

NATIONAL ELECTRICAL CODE

FEBRUARY 23-24, 2015 - **LOS ANGELES, CA**FEBRUARY 25-26, 2015 - **SAN FRANCISCO, CA**

TRAINING



Delegates receive:

- District Farmanian
- Our latest Electrical Safety Digital Handbook (Value \$20.00)
- \$100 Coupon Toward any Future 2015-16
- Electricity Forum Event (Restrictions Apply)
- FREE Digital Magazine Subscription (Value \$50.00)
- · Course Materials in Paper Format
- Register Three, Get One FREE (See details on Page 4)



WWW.ELECTRICITYFORUM.COM/USA/NEC-TRAINING.HTML

NEC COURSE OUTLINE

The 2014 National Electrical Code is not only being upgraded but also updated. Our NEC training course is intended to do a lot more than instruct about what changes have taken place since the last National Electrical Code. This interactive course is designed for electrical professionals who are either at an introductory level or who are experienced in working with electrical systems and want to learn not only the rules but the intention behind the rules. By the end of the course, students will significantly increase their knowledge, skill level and confidence when it comes to understanding the National Electrical Code.

Also, our course will instruct electrical professionals on how to access and navigate through the National Electrical Code in a cost-efficient manner. Make sure that your organization is in compliance now so you can avoid reworking your electrical systems after failing an inspection! Ampacity determination for sizing conductors, selecting overcurrent protection and grounding is used in this practical course.

The definitions of electrical terms, requirements for electrical installations, such as branch circuits and grounding systems; wiring methods, materials, design and protection, voltage drop, neutral load and other calculations; motors and motor circuits; hazardous locations and more will be studied in this course.

The National Electrical Code is the basis for the California Electrical Code. You need to know both the national AND specific California code differences.

Designed and delivered by one of America's leading experts on the NEC (a certified Electrical Inspector and NEC Instructor), and NEC interpretation, the course will instruct not only on the latest code changes, but how to understand what the rules are and how to access the code with ease. Some people spend endless time searching for the rules that they need. This course will teach what you need to know, quickly and accurately. Our instructor will demonstrate how to find the answers you need in a few easy steps.

AGENDA - DAY 1

Session 1: Introduction to the 2014 NEC and General Requirements

- Course Outline
- History and Development
- Purpose and Intent of the Code
- California Electrical Code Amendments
- How to Use the NEC
- Definitions and Code Terminology
- Clearances and Required Working Spaces
- · Group breakout and feedback session

Session 2: Wiring and Protection

- Branch Circuits and GFCI & AFCI Protection
- Required Outlets
- Branch Circuit, Feeder, and Service Calculations
- Group Breakout and Feedback Session
- Branch Circuits and Feeders
- Services
- Overcurrent Protection

- · Grounding & Bonding
- · Group Breakout and Feedback Session

Session 3: Wiring Methods and Materials

- General Requirements
- Conductors for General Wiring
- Cabinets, Cutout Boxes and Conductor Bending Space
- Outlet, Device, Pull and Junction Boxes
- · Group breakout and feedback session
- Metallic Cable Types: AC, MC and MI
- Non-metallic Cable Types: NM, NMC, NMS, SE and UF
- Metal Conduits Types: IMC, RMC, FMC, LFMC and EMT
- Non-Metallic Conduit Types: PVC, LFNC and ENT
- Auxiliary Gutters
- Busways
- · Group breakout and feedback session
- Panelboards & Luminaires
- Designing Motor Circuits
- Transformers & Capacitors

course instructor: Lynn Palmer, CEI

Lynn Palmer started his career as an electrician in 1979, and became a licensed electrical contractor in 1985. He later went to work as an electrical inspector for the County of Sacramento, where he worked for 10 years. Lynn is a member of the International Association of Electrical Inspectors, Sacramento Valley Chapter, where he also served as Chairman, and was a member of IBEW Local 340 Sacramento. Lynn has taught a variety of apprenticeship, journeyman and NEC training classes. He currently teaches in the Building Inspection Technology Program at Cosumnes River College in Sacramento. He is a certified electrical inspector and a member of the International Association of Electrical Inspectors (IAEI).



AGENDA - DAY 2

Session 4: Equipment for General Use

- Flexible Cords and Cables
- Switches
- · Receptacles, Cord Connectors, and Attachment Plugs
- · Switchboards and Panelboards
- Luminaries
- Appliances
- Group Breakout and Feedback Session
- Motors, Motor Circuits, and Controllers
- · Air Conditioning and Refrigeration Equipment
- Generators
- Transformers
- Group Breakout and Feedback Session

Session 5: Special Occupancies - Overview

- Hazardous Locations
- Commercial Garages
- Motor Fuel Dispensing
- Health Care Facilities
- Group Breakout and Feedback Session

Session 6: Special Equipment & Special Conditions - Overview

- · General Overview
- Fire Pumps
- Emergency Systems
- Class 1, 2 and 3 Circuits
- Fire Alarm Systems
- Group Breakout and Feedback Session

Session 7: Questions and Answers

It's a Proven Fact:

- Electrical Engineering, Design, Maintenance and Construction professionals who understand the most current NEC requirements will:
- Work more safely and provide a greater degree of electrical protection for electrical systems
- Work more productively. Make more money, save their clients' money
- Prevent system incompatibilities from holding up a job
- Experience a higher rate of passing electrical inspection

Why You Should Attend

This interactive 2-Day Course will instruct industrial, commercial and institutional electrical professionals and electrical professionals on how to:

- 1. Describe the application, purpose and intent of specific requirements in the National Electrical Code. Locate specific sections in the National Electrical Code in order to provide accurate information to applicants, contractors, property owners and co-workers.
- 2. Interpret the National Electrical Code based on a thorough understanding of the code requirements in order to ensure code compliance on complex electrical systems. Apply examination procedures by developing the ability to visualize various types of electrical methods and identify code issues and conflicts in installed electrical systems at various stages of construction.
- **3.** Interpret and apply the provisions of the National Electrical Code while performing plan quality assurance and quality control of advanced electrical systems.

This course is designed to be an interactive, problem-solving, learning environment for delegates of all disciplines.

The positive outcome of this training is to improve the quality of installations and to pass electrical inspection with fewer deficiencies. It means working more efficiently and productively, saving time, energy, and money.





(315) 789-8323



(315) 789-8940



ON-LINE:

www.electricityforum.com/usa/nec-training.html



MAIL:

COMPANY ____

The Electricity Forum
One Franklin Square, Suite 302
Geneva, NY 14456

ATTENDEE INFORMATION

IER AN	D PREPAY prior to the course date.
NAME _	
TITLE	

To receive registration fee discounts, you must REGIS-

ADDRESS	
CITY	

CITT		
STATE		

ZIP COD	E		
E-MAIL			

TEL ()	_
FAX ()	

METHOD OF PAYMENT

Bill My	Credit Card		
AMEX	U VISA	■ MasterCard	
Card #			
Exp. Date			
Signature _			
Card Holder	rc Name		

FREE ON-SITE TRAINING QUOTATION

Our electrical code on-site training courses are tailored to meet your company's specific requirements and conducted on your own premises for your employees.

Save the cost of travel and hotels and save on our regular public enrollment registration fees. Call Randy Hurst, Electricity Forum President, to discuss your on-site training needs. 315-789-8323 or, visit:

www.electricityforum.com/on-site-training-feedback.htm

FREE



Register 3 delegates at full price and get the 4th registration FREE!

SAVE \$50

REGISTER AND PREPAY 14 Days prior to course date and receive an early bird discount of \$50 off the full price.

WHEN & WHERE

(Please check the date/location where you want to attend the course)

National Electrical Code Training

Los Angeles, CA - February 23-24, 2015 Four Points By Sheraton LAX Airport Hotel 9750 Airport Blvd, Los Angeles, CA 90045 Tel: 310-645-4600



ACT NOW!

Limited Seating! Register Today!

REGISTRATION FEES

The registration fee to attend the National Electrical Code training course is **\$799.00**. The registration fee includes: course materials, a free digital magazine subscription to our electrical magazine, our latest Electrical Safety Digital Handbook, a **\$100** coupon towards any future 2015-16 Electricity Forum event (restrictions apply), refreshments. Lunch is included with this course.

CANCELLATION AND REFUND POLICY

Registration fees are refundable only upon receipt of written notification 10 days prior to the conference date, less a 10 per cent service charge. Substitution of participants is permissible. The Electricity Forum reserves the right to cancel any conference it deems necessary and will, in such event, make a full refund of the

registration fees.