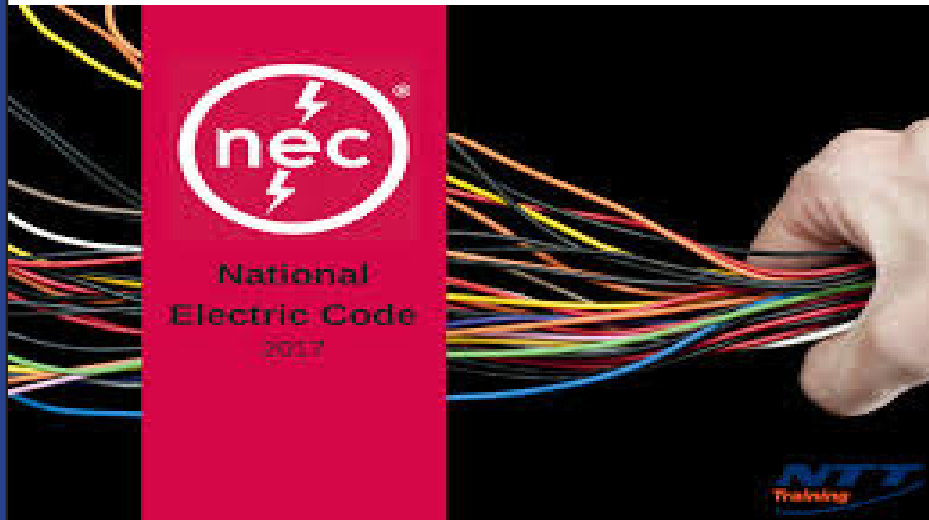


# National Electrical Code Workshop



The 5 day workshop combines Introduction to the National Electrical Code and National Electrical Code for Maintenance Technicians to form a 5 day class.

Electrical Code

# National Electrical Code Workshop

## Course Topics and Objectives

- Introduction to the National Electrical Code (NEC)
- NEC layout as the first step in successful navigation
- Differences between chapters 1-4 and 5-9
- How to quickly put yourself in the right chapter of the National Electrical Code
- Finding Specific Information in Chapter 1 General:
  - Key words and definitions you must know
  - Installation requirement topics
- Finding Specific Information in Chapter 2 Wiring and Protection on: Use and Identification of Grounded Conductors
  - Branch Circuits
  - Feeders
  - Branch-Circuit, Feeder and Service Calculations
  - Outside Branch Circuits and Feeders
  - Services
  - Overcurrent Protection
  - Grounding
  - Transient Voltage Surge Suppressors
- Finding Specific Information in Chapter 3 Wiring Methods and Materials on:
  - Wiring Methods
  - Conductors for General Wiring
  - Cabinets, Cutout Boxes, Meter Socket Enclosures Outlet, Device, Pull, and Junction Boxes; Conduit Bodies; Fittings; and Manholes Armored Cable
  - Nonmetallic-Sheathed Cable: Types NM, NMC and NMS
- Flexible Metal Conduit: Type FMC
- Liquidtight Flexible Metal Conduit: Type LFMC Rigid Nonmetallic Conduit: Type RNC
- Liquidtight Flexible Nonmetallic Conduit: Type LFNC Electrical Nonmetallic Tubing: Type ENT
- Auxiliary Gutters
- Busways
- Cablebus
- Metal Wireways
- Surface Metal & Nonmetallic Raceways
- Cable Trays
- Finding Specific Information in Chapter 4: Equipment for General Use on:
  - Flexible Cords and Cables
  - Fixture Wires
  - Switches
  - Receptacles, Cord Connectors, and Attachment Caps Switchboards and Panelboards
  - Luminaires, Lamp holders, Lamps
  - Appliances
  - Fixed Electric Space-Heating Equipment
  - Motors, Motor Circuits, and Controllers, including Disconnecting Means for Motors
  - Air Conditioning and Refrigeration Equipment
  - Transformers and Transformer Vaults
  - Equipment over 600 Volts, Nominal
- Finding Specific Information in Chapters 5 through 8 on:
  - The interrelationships between the first four chapters and these chapters
  - Special Occupancies

# National Electrical Code Workshop

- Special Equipment
- Special Conditions
- Communication Systems
- Finding Specific Answers from Tables in Chapter 9
- Calculate box size
- Calculate conduit size
- Calculate ampacity of conductors
- Calculate voltage drop
- Size grounding conductors
- Calculate wire size for motor circuits
- Calculate fuse and circuit breaker size for motor circuits
- Calculate disconnect size for motor circuits
- Calculate overload size for motor circuits
- Use the codebook to answer real world questions

# National Electrical Code Workshop

## Who Should Attend:

- Energy management personnel
- Apprentice and experienced HVAC technicians
- IT Technicians
- Fire Alarm Technicians
- Electricians
- Multi-craft personnel
- Plant & facility maintenance technicians
- Building engineers
- Building managers & superintendents
- Plant & facility managers
- Stationary engineers
- Anyone who works with electrical systems and circuits.

## Onsite Training:

- We offer onsite training at your facility.
- We can provide the same courses as we offer in public seminars. We can even design courses especially to meet your needs.

## Advantages of On-Site Training:

- Modify the content to your specific needs
- Protect company privacy
- Workers remain on site in case of an emergency
- Saves time and travel costs
- Instructors can discuss your specific equipment
- Problems can be openly discussed
- Flexible scheduling
- Increased price savings as the groups get larger
- Promote teamwork & camaraderie among workers
- More comfortable learning environment

## Class Options:

### 2 Day Class

- Introduction to the National Electrical Code

### 3 Day Class

- National Electrical Code for Maintenance Technicians

### 5 Day Class – National Electrical Code Workshop

- Introduction to the National Electrical Code - 2 Days
- National Electrical Code for Maintenance Technicians - 3 Days

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