

 EUCI COURSE

# NATIONAL ELECTRIC SAFETY CODE WITH 2017 REVISIONS

**April 18-19, 2017**  
**EUCI Offices, 4601 DTC Blvd**  
**Denver, CO**



EUCI is authorized  
by IACET to offer  
1.0 CEUs for this  
course

## OVERVIEW

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The National Electric Safety Code is the electrical supply and communications construction standard by which states and utilities base their construction specifications. Attendees will receive a general overview of the National Electrical Safety Code with regard to purpose, scope and definitions. This standard is revised every five years and the 2017 code (effective February 1, 2017) changes are included. This overview concentrates on Section 9, Grounding, Part 2 (Overhead Electric Supply) and Part 3 (Underground Electric Supply). The NESC provides specifics as to grades of construction for overhead lines with regard to loading and strength. The code provides underground construction detail with regard to routing and placement of ducts and conduit. Practical concepts are emphasized to ensure sufficient understanding of the various aspects of the code.

## LEARNING OUTCOMES

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Attendees will:

- Acquire the skills to effectively navigate the 2017 NESC
- Assess the impact of ice and wind on loading of overhead lines and equipment
- Identify the differences in loading and strength requirements between grades B and C Construction
- Review requirements for underground duct, conduit and direct buried cable
- Discuss code requirement for riser poles
- Review the changes implemented in the 2017 version of the NESC

## INSTRUCTORS

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### Patrick Liebel

**Certified Project Manager Professional, UC Synergetic**

Certified Project Manager Professional, UC Synergetic

Patrick received his PMP certification through the Project Management Institute in 2013. He has ten years of power systems and project management experience, three of which were in Quality Assurance and Corporate Training with responsibilities of utility NESC Compliance, internal/external quality control program development and implementation. In addition, he has worked extensively in Electric Distribution Project Management and Communication Infrastructure systems with regard to distribution line construction and asset reliability management.



### Jerry Josken

**Senior Consultant, UC Synergetic**

Jerry holds a BS in Electrical Engineering Technology from the Milwaukee School of Engineer and a MBA from North Central College. During his 30+ year career with Eaton's Cooper Power Systems Jerry has served as Test Engineer, Design Engineer, Distribution Protection Engineer and Field Application Engineer. Past leadership positions include Chair of IEEE Rural Electric Power Conference (2012) and Chair of GLEMS Distribution Equipment /Controls (2013-2014). Presently, Jerry coordinates UCS Training Programs.

# COURSE TIMING

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TUESDAY, APRIL 18, 2017

**8:00 – 8:30 am**            **Registration and Continental Breakfast**

**8:30 am – 5:00 pm**        **Course Timing**

**12:00 – 1:00 pm**         **Group Luncheon**

WEDNESDAY, APRIL 19, 2017

**8:00 – 8:30 am**            **Continental Breakfast**

**8:30 am – 12:00 pm**      **Course Timing**

# PROGRAM AGENDA

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## **Introduction to National Electric Safety Code**

- Scope
- Applications
- Intent

## **Grounding – Section 9**

- Purpose and Scope
- Point of Connection of Grounding Conductor
  - o Alternating Current Systems that are Required to be Grounded
  - o Messenger Wires and Guys
  - o Current in the Ground Conductor
  - o Fences
- Grounding Electrodes

## **Overhead Electric Supply and Communications – Part 2**

- Clearances – Section 23
  - o Supporting Structures from other objects
  - o Wires, Cables and Conductors above Roadway, Rail and Water Surfaces
- Wires Cables and Conductors from Buildings and Other Structures Grades of Constructions – Section 24
  - o Application for Construction Grades at Crossing
  - o Grades of Construction for:
    - Conductors
    - Line Support Equipment
- Loading for B and C Grades of Construction - Section 25
  - o Loading Requirements and Maps
  - o Conductor Loading
  - o Loading on Line Supports
- Strength Requirements – Section 26
  - o Supporting Structures
  - o Guying and Bracing

# PROGRAM AGENDA (CONTINUED)

## **Underground Electric Supply and Communications – Part 3**

- General Requirements – Section 31
  - o Grounding of Circuits and Equipment
- Underground Conduit Systems– Section 32
  - o Routing
  - o Separation for Other Underground Installation
- Supply Cable – Section 33
- Direct Buried Cable - Section 35
- Supply Cable Terminations – Section 37
  - o Clearances
  - o Grounding
- Equipment – Section 38
  - o General
  - o Design

**REGISTRATION**  
*to register [CLICK HERE](#) or*

  

**Call: 201 871 0474**  
**fax: 253 663 7224**  
**email: [register@pmaconference.com/](mailto:register@pmaconference.com)**  
**web: <http://pmaconference.com/>**  
**Mail: POB 2303 Falls Church Va 22042**

# REQUIREMENTS FOR SUCCESSFUL COMPLETION OF PROGRAM

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Participants must sign in/out each day and be in attendance for the entirety of the course to be eligible for continuing education credit.

## INSTRUCTIONAL METHODS

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PowerPoint presentations and classroom discussions will be used in this course.

## PROCEEDINGS

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The proceedings of the course will be published, and one copy will be distributed to each registrant at the course.

## EVENT LOCATION

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### **EUCI Offices**

4601 DTC Blvd. Suite 800  
Denver, CO 80237

## NEARBY HOTELS

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### **Hyatt Regency Denver Tech Center**

7800 E. Tufts Ave  
Denver, CO 80237  
Phone: 303-779-1234  
0.3 miles away

### **Denver Marriott Tech Center**

4900 S. Syracuse St  
Denver, CO 80237  
Phone: 303-779-1100  
0.7 miles away

### **Hampton Inn & Suites**

5001 S Ulster Street  
Denver, CO 80237  
Phone: 303-804-9900  
0.5 miles away

### **Hilton Garden Inn Denver Tech Center**

7675 E Union Ave  
Denver, CO 80237  
Phone: 303-770-4200  
0.7 miles away

## IACET CREDITS

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EUCI has been accredited as an Authorized Provider by the International Association for Continuing Education and Training (IACET). In obtaining this accreditation, EUCI has demonstrated that it complies with the ANSI/IACET Standard which is recognized internationally as a standard of good practice. As a result of their Authorized Provider status, EUCI is authorized to offer IACET CEUs for its programs that qualify under the ANSI/IACET Standard.

**EUCI is authorized by IACET to offer 1.0 CEUs for the course.**

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**web: <http://pmaconference.com/>**  
**Mail: POB 2303 Falls Church Va 22042**

Please make checks payable to: "PMA"

## EVENT LOCATION

### EUCI Offices

4601 DTC Blvd. Suite 800  
 Denver, CO 80237

**See nearby hotels on page 4**

## PLEASE SELECT

**BOTH NATIONAL ELECTRIC SAFETY CODE WITH 2017 REVISIONS COURSE AND DISTRIBUTION FEEDER DESIGN COURSE:**  
 APRIL 18-20, 2017: US \$2195,  
 Early Bird on or before MARCH 31, 2017: US \$1995

**NATIONAL ELECTRIC SAFETY CODE WITH 2017 REVISIONS COURSE:** APRIL 18-19, 2017: US \$1395,  
 Early Bird on or before MARCH 31, 2017: US \$1195

How did you hear about this event? (direct e-mail, colleague, speaker(s), etc.)

Print Name Job Title

Company

What name do you prefer on your name badge?

Address

City State/Province Zip/Postal Code Country

Phone Email

List any dietary or accessibility needs here

### CREDIT CARD INFORMATION

Name on Card Account Number

Billing Address Billing City Billing State

Billing Zip Code/Postal Code Exp. Date Security Code (last 3 digits on the back of Visa and MC or 4 digits on front of AmEx)

**OR** Enclosed is a check for \$ \_\_\_\_\_ to cover \_\_\_\_\_ registrations.

### Substitutions & Cancellations

Your registration may be transferred to a member of your organization up to 24 hours in advance of the event. Cancellations must be received on or before March 17, 2017 in order to be refunded and will be subject to a US \$195.00 processing fee per registrant. No refunds will be made after this date. Cancellations received after this date will create a credit of the tuition (less processing fee) good toward any other EUCI event. This credit will be good for six months from the cancellation date. In the event of non-attendance, all registration fees will be forfeited. In case of course cancellation, EUCI's liability is limited to refund of the event registration fee only. For more information regarding administrative policies, such as complaints and refunds, please contact our offices at (201) 871-0474.