2014 NATIONAL ELECTRICAL CODE® CHANGES

CLASS FORMAT:

Classroom

STANDARD CLASS SIZE:

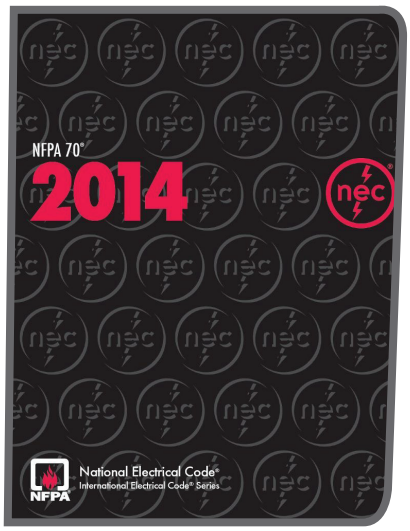
NTT recommends a class of not more than 35 participants to obtain the best results.

NTT PROVIDES:

Two-day (16 contact hours) of on-site instruction including participants textbooks, classroom consumables, completion certificates, shipping and instructor travel logistics.

CLIENT PROVIDES:

Classroom of 1,000 square feet or greater, projection screen, white board and/or flip chart(s).



This National Electrical Code® (NEC) course teaches how the current rules and standards apply to a facility, why safe electrical work practices are important, and what to do to ensure your organization meets all government standards for electrical safety.

The purpose of the 2014 NEC® is the practical safeguarding of persons and property from hazards arising from the use of electricity. The requirements in the 2008 NEC address the fundamental principles of protection for safety.

This course covers how to remain safe when working on or around electrical systems and the changes to the Code.

NEW OR REVISED ARTICLES FOR 2014

- Uninterruptable power supply [UPS systems]
- Arc fault circuit interrupter
- 110.24: Available fault current
- 210.8[b]: GFCI in other than dwellings
- 210.52.4: Separate spaces on counters
- 210.55: Meeting rooms
- 250.30: Grounding separately derived systems
- Grounding electrode conductor
- Service conductors—overhead and underground
- Other revision in grounding to insure compliance
- Revised Table 310.15: Adjustment and correction factors for the ampacity of conductors
- Article 314: Size of Power distribution Blocks Revised
- Article 410.130G: Revised to include disconnecting when ballast is replaced
- Article 430: Motors has several revisions
- New requirement for Article 590: Temporary wiring receptacles during construction
- New Article 606: Prefabricated Wiring Assembles
- New requirement for Fire Pumps from article 695: Power source for electric driven fire pumps

ALTERNATE ENERGY, GREEN TECHNOLOGIES, AND IT EQUIPMENT PROPOSED CHANGES

- Revised Article 625: Updates on safe battery charging for plug-in hybrid vehicles that reduce the risk of explosion
- Revisions to Article 645: IT Equipment
- New Article 694: First-time requirements for small wind electric systems

NTT Training

2014 NATIONAL ELECTRICAL CODE® CHANGES

ALTERNATE ENERGY, GREEN TECHNOLOGIES, AND IT EQUIPMENT PROPOSED CHANGES, CONTINUED

- Revised Article 705: Interconnecting generators, windmills and solar and fuel cells with other power supplies
- New Article 840: The increased demand for broadband communications systems with requirements for wireless, routers, and wireless disconnects

OTHER REQUIREMENTS FOCUSED ON WORKPLACE SAFETY

- Provisions on electrical installations over 600 volts
- 240.87: Means to reduce incident energy
- New Article 399: Incorporates requirements for overhead distribution systems for large electrical system users, such as school or business campus settings.
- 408.4B: Labeling at subpanels to identify feeder supply source
- 450.14: Disconnecting means for transformers

COURSE AGENDA

- Navigate through the NEC Code-wide changes
- Administration and enforcement
- Information and general guidelines
- Flash protection
- NFPA 70E requirements
- Wiring design and protection
- AFCI Revisions
- Dwelling unit receptacles
- GFCI locations
- Rating of disconnect
- Revised exceptions
- Lockout on breakers
- Battery conductors
- Panel locations
- Terminology
- Isolated receptacles
- Surface mounted boxes
- Surge arresters over 1 kV
- Surge protective devices (SPD's), 1 kV or less
- Wiring methods and materials
- Raceways under roof decking
- Wet locations
- Cables under buildings
- Bundled cable ampacity adjustments
- De-rating of conductors
- Conductors on roof tops
- Repairing noncombustible surfaces
- Device and equipment fill for oversized devices
- Utilization equipment
- Equipment for general use
- Multipole snap switches
- Grounding
- Classification of panelboards revised
- Overcurrent protection
- Disconnect for all supply circuits
- Luminaries in clothes closets
- Disconnecting means revised
- Within sight or locked type disconnects
- GFCI for water coolers
- GFCI for vending machines
- Selection on overload devices
- Method of grounding
- Special occupancies
- Revisions to unclassified locations
- Wet procedures locations
- Panelboard grounding and bonding
- Generators set and transfer switch locations
- Special equipment
- Field installed secondary wiring
- Remote machine rooms
- Wiring methods in hoist
- Platform lift and stairway chairlift
- Disconnecting means
- Wiring under raised floors
- Abandoned supply circuits
- Disconnecting means
- Equipotential bonding
- Pumps
- Receptacle locations
- Wiring methods
- Disconnecting means
- Special conditions
- Feeder circuit wiring
- Outdoor generator sets
- Installation of conductors
- Branch circuits
- Listing and marking of cable
- Communications systems
- Mechanical execution of work
- Electrode and intersystem bonding
- Dwelling unit communication outlets
- Cable grounding, intersystem bonding
- Mechanical execution of work
- Spread of fire
- Conduit fill tables
- Note 9