

IOWA DEPARTMENT OF ADMINISTRATIVE SERVICES ▼
HUMAN RESOURCES ENTERPRISE
ELECTRICIAN

DEFINITION

Performs skilled electrical work in the installation, alteration, maintenance, and repair of electrical systems, fixtures, and related equipment; performs related work as required.

The Work Examples and Competencies listed are for illustrative purposes only and not intended to be the primary basis for position classification decisions.

WORK EXAMPLES

Performs skilled work in the installation, maintenance, alteration, and repair of wiring, power appliances, machinery, overhead circuits, underground circuits, and pole lines.

Lays out, assembles, installs, tests, and maintains electrical fixtures and apparatus such as boxes, conduit, wiring outlets, switch panels, and bus bars; tests circuits for continuity and proper connections.

Installs and maintains motors and generators, seats and replaces brushes, oils and cleans motors, and does limited mechanical work in repairing and replacing parts on electrical fixtures or equipment.

Uses standards and specialized electrical fixtures or equipment such as voltmeters, ammeters, ohmmeters, magnetos, and other hand tools ordinarily used in the trade.

Rewinds coils and armatures, dresses and polishes commutators, converts motors, refrigerators, and similar appliances to correct current ratings; trouble shoots electrical systems; operates electrical equipment.

Repairs and maintains a power plant switchboard and related control devices.

Makes minor repairs and adjustments on passenger and freight elevators and air conditioning equipment; inspects elevators, with state inspectors, for code violations.

Installs high voltage distributor transformers and makes internal connections to adjust to the required voltage; installs, splices, and insulates high voltage underground and overhead cables; performs maintenance and runs tests on generators.

Confers with supervisor, department head, or others regarding operation, installation, maintenance, or repair of electrical systems or equipment; advises in the selection and storage of electrical equipment; consults and works with other trades personnel.

Makes rough sketches and estimates the cost of minor electrical installations; interprets blueprints, sketches, and specifications in making electrical installations.

Instructs trades helpers and unskilled or semi-skilled workers; keeps simple records and makes reports as required; assists generally, as required, in other maintenance work.

COMPETENCIES REQUIRED

Knowledge of the tools, materials, and practices of the electrical trade.

Knowledge of local, state, and federal electrical codes.

Knowledge of the hazards and safety precautions of the trade; lockout tagout programs.

Ability to work on high voltage equipment.

Ability to work from penciled sketches and blueprints.

Ability to work in confined spaces.

Skill in the use and care of the standard tools and equipment of the trade.

Skill in locating and correcting defects in electrical systems, machinery, and equipment.

Displays high standards of ethical conduct. Refrains from dishonest behavior.

Works and communicates with all clients and customers providing quality professional service.

Displays a high level of initiative, effort, attention to detail and commitment by completing assignments efficiently with minimal supervision.

Follows policy, cooperates with supervisors and aligns behavior with the goals of the organization.

Fosters and facilitates cooperation, pride, trust, group identity and team spirit throughout the organization

Exchanges information with individuals or groups effectively by listening and responding appropriately.

EDUCATION, EXPERIENCE, AND SPECIAL REQUIREMENTS

Experience equal to three years of full-time work in skilled electrical work in the construction or repair of residential or commercial buildings;

OR

the successful completion of a standard electrician's course at a recognized trade school;

OR

an equivalent combination of education and experience, substituting the successful completion of one term of study in an electrician's course at a recognized trade school for each six months of the required experience;

OR

the completion of three years of an approved electrician's apprenticeship program;

OR

employees with current continuous experience in the state executive branch that includes two years of full-time work as a Trades Helper which involved electrical duties.

SPECIAL REQUIREMENT

Within a period of time as determined by the appointing authority, persons in this class may be required to obtain a license to perform electrical work in accordance with Chapter 103, Iowa Code.

NOTE

Designated positions in this job class require applicants to obtain the required commercial driver's license and endorsements within a period of time as determined by the appointing authority at the time of hire.

Effective Date: 08/11 BR