

National Electrical Code

This three-day course reviews the 1999 NEC and an overview of the significant changes from earlier editions. Topics relating to industrial applications including grounding, overcurrent protection, wiring methods, and working clearances are given. This course includes class exercises working through typical calculations and determinations that require participants to search and find information in the Code.

I. Introduction

- Purpose of Workshop
- Areas of Study
- Introduction to the National Electric Code

II. Definitions

- Terms
- Equipment
- Circuit Classifications

III. Wiring Design and Protection

- Circuit Types
- Branch Circuits
- Feeders
- Branch and Feeder Circuit Calculations
- Services
- Overcurrent Protection

IV. Wiring Methods and Materials

- Conductor Classification
- Identification of Conductors
- Conductor Insulation
- Conduit Installation
- Cable Installation
- Fixture Wiring
- Fittings
- Supports
- Enclosures

V. Electrical Equipment Wiring

- Switchboards and Panel Boards
- Lighting Branch Circuits
- Illumination
- Air Conditioning
- Motors and Motor Controls

VI. Special Circuits

- Data Processing
- Isolation Techniques
- Backup/Surge Protection
- Hazardous Locations

VII. Grounding and Bonding

- Circuit and system Grounding
- Ground Locations
- Equipment Grounding
- EMI