



## University System of Maryland Job Class Specification

**TITLE: ELECTRICIAN HIGH VOLTAGE**  
**FLSA: NONEXEMPT**  
**EEO6: H60**  
**IPEDS-SOC: 47-2111**

**JOB CODE: N13EVU**  
**JOB TYPE: SYSTEMWIDE**  
**JOB FAMILY/SERIES: PHP MNT**

**APPROVED BY: Chancellor's Designee:**  
09/01/07

**EFFECTIVE DATE:**

**James Sansbury, Associate VC Financial Affairs/Human Resources**

### **JOB SUMMARY**

Under general supervision, performs high voltage electrical work at the journey level. Installs and maintains electrical service ranging from low to high voltage.

### **PRIMARY DUTIES**

1. Performs specified electrical work; installs, repairs or maintains transformers, generators, circuit breakers, conduits and panels; tests electrical circuits; replaces units or parts including wiring, fuses, transformers, coils and switches.
2. Plans layout, installs and repairs wiring, electrical fixtures, apparatus, and control equipment; plans new or modified installations consistent with specifications and local electrical codes.
3. Coordinates the installation, maintenance and repair of electrical service. Performs specialized activities including coordinating electrical renovations and performing high voltage electrical work.
4. Reads, interprets and works from blueprints, schematic drawings, and specifications ensuring concealed wiring is installed before completion of future walls, ceilings, and flooring. Prepares sketches showing wiring equipment location.
5. Tests continuity of circuit to ensure electrical compatibility and safety of components; observes functioning of installed equipment or system to detect hazards and need for adjustments, relocation and/or replacement.
6. Prepares estimates of time, labor and materials. Prepares reports reflecting daily operations and project status.
7. Operates and maintains tools and equipment of the electrical

trade. Cleans work area upon completion of project.

8. Provides guidance and training in high voltage electrical work to other maintenance personnel. May have lead responsibility for special projects.

Note: The intent of this list of primary duties is to provide a representative summary of the major duties and responsibilities of this job. Incumbents perform other related duties assigned. Specific duties and responsibilities may vary based upon departmental needs.

#### **MINIMUM QUALIFICATIONS**

##### **EDUCATION:**

**EXPERIENCE:** Four years progressively responsible experience in the electrical trade, two years of which must have been in the installation and repair of high tension (13,000 volts and up) service switch gear and controlling wiring, or motors and motor circuitry of 30 horsepower or more.

##### **OTHER:**

#### **REQUIRED KNOWLEDGE/SKILLS/ABILITIES**

Comprehensive knowledge of and skill in the theory, principles, methods and techniques used in the installation, repair, and maintenance of electrical systems, equipment, and apparatus including Underwriters Rules for electrical wiring and installation of electrical equipment. Thorough knowledge of and skill in basic mathematics including area, volume, weights, and the practical application of fractions, percentages, ratios, and proportions; of OSHA regulations and National Electric Codes related to the electrical trade and working with high tension lines and equipment. Working knowledge of the principles and theories of electronics. Skill in the use and maintenance of the tools and equipment of the electrical trade including testing equipment such as ohmmeters, battery and buzzer and oscilloscopes. Skill in and ability to work with high tension lines and equipment. Ability to read, interpret, and work from blueprints, drawings, and specifications; to prepare sketches and schematic drawings; to prepare summaries and reports; to communicate effectively and follow directions; to work in, on, around, over and under fixed equipment and machinery; to work from lifts, ladders and scaffolding; to manipulate heavy equipment, tools, and supplies and/or exert force up to 70 lbs.; to concurrently manipulate multiple controls on equipment and machinery; to work in hazardous or irritating environments, confined spaces, and adverse weather or temperature conditions; to wear and work in personal protective equipment.

**OTHER:** Except for qualifications established by law, additional related experience and formal education in which one has gained the knowledge, skills, and abilities required for full performance of the work of the job class may be substituted for the education or experience requirement on a year-for-year basis with 30 college

credits being equivalent to one year of experience.

**CONDITIONS OF EMPLOYMENT**

Candidates selected for employment may be subject to medical inquiries and/or medical examinations to determine ability to perform the job. Valid Maryland Non-commercial Class C or equivalent driver's license may be required. Possession of Maryland State certification as a licensed maintenance electrician may be required. Candidates selected for employment must be available for emergencies on an as needed basis. Employees in this job class may be subject to pre-employment and random drug testing.