic television equipment, while the latter class is responsible for computer, video and electronic design, repair and support for California Community Colleges and Telecommunications and Technology Infrastructure Program (TTIP) South video productions, either onsite or on location.

**ESSENTIAL AND MARGINAL FUNCTION STATEMENTS.**

**Essential Functions:** Essential responsibilities and duties may include, but are not limited to, the following:

1. Analyzes, repairs and maintains production, post-production and broadcast television equipment, including digital and computer electronics that regulate the signal strength, clarity and ranges of sounds and colors for television broadcasts; calibrates and utilizes a variety of precise electronic testing equipment; integrates and maintains broadcast network and video distribution facilities.
2. Provides engineering support to staff, faculty and students in the technical operation of broadcast television equipment for production, post-production and master control equipment including digital television equipment; provides production engineering on remote productions.
3. Designs, assembles, installs, modifies, relocates and tests broadcast equipment to maintain circuitry of electronic components utilizing engineering instructions and technical manuals; installs computer-based software, hardware or peripheral equipment related to post-production and broadcast television; uses diagnostic methodologies to troubleshoot problems and makes appropriate repairs.
4. Performs systems-level analysis and design for television systems; advises department management of appropriate equipment upgrades or additions; prepares equipment specifications and coordinates purchases through established procedures.

5. Maintains current technical expertise in broadcast television and news media, including Federal Communications Commission (FCC) regulations pertaining to Educational Broadband Services (EBS) and cable broadcast standards and technical operations.
6. Trains and provides guidance to faculty, staff and students in the operations of facility systems and applications.
7. Works with Facilities staff to resolve any facility-related issues concerning air conditioning, emergency generator and electrical systems.
8. Maintains equipment records and prepares reports.
9. Assists in the production of instructional videos as needed.

**Marginal Functions:**

1. Operates District vehicles to drive to remote production sites as required.
2. Performs related duties and responsibilities as required.

**QUALIFICATIONS.**

**Experience and Education/Training Guidelines:** Any combination of experience and training that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:

**Experience:** Four years of increasingly responsible experience in the design, operation, maintenance and repair of professional-level television and multimedia production, post-production and broadcast equipment.

**Education/Training:** Equivalent to an associate's degree from an accredited college or university with major coursework in electronic engineering, computer technology, broadcast engineering or a related field.

**Licenses/Certificates:**

Possession of, or ability to obtain, an appropriate, valid California driver's license by time of appointment.

**Knowledge of:**

1. Principles, practices, methods and trends in broadcast television equipment maintenance and repair including digital electronics as applied to broadcast engineering.
2. Broadcast-related computer repair, Internet Protocol (IP) networking and software installation.
3. General principles and theories of broadcasting.
4. Electronic specifications, design and equipment installation.
5. Methods, techniques and test equipment used in the maintenance, repair and operation of broadcast equipment.
6. FCC rules and regulations pertaining to EBS and cable broadcast standards.
7. Occupational hazards and standard safety principles relative to assigned areas of responsibility.
8. Practices and procedures of recordkeeping.
9. Modern office procedures, methods and equipment including computers.
10. Business mathematics.
11. Pertinent federal, state and local codes, laws and regulations.

**Skill in:**

1. Troubleshooting, maintaining, designing and repairing defects in a wide variety of television broadcasting equipment.
2. Operating a variety of television broadcasting and repair equipment and tools in a safe and effective manner.
3. Designing, assembling and installing new television broadcasting equipment.
4. Training others in the use and care of television equipment and supplies.
5. Maintaining accurate records and inventories.
6. Operating vehicles in a safe and effective manner.
7. Working independently in the absence of supervision.
8. Understanding and following oral and written instructions.
9. Operating standard office equipment including computers and using business-related software.
10. Communicating clearly and effectively, both orally and in writing.
11. Maintaining 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.
12. Establishing and maintaining effective working relationships with those encountered in the course of work.

**WORKING CONDITIONS.**

**Environmental Conditions:** The incumbent works under office and studio conditions, and the noise level is usually quiet to moderate; interacts with students, faculty and staff, and must work with electrical equipment with the risk of electrical shock; and is exposed to inclement weather conditions.

**Physical Conditions:** Essential and marginal functions may require physical fitness requirements necessary to perform the job functions with or without accommodation, such as the ability to walk, stand or sit for prolonged periods and use computer keyboards and broadcasting equipment; possesses near visual acuity and the ability to differentiate operating equipment sounds. Occasionally operates a District vehicle.

**TERMS OF EMPLOYMENT.**

The duration of any fully restricted funded position in this classification is dependent upon the continuation of funding.