



More **power** to you!



It's an electrified world! From homes to sports stadiums to skyscrapers, we all depend on electricians to build and maintain the power systems that make modern life possible. This fast-paced program covers construction-based electrical concepts plus the newest means of generating energy including solar, wind, and geothermal technologies. So "get current" with the leading-edge skills to succeed in this evolving and well paying field!

Advanced college/trade school credit is available to qualifying students from the following institutions:



COURSE TITLE: ELECTRICAL TRADE AND ALTERNATIVE ENERGY

COURSE DESCRIPTION

This two-year program is a combination of hands-on skill development and technical training in order to prepare students for entry level employment or higher in the electrical trade. Students gain practice in traditional wiring methods and blueprint reading, as well as learn the latest renewable energy concepts including solar, wind, and geothermal technologies.

Students will take the OSHA-10 course in their first year of study with the goal of obtaining the OSHA-10 card. Second-year students will take the OSHA-30 course as well.

COURSE CONTENT

Series and Parallel Circuits
 Ohm's Law/Power Law
 Electrical Codes
 Alternating Current Theory
 Trade Related Technical Math
 Residential/Commercial Wiring Methods

Residential Service Installations
 Basic Troubleshooting Techniques
 Basic Electrical Measurements
 Raceways
 Motor Control Wiring
 Alternative Energy Sources



EDUCATIONAL OPPORTUNITIES

Associate Degree

CAREER OPPORTUNITIES

Electrician's Helper
 LIRR/MTA Entry-Level Apprenticeships
 IBEW Apprenticeships
 Building Electrical Maintenance Assistant
 Electrical Utility Apprenticeships

Cable System Technician
 Geothermal Technician
 Wind Turbine Service Technician
 Entrepreneurship

CAREER OPPORTUNITIES FOLLOWING ADDITIONAL COURSEWORK

Electrician
 Energy Retrofitting Specialist
 Energy Engineer
 Solar Photovoltaic Installer

Solar Energy Manager
 Data and Telecommunications Technician
 Electrical Power Line Installer/Repairer

SUGGESTED SUPPORTIVE COURSES

Algebra

Students enrolling in this program are expected to show proficiency in math and science by scoring a minimum of 80% on the Algebra Regents and a minimum of 75% on the Living Environment Regents.

ADDITIONAL INFORMATION

- COSTSTools approximately \$250; approved footwear approximately \$35
- LENGTH OF COURSE.....2 years
- LOCATIONSGary D. Bixhorn Technical Center, Edward J. Milliken Technical Center, and Harry B. Ward Technical Center
- CTE/ACADEMIC CREDITPlease see chart on pages 4 and 5 for updated details
- INDUSTRY CERTIFICATION.....National Center for Construction Education and Research (NCCER) National Registry, OSHA-10, OSHA-30

