ELECTRONIC TECHNICIAN – MEDIA
TITLE SERIES DEFINITIONS

I. DEFINITIONS

ELECTRONIC TECHNICIAN – MEDIA

Under close supervision, positions are responsible for operating, monitoring, and basic maintenance of media, multi-media and interactive delivery systems. Positions at this level perform the most routine duties with clearly defined and specific objectives, guidelines, and instructions, exercising limited decision–making discretion. Assignments are narrow in scope.

ELECTRONIC TECHNICIAN – MEDIA INTERMEDIATE

Under limited progressing to general supervision, positions are responsible for a wide range of technical telecommunications activities. (1) Positions at the network head-end work in multi functional diverse technical areas such as media preparation, traffic, databasing, manipulating, scheduling, setting-up, operating, recording, encoding and ingesting, switching and releasing video, audio, and data information and/or programs. Duties include equipment installation, monitoring, and correcting incoming and outgoing signals, videotape machines, audio and video servers; recording and/or conducting technical checks of media programs; operating and optimizing satellite downlink systems; operating, monitoring, and controlling transmitter and associated equipment; setting up, operating, monitoring, and controlling transmitter and associated equipment; setting up, monitoring, and adjusting interconnecting feeds; and initiating troubleshooting procedures. (2) Production positions work in multi functional diverse technical areas such as working with in-house and out-of-house clients to determine, set up, and mix audio for complex broadcast and teleconference productions at studio and remote locations. These positions setup and operate media recording/playback devices; assign, connect, and set up specialized production support devices such as still-stores, frame synchronizers, microwave interconnects, color correctors, scan converters, wireless intercoms, delay systems, and Intercom Fold Back (IFB); align, match, and monitor multiple color cameras for complex studio and remote productions; set up video switchers and related equipment for proper operation during productions; electronically edit field or in-house video production segments with special effects; set up applications and instruct personnel on production computer systems; and perform corrective and preventive maintenance on electronic systems and devices to the component level. (3) Positions specializing in teleconferencing operate, maintain, and repair telecommunications, distance education, teleconference, webconference, audio conference, video conference, and data conference systems and equipment; operate computer based multimedia production equipment; produce, reformat, repurpose, duplicate, and distribute analog and digital audio, video, graphics multimedia educational materials for distribution by videotape, CD, DVD, webcasting, streaming, teleconference, and other distribution systems; set up class room multimedia teaching and display technologies, configure and arrange computer based room and systems control panel, patch, and configure central media distribution routers; and troubleshoot remote classroom multimedia systems and network interconnections. Employees may lead and/or train lower level technicians.

ELECTRONIC TECHNICIAN – MEDIA SENIOR

Under general supervision, positions perform the most complex operations and/or maintenance activities reflecting substantial variety and complexity. In addition to the duties assigned at the Intermediate level, duties include the planning, designing, construction, installation, troubleshooting and repair of complex
telecommunications systems such as routers, switches, various transmitters, satellite uplinks/downlinks, fiber optics, LANS/WANS, streaming, digital video, and teleconference codes, multipoint teleconference servers, and gateways, distance learning distribution center control systems, and interactive statewide telecommunications networks for program delivery, multimedia interfaces, computer interfaces, and audio and video presentation podiums and instructor’s control panel interface and related classroom media controls; performing and/or coordinating system maintenance down to the component level; and serving as a technology consultant to clients. Positions at this level may also coordinate media storage, traffic functions, operations, develop operations and maintenance procedures, and coordinate the technology and software used to acquire, schedule, prepare utilize and store various media, data, and meta-data. Objectives are long-term and defined in broad general programmatic terms and employees have regular and continuing participation in the development of long-range program goals and objectives. Employees may lead and/or train lower level technicians.

**Position Types**

**Transmission and Related Systems:** Perform maintenance and emergency repair to a wide scope of broadcast and telecommunications transmission and related systems to ensure proper signal emissions and radiation do not infringe on frequencies or broadcast area of other stations. Maintain optimum operational performance of transmitting systems, equipment in the signal flow paths, and all related equipment. Duties include measuring and adjusting the modulation, frequency, power levels, and signal strength; interpreting readings and indicators on control consoles and video monitors; recalibrating overloads; troubleshooting and repairing, down to component level, transmitters, transmission lines, site auxiliary systems, antennas, down converters, power supplies, and signal lines; overseeing tower crew; maintaining satellite systems equipment by maintaining various audio, video, and data systems to complete satellite uplink / downlink operations; maintaining and repairing broadcast and weather service transmission systems and the statewide broadcast interconnect system.

**Operations Center and Related Systems:** Perform and coordinate the operation and maintenance activities of broadcast, weather, microwave, and satellite uplink transmitters to ensure highest standards of broadcasting operations. Duties include monitoring and correcting incoming and outgoing signals; operating videotape machines to support delivery systems; recording and/or conducting technical checks of videotaped programs; operating and optimizing satellite downlink systems; operating, monitoring, and controlling transmitter and associated equipment; setting up, monitoring, and adjusting interconnecting feeds for transferring signals; initiating and coordinating troubleshooting procedures; providing in-house videoconferencing; maintaining site security; monitoring local weather conditions to maintain operation of transmitter and satellite facilities; initiating and coordinating troubleshooting procedures to ensure integrity of vendor network interconnection facilities; monitoring modulation levels and controlling all transmission and remote control equipment; monitoring, logging and reporting all tower light information and emergency alert system tests; and monitoring, coordinating configuring, troubleshooting, repairing and setting up the statewide broadcast interconnect system.

**Education Operation Centers:** Specialize in operation of TV broadcast, distance education transmissions, or teleconference setups. Duties include preparing and operating technical production equipment and software in the audio, video, and editing areas; installing and supporting computer based production equipment; installing, repairing, and maintaining studio, remote, and field equipment; and designing, laying out, and constructing electronic devices to integrate new equipment into existing plant systems. Duties also include maintaining and repairing the Instructional Communications Systems telecommunications and teleconferencing electronic and electromechanical systems and equipment; producing and duplicating educational audio materials; consulting with clients on audio services, techniques, costs, and capabilities; delivering, setting up, operating, and maintaining instructional equipment to include computers and applications, audio and video taping equipment, data and video
projection systems, classroom equipment control systems, lighting systems, audio systems, and telecommunications equipment; supporting computer labs, distance education events, research and selection of equipment and control of inventory; maintaining, repairing, aligning, and calibration of the distance learning and electronic systems; providing service, repair, and maintenance support for the telecommunications networks systems, teleconferencing, multimedia teaching and display technologies and electronic and electromechanical equipment; managing parts and supplies acquisitions; servicing and repairing systems and equipment; building, modifying, and installing systems and equipment; and reporting and maintaining records such as maintenance logs, service manual files, and equipment status reports. Duties can also include setting up, operating, and maintaining computer workstations, cameras, control systems, digital audio, video and audio graphic teleconference bridges, ISDN, ATM, and IP based networked equipment, and classroom technology.

Campus Technical Media Support: Positions support the media transmissions produced on campus or transmitted to or from other sources. Duties can include scheduling, setting up, operating, recording, and dispatching video and audio programs; duplicating video and audio tapes; transferring programs and program segments to various formats; installing, repairing, performing preventive maintenance, and troubleshooting; satellite recording, signal timing and phasing, audio and video signal adjusting, setting up cameras, microphones, monitors, and other television broadcast and non-broadcast equipment in studio and remote locations; training student employees; delivering programming via the appropriate format; setting up, operating, training, and maintaining compressed video and related systems; servicing equipment; and maintaining records. Duties can also include preparing and operating technical production equipment and software in the audio, video, and editing areas; managing the technical aspects of the interconnect systems; performing technical quality control evaluations; installing and supporting computer based production equipment; installing, repairing, and maintaining studio and field equipment; maintaining and upgrading computer equipment, server and multimedia equipment; designing and installing computer interfaces, multimedia interfaces, computer, audio, and video presentation podiums and electronic mechanical assemblies; planning, installing, maintaining, repairing and managing complex broadcast television and distance learning technologies for production, distribution, and distance learning; evaluating, designing, purchasing, installing, and operating television and video systems; coordinating video and television technologies and systems; coordinating technical staff in repairing and maintaining equipment; installing, repairing, maintaining, and operating broadcast and non-broadcast television and video technology; and performing responsibilities for pre-production set-up, production operation, and technical oversight of production and transmission equipment.

Audio Technician: Positions are responsible for radio transmissions. Duties can include performing corrective and preventive maintenance at the component level; recommending repairs, modifications, designs or new equipment; designing, constructing, installing, and modifying audio and broadcast electronic equipment and mechanical devices; performing harmonic measurements; performing preventive and corrective maintenance; installing and performing tests on equipment; and operating the radio operations center by operating all electronic equipment, recording and monitoring audio feeds, operating satellite uplink and downlink; and preparing cassette duplication and transfer of audio files.

II. QUALIFICATIONS

The qualifications required for these positions will be determined at the time of recruitment.

III. RELATED POSITIONS

Electronic Technician – Research
Electronic Technician – General
Electronic Technician – Security
Electronic Technician – Specialized
Communication Technician
IS Technician