

Electrical and Alarm Continuing Education Course Catalog



Online and Instructor-Led



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Looking for a course not listed? Have course recommendations?

Email us: instructor@jadelearning.com

National Electrical Code (NEC) Update Courses

2011 NEC CHANGES PART 1

This course covers 125 of the most relevant and important changes to the 2011 NEC, based on Articles 90 - 406.

Price: \$85 - \$150
8-16 Hours Credit



2011 NEC CHANGES PART 2

This course covers 125 of the most relevant and important changes to the 2011 NEC, based on Articles 406. – Annex I.

Price: \$85 - \$150
8-16 Hours Credit



2014 NEC CHANGES PART 1

This course will review the first half of the most important National Electrical Code changes from the 2014 NEC. Changes in Articles 100 – 404.2 will be covered.

Price: \$85-100
8 Hours Credit



2014 NEC CHANGES PART 2

This course will review the second half of the most important National Electrical Code changes from the 2014 NEC. Changes in Articles 404 – Chapter 9 will be covered.

Price: \$85 - \$100
8 Hours Credit



15 HOUR CODE UPDATE –2014 NEC CHANGES

This course will review the most important National Electrical Code changes from the 2014 NEC. Changes in Articles 100 – Chapter 9 will be covered.

Price: \$150
15 Hours Credit



15 HOUR CODE UPDATE –2014 NEC CHANGES

This course will review the most important National Electrical Code changes from the 2014 NEC. Changes in Articles 100 – Chapter 9 will be covered. This course also covers New Hampshire's 2014 Licensing Concerns and Deficiencies as well as State Statutes.

Price: \$150
Accepted in New Hampshire
An 8 hour version includes North Dakota specific rules and regulations.
15 Hours Credit



2014 NEC CHANGES PART 2, SAFETY, LAWS

This course covers 50 of the most important changes from the 2014 NEC as well as safety according to NFPA 70E and current Texas Laws and Regulations.

Price: \$35
Accepted in Texas
4 Hours Credit



MOST IMPORTANT 2014 NEC CHANGES

This course will review 50 of the most important National Electrical Code changes from the 2014 NEC. Changes in Articles 100 – Chapter 7 will be covered.

Price: \$45
Accepted in Virginia
3 Hours Credit



NEC COURSES FOR INSPECTORS

Many NEC and NEC Related courses are also accepted for CE credit for electrical inspectors licensed in Michigan, North Carolina, Ohio, Pennsylvania, South Carolina, Virginia, and West Virginia, as well as for International Code Council certified inspectors.

NEC COURSES FOR ENGINEERS

NEC and NEC Related courses are also accepted for PDH credit for Electrical Engineers in most states.

National Electrical Code (NEC) Related Courses

RESIDENTIAL WIRING (2014 NEC)

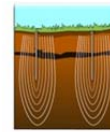
This course will cover the requirements in the 2014 NEC for installing electrical systems in dwelling units. Sections include: Service and Subpanels, Kitchen, Pantry and Dining Rooms, Bathrooms and Laundry, Living Areas (and Bedrooms), Stairways and Hallways, Luminaires, Fans and Switches, Outdoors, Garages, Basements, and Crawl Spaces, Heating and Cooling, Swimming Pools and Spas, Generators, Limited Energy, Installation and Wiring Methods, and exercises.

Price: \$50-100
4-16 Hours Credit



SYSTEM GROUNDING AND BONDING (2014 NEC)

This course will cover system grounding and bonding according to the 2014 NEC. The following topics will be covered: grounding and bonding basics, grounding and bonding at services, grounding and bonding at transformers, and grounding and bonding at generators.

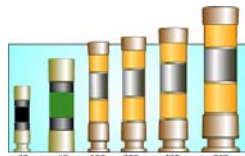


Price: \$49-\$55
4 Hours Credit

OVERCURRENT PROTECTION (2014 NEC)

The key sections of Article 240 will be discussed. Overcurrent protection for panelboards, appliances, motors, motor compressors, transformers, and fire pumps will also be included. The requirements for ground-fault protection for personnel and arc-fault circuit-interrupter protection are presented.

Price: \$49-\$55
4 Hours Credit



INSTALLING SERVICES (2014 NEC)

This course will focus on the 2014 National Electrical Code rules for installing Service Equipment and Conductors including Service Basics, Overground and Underground Services, Service Entrance Conductors, Service Equipment, and exercises using a Strip Shopping Center.

Price: \$49-\$55
4 Hours Credit



CODE CALCULATIONS (2014 NEC)

This course covers single family and multi-family dwelling calculations including lighting loads, general loads, feeder or service neutral loads, and heating and air-conditioning loads. This course also covers box fill calculations including metal boxes and minimum size. Lastly, a section on motors covers full load current and conductor ampacity.

Price: \$49-\$55
4 Hours Credit



COMMERCIAL AND INDUSTRIAL WIRING (2014 NEC)

This course will review the 2014 National Electrical Code requirements for installing commercial and industrial wiring systems and equipment. Topics covered will include branch circuits and feeders, services, overcurrent protection, grounding and bonding, wiring methods and materials, switchboards and panelboards, motors, motor circuits, and motor controllers, generators, transformers, and industrial machinery.

Price: \$50-\$100
4-8 Hours Credit



INTRODUCTION TO PHOTOVOLTAIC SYSTEMS

A highly interactive course based on the 2011 NEC requirements for photovoltaic systems. The course covers costs and incentives for PV installations, system design, system components such as modules, disconnects, and inverters, parallel and series wiring, and a complete 7 kW installation from array to signage to grounding.

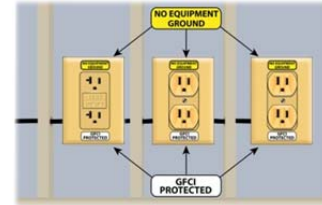
Price: \$45-75
4-8 Hours Credit



FIELD MARKING

This short course covers the most important requirements in the 2011 NEC for identifying and marking electrical equipment in the field. The purpose of the field marking is to warn personnel of potential hazards associated with the equipment or to identify unique characteristics of the equipment.

Price: \$20
Accepted in Florida
1 Hour Credit



INTRODUCTION TO EVSE INSTALLATIONS

This course provides an introduction to electric vehicle charging stations, potential business opportunities with this new equipment, and steps to install charging stations in both residential and commercial locations.

Price: \$45-\$55
4 Hours Credit



RESIDENTIAL ELECTRICAL INSPECTIONS

This interactive course has you acting as Mike, a new electrical inspector. Based on the 2011 NEC, you will work to successfully inspect a total of 6 properties. A temporary service inspection, rough-in stage inspections, and final stage inspections will all be covered, and you will learn more about specific code sections relating to each.

Price: \$49-\$55
4 Hours Credit



EQUIPMENT GROUNDING & BONDING (2014 NEC)

Equipment grounding and bonding is done after the first overcurrent device in the electrical distribution system. Equipment grounding and bonding conductors are installed to connect normally non-current-carrying metal parts of equipment together and to the system grounded conductor and the grounding electrode.

Price: \$49-\$55
4 Hours Credit



COMMERCIAL BLUEPRINT READING

Commercial blueprint reading is the focus for this course based on an electrical blueprint of a dentist's office. Lighting plans, Power & Communications plans and the Power Riser diagram are discussed.

Price: \$45-\$50
Accepted in New Mexico, North Carolina
4 Hours Credit



CONDUCTOR AMPACITY AND CALCULATIONS (2014 NEC)

This course covers selecting conductors from Table 310.15(B)(16), applying adjustment factors and ambient temperature correction factors, and accounting for continuous loads. The temperature rating of conductors and the temperature rating of terminals is discussed, as well as how the temperature rating of terminals affects the rating of the selected conductor. Tables 310.15(B)(2)(a), Table 310.15(B)(3)(a) and Section 310.15(B)(7) are covered.



Price: \$49-\$55
4 Hours Credit

NFPA 70E and OSHA (Safety) Courses

ELECTRICAL SAFETY NOW (NFPA 70E 2012)

A highly interactive course based on NFPA 70E, Standard for Electrical Safety in the Workplace. Course includes user activities along with multiple choice questions. Topics include working on energized equipment and the work permit, hazard categories, approach boundaries, and personal protective equipment necessary.



Price: \$25-\$55
2-4 Hours Credit

LOCKOUT/TAGOUT (NFPA 70E 2012)

A highly interactive course with real life scenarios based on the concepts of individual employee control, simple lockout/tagout, and complex lockout/tagout. Course includes user activities along with multiple choice questions.

Price: \$25-\$55
2-4 Hours Credit



OSHA SAFETY STANDARDS

This course covers OSHA standards, 1910 and 1926. Some of the topics included are general electrical requirements, general health and safety provisions, ladders, and personal protective equipment.

Price: \$25-\$55
2-4 Hours Credit



OSHA ELECTRICAL SAFETY WORK PRACTICES

This course highlights the OSHA requirements for electrical safety including (1) Deenergizing equipment and placing a lock and tag on the disconnecting means of the power source, and (2) Taking the required precautions to protect the individual doing the electrical testing, troubleshooting, or repair when the equipment cannot be deenergized.

Price: \$20
Accepted in Florida
1 Hour Credit



OSHA SAFETY FOR ELECTRICIANS

This course covers OSHA standards for workplace safety for electricians working in construction and general industry. There are three main sections to the course (1) top violations cited by OSHA, (2) non-electrical workplace safety hazards common on any job site, and (3) hazards that are related to electrical work.

Price: \$25-\$55
2-4 Hours Credit



Business Courses

INTRODUCTION TO ROLE OF FOREMAN

A highly interactive course that covers a new foreman's transition to management, ways to effectively lead a crew, and an introduction to project management through planning and monitoring. Course includes user activities along with 50 multiple choice questions.

Price: \$49-\$55
4 Hours Credit



HOW TO MANAGE AN ELECTRICAL SERVICE CONTRACTING BUSINESS

This course is about managing an electrical service company and explains the principles of management. Scenarios are provided in which the business principles must be applied. Course includes 31 multiple choice questions.

Price: \$50
Accepted in Kentucky
4 Hours Credit



State Specific Content Courses

SAFETY AND TEXAS LAWS

All courses approved in the state of Texas include safety content based on the NFPA 70E as well as laws and rules from state regulations chapters 1305 and 73.

Price: \$35
Accepted in Texas
4 Hours Credit



FLORIDA STATUTES

It reviews the statutes and rules that govern Electrical and Alarm System contracting. Topics include: qualifications to practice, renewal of certificate, alarm system agents, business organizations, prohibitions, penalties and disciplinary proceedings.

Price: \$20
Accepted in Florida
1 Hour B Credit



WORKERS' COMPENSATION

This course covers important workers' compensation topics for the state of Florida, including reporting injuries, injuries that are not covered, drug testing, and missed work compensation.

Price: \$20
Accepted in Florida
1 Hour WC Credit



RCW / WAC UPDATE

This course is randomized so that each user receives 50 unique questions from a larger pool. Questions are based on the rules and regulations of Washington, RCW 19.28 and WAC 296-46B.

Price: \$50
Accepted in Washington
4 Hours Credit



OESC AND ADMINISTRATIVE RULES

This course will cover Oregon electrical laws and rules including the 2014 OESC and Chapter 918 Oregon Building Codes Division Administrative Rules. Topics covered: OESC changes, Statewide Code Interpretations, Appeals Process, and Location of Electrical Requirements.

Price: \$50
Accepted in Oregon
4 Hours Credit



TEXAS PRIVATE SECURITY ETHICS

This course provides an introduction to ethics for the licensed security professional in Texas. It addresses common areas where ethical choices can impact your business and the profession. This course also highlights key sections of the Private Security Licensing Administrative Rules and how operating with ethical business practices can ensure you meet regulations and stay licensed in Texas.

Price: \$20
Accepted in Texas
1 Hour Credit



Alarm / Security Courses

FALSE ALARM AWARENESS

False Alarm Awareness discusses best practices to reduce false alarms, model ordinances, current laws, enhanced call verification, and the important relationships with customers and the law enforcement community.



Price: Varies

Accepted in Alabama, Florida, Louisiana, New Jersey, North Carolina, Oregon, Tennessee, Texas

2-4 Hours Credit

ACCESS CONTROL

This course covers the fundamentals of access control including the most common types of installations in four to forty door systems.

Price: \$25-\$50

Accepted in Alabama, Louisiana, Mississippi, New Jersey, North Carolina, Oregon, Tennessee, Texas

2-4 Hours Credit



ADVANCED ACCESS CONTROL

This course is based on advanced access control systems with a primary focus on topology, hardware and software developments, and emerging technologies. Although the basics of access control have not changed much in recent years, technology has improved system utilization.



Price: \$25-\$50

Accepted in Alabama, Louisiana, Mississippi, New Jersey, North Carolina, Tennessee, Texas

2-4 Hours Credit

CCTV CONFIGURATION BASICS

This course shows the user how to configure a basic CCTV system. Topics include: camera basics, coaxial cable installation and labeling, monitors, connecting monitors together, understanding lenses, and recording methods.

Price: \$25-\$50

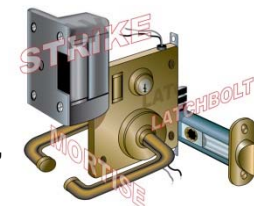
Accepted in Alabama, Louisiana, Mississippi, New Jersey, North Carolina, Tennessee, Texas

2-4 Hours Credit



LOCKS & STRIKES

After completing this course a user will be able to recognize and identify the most common locksmithing terms. Tips on doing a security site survey and recommending appropriate locking door hardware are included along with the challenges and advantages of retrofitting mechanical locks and strikes with electrified hardware.



Price: \$25-\$50

Accepted in Alabama, Louisiana, Mississippi, New Jersey, North Carolina, Tennessee, Texas

2-4 Hours Credit

INTRODUCTION TO NETWORK SECURITY CAMERAS

An introduction to network security cameras that educates users on the basics of a network, how to configure an IP/network camera, how to configure an analog camera for use on a network, solutions to common problems, and the interface for controlling a networked camera.

Price: \$25-\$50

Accepted in Alabama, Louisiana, Mississippi, New Jersey, North Carolina, Tennessee, Texas

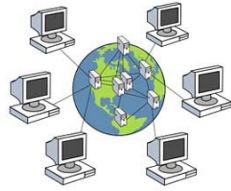
2-4 Hours Credit



NETWORKING & CABLING FOR SECURITY INSTALLATIONS

This course is intended for intermediate level installers and system designers. It will provide an overview of networking, cabling, and system design. Objectives: 1. Form a basic understanding of computers and networks. 2. Understand the differences between different cables, terminations, and uses. 3. Know the different hardware components and system requirements for a security camera system. 4. Work through video security system case studies.

Price: \$25-\$50
Accepted in Alabama,
Louisiana, Mississippi,
North Carolina,
Tennessee, Texas
2-4 Hours Credit



BASIC SECURITY ALARM INSTALLATIONS

Covering the basics of a security installation including control panels, zones, signals, central stations, battery backup, switches, detectors, and wireless technology.

Price: \$25-\$50
2-4 Hours Credit



Instructor-Led Classroom Courses

MOST IMPORTANT 2011 NEC CHANGES PART 1

This classroom course covers the most important and relevant changes to the 2011 NEC, from Articles 100 - 250.

Price: 75.00
Accepted in North Carolina
4 Hours Credit



MOST IMPORTANT 2011 NEC CHANGES PART 2

This classroom course covers the most important and relevant changes to the 2011 NEC, from Articles 300 – Annex I.

Price: 75.00
Accepted in North Carolina
4 Hours Credit



2014 NEC CHANGES PART 1

This course will review the first half of the most important National Electrical Code changes from the 2014 NEC. Changes in Articles 100 – 404.2 will be covered.

Price: 75.00
Accepted in North Carolina
4 Hours Credit



2014 NEC CHANGES PART 2

This course will review the second half of the most important National Electrical Code changes from the 2014 NEC. Changes in Articles 404 – Chapter 9 will be covered.

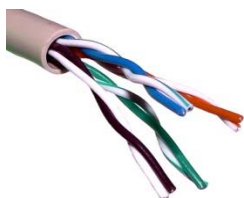
Price: 75.00
Accepted in North Carolina
4 Hours Credit



CODE FOR CONTRACTORS PART 1

This in-person classroom course will cover limited energy installations, branch circuits, and equipment ratings.

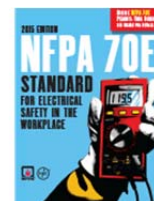
Price: 75.00
Accepted in North Carolina
4 Hours Credit



CODE FOR CONTRACTORS PART 2

This course will cover personal protection from shock and arc flash, motor applications, and neat and workmanlike installations.

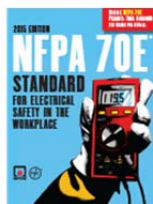
Price: 75.00
Accepted in North Carolina
4 Hours Credit



ELECTRICAL SAFETY ACCORDING TO NFPA 70E, 2015

NFPA 70E, Standard for Electrical Safety in the Workplace, was updated in 2015 with important revisions. Topics in this class include simple lockout/tagout, complex lockout/tagout and safe work practices for working on energized equipment.

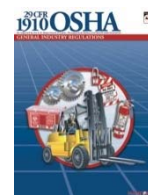
Price: 350.00
Accepted in North Carolina
8 Hours Credit



OSHA SAFETY RULES FOR ELECTRICAL INSTALLATIONS

This classroom course focuses on the requirements for electrical safety in sections 331-335 of the OSHA 1910 Standard. Topics include the skills and techniques necessary to be considered a qualified person, training, selection and use of safe work practices, use of equipment, and safeguards for personnel protection.

Price: 250.00
Accepted in North Carolina
8 Hours Credit



RESIDENTIAL ELECTRICAL INSPECTIONS

This class will look at residential installations for rough-in stage and final inspections. Licensees will determine why or why not they were approved based on the 2011 NEC.



Price: 75.00
Accepted in North Carolina
4 Hours Credit

COMMERCIAL AND INDUSTRIAL WIRING

This class will go into generators, motors, transformers, and other installations in various commercial and industrial settings.



Price: 75.00
Accepted in North Carolina
4 Hours Credit

Our Instructors

David Burt has been in the electrical trade since 1978. He has worked as an electrical contractor, maintenance electrician, shop supervisor, and electrical instructor. Mr. Burt has been teaching continuing education courses on the National Electric Code since 1990. He is currently approved to offer continuing education courses on the National Electric Code in Alaska, Alabama, Arkansas, Dade County, Delaware, Florida, Idaho, Maine, Montana, North Carolina, New Hampshire, New Mexico, Oklahoma, Oregon, Tennessee, Texas, Utah, Virginia, Vermont, Washington, Wisconsin, and Wyoming. He is a member of the National Fire Protection Association, the International Association of Electrical Inspectors, and the American Society for Training and Development. Mr. Burt is married and has 3 grown daughters.

Don Hursey is a retired Senior Electrical Inspector for the Durham City/County Inspections Department. He worked in the Inspections Department from 1977 - 2010. Don is a level 3 Electrical Inspector and holds an Unlimited Electrical Contracting license in North Carolina. He is a Code panelist for the Ellis Canady Chapter of the IAEI and in 2004 was chosen the Electrical Instructor of the Year by the NC Board of Examiners of Electrical Contractors. He is an Underwriters Laboratories Workshop Instructor, an Underwriters Laboratories Standard Technical Panel member for electrical devices, and a certified instructor for the National Center for Construction Education and Research. Don Hursey is also a NFPA National Instructor, and the Recipient of the 2008 North Carolina Electrical Inspector of the year award.

Jeff Simpson is currently a licensed inspector, electrician, and instructor at JADE Learning. He previously supervised the Electrical Inspections Department at the City of Durham, NC. He also previously worked at the City of Peoria in Arizona as a Senior Electrical Inspector and was licensed in Arizona as an electrical contractor. He taught electrical code classes at Glendale Community College and was an instructor for the Independent Electrical Contractors Association. He was on the education committee for the Central Arizona IAEI Chapter and is currently the Continuing Education Coordinator for the Ellis Canady IAEI Chapter. Jeff is a level 3 electrical inspector and holds 25 certifications through the International Code Council including Master Code Professional. Jeff is also certified as a Master Electrical Inspector through the International Association of Electrical Inspectors. Jeff enjoys working outside and spending time with his wife and kids.

John Hauck has 40 years of experience in the electrical trade. First licensed in 1976, he worked as an electrician in California for a number of years before becoming an instructor at Long Beach City College in 1989. He is currently a full-time instructor, teaching Electrical Technology to students there. He is also the author of *Industrial/Commercial Building Electrical Design*, *Instructor's Guide: Illustrated Changes to the 2008 National Electrical Code*, and *Passing the California Electrical Contractor's Exam*.

David Herres is a licensed master electrician in Clarksville, New Hampshire. He has written a number of articles for *Electrical Construction and Maintenance* magazine and is also the author of *2011 NEC Chapter-by-Chapter*, *The Electrician's Trade Demystified*, and *Troubleshooting and Repairing Commercial Electrical Equipment*. David also has his own website of articles, tools, tips, and links, called *Electrician's Paradise*.

Charles Miller is an author and instructor that has passed over 40 master electrical exams nationwide. He is the author of *Code In Focus* in *Electrical Contractor* magazine, and has published a number of references including: *The Electrician's Exam Prep Manual*, *NFPA's Pocket Electrical Reference*, and *NFPA's Electrical References*. He has a wide range of classroom teaching experience including exam prep, electrical contracting, electrical safety, and customized training. He currently teaches classes for Lighthouse Educational Services, NFPA, and JADE Learning.

Stephen Pape is the General Manager and state air conditioning, refrigeration, and master electrical contracting licensee for Pape Air Conditioning Service in DeSoto, Texas. He is active in Air Conditioning Contractors of America (ACCA) and is a past Director for the Texas State and North Texas Regional ACCA Chapters. He also has served as the Texas ACCA Legislative Chairman and North Texas Chapter President. Stephen is a 2007 MBA Graduate of Texas A&M in Commerce, Texas.

Bruce Resman is a project manager for Foster, Jacobs and Johnson in Duluth Minnesota. He is a licensed electrical contractor and has taught electrical classes in community college. He is the author of the JADE Learning course, 'Commercial Blueprint Reading.'

Harvey Riddle is a Regional Operations Manager for a large national security company, and primarily manages all of the electronic security systems for a national cellphone company. He has been employed in the security industry since 1980 and has worked as a technician, service manager, Vice President and General Manager at leading edge security companies. He is a graduate of North Carolina State University and is the author of the JADE Learning courses, 'Basics of CCTV Configuration', and 'Access Control.'

Jay Slaughterbeck is licensed by the North Carolina Alarm Systems Licensing Board and works for Intelligent Access Systems of North Carolina. He has been working in the security industry since 1998 and has experience as an Installation Technician, Estimator, Commercial Security Division Manager, and Sales Engineer. He is the author of the JADE Learning courses, 'Introduction to Network Security Cameras' and 'Advanced Access Control.'

Randy Morris is from Yadkin County, NC, has a Bachelor's Degree in Music and Communications (Radio/TV) from Wake Forest University, where he was Student Engineer and Student Production Manager. He has held an Unlimited General Contractor's license, Electrical Contractor's license, FCC 2nd class engineer's license; and BICSI RCDD, NTS, LAN Specialist, and Installer II. On the computer side, he is a Microsoft Partner, HP and Dell partner, an Apple ACTC engineer, Sun Solaris Admin, RedHat admin, and Security Partners with Meraki, SonicWall, Symantec, and Trend Micro. He is currently IT Director and an Audio-Visual, Broadcast, and Systems Engineer for Strategic Connections, which has offices in Raleigh, Winston-Salem, Charlotte, and Myrtle Beach. He is married and has 3 children and 7 grandchildren.

Dick Statham has been in the electrical trade since 1958 when he began work as a helper while in high-school. Since then he has worked as a journeyman, controls technician, electrical contractor, estimator, and project manager. He began teaching National Electrical Code classes part time in 1972 at Mayland Technical Community College in Spruce Pine, N.C. In 1975 he moved to Greensboro, N.C., where he was the department head of the Electrical/Electronic Technology program at Guilford Technical Community College in Jamestown, N.C. from 1975-1995. He has retired from Guilford Tech and enjoys canoeing, hiking, trout fishing, and kayaking in the N.C. mountains. He has been teaching continuing education courses on the National Electric Code since 1996. He is currently approved to offer continuing education courses on the National Electric Code in North Carolina. He is a member of the International Association of Electrical Inspectors. He is married and has a grown daughter.