Electrician

Electricians lay out, install, and test electrical service and electrical wire systems used to provide heat, light, power, air conditioning, and refrigeration in homes, office building, factories, hospitals, and schools. They also install conduit and other materials, and connect electrical machinery, equipment, and controls and transmission systems.

Working Conditions

Electricians work both in and outside. They work in all kinds of weather while installing grounding and temporary lights and power. The work is active and strenuous with much of it done in awkward positions and frequently in cramped quarters. They must do considerable standing, reaching, bending, stooping, climbing, carrying, and lifting in order to install electrical conduit and equipment.

Aptitude and Interest

Applicants interested in becoming electricians must enjoy working with math problems and be able to work with fine measurements. They must be able to work very carefully, without close supervision, have steady nerves, and possess a great deal of patience. Prospective electricians should have above average intelligence, the ability to visualize detailed sketches, finger dexterity, understanding of electrical theory, and be able to plan sequences of operations. Good color vision is also important.

Training

To become a skilled electrician training is essential. It can be acquired informally through "learning-by-working;" through company on-the-job training programs; by attending trade or vocational/technical schools; through unilaterally (management or labor) sponsored trainee programs; through registered labor-management apprenticeship programs, or a combination of the above. It is generally accepted that the more formalized training programs give more comprehensive skill training. Recommended high school courses include English, algebra, geometry, trigonometry, physics, mechanical drawing, blueprint reading, and general shop.