## STATE OF NEBRASKA CLASS SPECIFICATION ELECTRONICS TECHNICIAN/SENIOR PROVISIONAL

EST: 06/92 - REV: 10/11 CLASS CODE: M08802

**DESCRIPTION**: Under limited supervision, performs skilled technical work installing, configuring, maintaining, modifying diagnosing, and repairing stationary and portable electronic equipment, electronic devices and testing instruments and components of communication, monitoring, or similar systems; performs related work as assigned.

**<u>DISTINGUISHING CHARACTERISTICS</u>**: (A position is assigned to this class based on the scope and level of work performed as outlined below.)

Not available.

**EXAMPLES OF WORK**: (A position may not be assigned all the duties listed, nor do the listed examples include all the duties that may be assigned.)

Installs, configures, and maintains highly technical and/or specialized electronic equipment and their connectors/links to systems such as permanent electronic scales and weigh in motion systems, traffic signals, permanent variable message signs, traffic survey and collection equipment, computers or microprocessors, radio base stations and towers, telephone systems, microwave communication systems, vehicular based - computer linked equipment, permanent speed measuring equipment, surveillance sensor systems and equipment, and television transmitting systems.

Installs and maintains various conventional, hand-held/mobile electronic devices such as speed measuring instruments, audio/visual surveillance and recording devices, portable emergency warning and variable message signs, portable electronic scales, breath testers, audio/video equipment, cellular and other personal communications devices, or electronic circuitry boards.

Analyzes and diagnoses malfunctions and other problems with electronic equipment using schematic drawings and equipment prints and conducts necessary repairs.

Schedules and performs preventative maintenance for electronic equipment to ensure that necessary inspection, adjustment, and replacement of parts are made to prevent malfunctions or safety hazards from occurring.

Estimates time, cost, and materials needed to install, replace, repair, or modify electronic equipment linked to communication systems to provide others with information necessary to determine whether work should be done.

Confers with immediate supervisors, other technical co-workers, and end users of the employing agency to discuss electronic equipment installation or modification work and determine appropriate configurations and locations of equipment; confers with state system and procurement coordinators, and vendors or suppliers concerning installation, compatibility, hardware/software, and repair issues and options.

Evaluates features of new equipment and other hardware and associated software to recommend their procurement; orders supplies, materials, and equipment to maintain adequate stock levels of commonly used items and to obtain unusual or special purpose items for specific jobs to be performed.

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Records time spent, materials used, supplies and equipment purchased, and other necessary information to determine the cost of work performed.

Tests and connects new equipment and modifies to meet system requirements and fit specialized user needs using digital multi-meters, oscilloscopes, battery testers, and similar instruments.

Designs and rebuilds circuits and specialized equipment and system components.

Tests, repairs, and calibrates testing equipment and specialized electronic or other equipment.

Demonstrates to co-workers and end users the operations and features of electronic equipment and other hardware; prepares operation instructions, hardware setup and modification records, and circuitry schematic and related drawings; records activities into test and maintenance logs.

Keeps abreast of technological changes and improvements regarding electronic hardware and related software and other equipment, and electronic troubleshooting and operational practices.

Performs physical/manual tasks to prepare work sites/stations for installation and maintenance of electronic equipment using various types of equipment such as small hand tools, fabrication machinery, portable power generators, ditching equipment, or bucket trucks.

KNOWLEDGE, SKILLS, AND ABILITIES REQUIRED: (These are needed to perform the work assigned.)

Knowledge of: tools, materials, and methods of electronic repair work; principles and theory of electricity; component parts of electronic devices; methods, practices, tools, and equipment used in the installation, maintenance, and repair of electronic equipment; the quality and adaptability of various materials used to complete assigned tasks; the occupational hazards and safety precautions of the electronics repair trade; employing agency policies and procedures pertinent to work assigned.

Ability to: construct and modify equipment for initial installation and specialized functions; use test equipment to locate and repair equipment defects; interpret and work from technical sketches and blueprints; establish personal work priorities; determine the materials and equipment necessary to install, repair, and maintain electronic equipment; determine appropriate work procedures.

**<u>MINIMUM QUALIFICATIONS</u>**: (Applicants will be screened for possession of these qualifications. Applicants who need accommodation in the selection process should request this in advance.)

Two-year vocational degree in electronics, electricity, or other similar technologies <u>and</u> experience in installing, maintaining, and repairing electronic devices/instruments, computer equipment, or related automated/electrical circuitry and hardware. Additional years of experience in the work described may substitute for the educational requirement on a year for year basis.

## SPECIAL NOTES:

Working in adverse weather conditions may be required. Must be able to be placed on-call during weather related emergencies

Some positions in this class may require possession of specific certifications based on job requirements.

Some positions in this class may require an employee to possess a valid driver's license in order to perform work-related travel.

State agencies are responsible to evaluate each of their positions to determine their individual overtime eligibility status as required by the Fair Labor Standards Act (FLSA).