1 & 2 Family Dwelling Electrical Systems

This course will cover the design, installation and inspection of electrical systems in new and existing one- and two-family dwellings based on the 2020 National Electrical Code® (NEC) and the 2021 International Residential Code (IRC). The course covers the subject in detail and meticulously updates the material as it pertains to the appropriate residential sections of the 2020 NEC and the 2021 IRC. This course covers in detail:

* general requirements
* installs and inspections of services
* personnel protection (GFCIs, AFCIs, Smoke and CO alarms, etc.)
* service grounding and bonding requirements
* cabinets, panelboards, and meter socket enclosures
* branch circuits and feeders and their wiring methods including overcurrent protection
* outlet, device, pull and junction boxes
* power and lighting distribution (general lighting circuits, small appliance branch circuits, receptacle spacing, etc.)
* requirements for luminaires, receptacles, and switches
* requirements for appliances
* fixed electric space-heating equipment
* air conditioning and heat-pump equipment
* branch circuits and feeders run to outbuildings (accessory buildings)
* existing electrical installations and wiring