**Course Name:** **2020 NEC Change**

**Credit Hours:** 8 hours

**Course Description:** This course will review the changes to Articles 90 through 420 of the 2020 National Electrical Code.

**Course Objectives:** After completing this course, the licensee will be able to apply changes to the 2020 NEC from Article 90 through 420 and understand the most common changes to the code. All electricians should have a solid understanding of the NEC code and the recent changes to the code.

**Method of Presentation:** This course is available online. Each slide includes commentary and a multiple choice question. The student will be required to provide their state license number as part of registration.

**Method of Evaluation:** The licensee must complete all 240 multiple choice questions with a score of 75% or better in order to receive credit for the course.

**Course Outline:**

**Article 90: 5 minutes**

(Revised) 90.2(A) Covered

(Revised) 90.6 Formal Interpretations

**Article 100: 20 minutes**

(Revised) Article 100 Scope.

(Revised) Simple Apparatus

(New) Spray Area

(New) Spray Booth

(New) Spray Room

(New) Type of Protection “n”

(Revised) Unclassified Locations

(New) Unenclosed Spray Area

(Revised) Ventilated

(Revised) Volatile Flammable Liquid

**Article 110: 35 minutes**

(Revised) 110.3(A) Examination

(Revised) 110.5 Conductors

(New) 110.12(C) Cables and Conductors

(Revise) 110.14 Electrical Connections

(Revised) 110.14(D) Terminal Connection Torque

(Revised) 110.21(A)(2) Reconditioned Equipment

(Revised) 110.22(A) General

(Revised) 110.24(A) Field Marking

(Revised) 110.24(B) Modifications

(Revised) 110.26(A) Working Space

(Revised) 110.26(A)(3) Height of Working Space

(Revised) 110.26(C)(2) Large Equipment

(Revised) 110.26(C)(3) Personnel Doors

(Revised) 110.26(D) Illumination

(Revised) 110.26(E)(2) Outdoor

(Revised) 110.30 General

(Revised) 110.31(A)(4) Locks

(Revised) 110.31(A)(5) Transformers

(Revised) 110.32 Work space About Equipment

(Revised) 110.33(A)(3) Personnel Doors

(Revised) 110.70 General

**Article 200: 15 minutes**

(Revised) 200.3 Connection to Grounded System

(Revised) 200.6(A) Sizes 6 AWG or Smaller

(Revised) 200.6(E) Grounded Conductors of Multiconductor Cables

(Revised) 200.9 Means of Identification of Terminals

(Revised) 200.10(B) Receptacles, Plugs, and Connectors

**Article 210: 45 minutes**

(Revised) 210.6(C) 277 Volts to Ground

(Revised) 210.8 Ground-Fault Circuit-Interrupter Protection for Personnel

(Revised) 210.8(A) Dwelling Unit

(Revised) 210.8(B) Other Than Dwelling Units

(New) 210.8(D) Specific Appliances

(New) 210.8(E) Equipment Requiring Servicing

(New) 210.8(F) Outdoor Outlets

(Revised) 210.11(C)(3) Bathroom Branch Circuits

(Revised) 210.12(C) Guest Rooms, Guest Suites, and Patient Sleeping rooms in Nursing Homes and Limited-Care Facilities

(Revised) 210.12(D) Branch Circuit Extensions or Modifications – Dwelling Units, Dormitory Units, and Guest Rooms and Guest Suites

(New) 210.15 Reconditioned Equipment

(Revised) 210.25(B) Common Area Branch Circuits

(Revised) 210.52 Dwelling Unit Receptacle Outlets

(Revised) 210.52(C) Countertops and Work Surfaces

(Revised) 210.52(C)(3) Receptacle Outlet Location

(Revised) 210.52(G) Basements, Garages, and Accessory Buildings

(Revised) 210.52(G)(1) Garages

210.60 Guest Rooms, Guest Suites, Dormitory Units, and Similar Occupancies

(Revised) 210.60(B) Receptacle Placement

(Revised) 210.63 Equipment Requiring Servicing

(New) 210.63(A) Heating, Air-Conditioning, and Refrigeration Equipment

(Revised) 210.63(B) Other Electrical Equipment

(New) 210.63(B)(1) Indoor Service Equipment

(New) 210.63(B)(2) Indoor Equipment Requiring Dedicated Equipment Spaces

(Revised) 210.65(B) Receptacle Outlets Required

(Revised) 210.65(B)(1) Receptacle Outlets in Fixed Walls

(Revised) 210.65(B)(2) Floor Outlets

Informational Note No.1: See 314.27(B) for floor boxes used for receptacles located in the floor

(Revised) 210.70(A)(1) Habitable Rooms

(Revised) 210.70(A)(2) Additional Locations

(Revised) 210.70(B) Guest Rooms or Guest Suites

(Revised) 210.70(C) All Occupancies

**Article 215: 5 minutes**

(Revised) 215.2(B)(3) Supervised Installations

(Revised) 215.10 Ground-Fault Protection of Equipment

**Article 220: 15 minutes**

(New) 220.11 Floor Area

220.12 Lighting Load for Non-Dwelling Occupancies

(Revised) 220.12(A) General

(New) 220.12(B) Energy Code

(Revised) 220.14(J) Dwelling Units

(New) 220.14(M) Hotel and Motel Occupancies

(Revised) 220.53 Appliance Load – Dwelling Unit(s)

(Revised) 220.60 Noncoincident Loads

**Article 225: 10 minutes**

(Revised) 225.4 Conductor Covering

(Revised) 225.15 Supports over Buildings

(Revised) 225.19 Clearances from Buildings for Conductors of Not over 1000 Volts, Nominal

(New) 225.30(B) Common Supply Equipment

**Article 230: 20 minutes**

(Revised) 230.46 Spliced and Tapped Conductors

(New) 230.62(C) Barriers

230.66 Marking

(New) 230.66(A) General

(New) 230.66(B) Meter Sockets

(New) 230.67 Surge Protection

230.67(A) Surge-Protective Device

(New) 230.67(B) Location

230.67(C) Type

(New) 230.67(D) Replacement

(Revised) 230.70 General

(Revised) 230.71(B) Two to Six Service Disconnecting Means

(New) 230.85 Emergency Disconnects

**Article 240: 15 minutes**

(Revised) 240.21(B) Feeder Taps

(Revised) 240.24(A) Accessibility

(New) 240.62 Reconditioned Equipment

(New) 240.67(C) Performance Testing

(New) 240.87(C) Performance Testing

(New) 240.88 Reconditioned Equipment

(New) 240.88(A) Circuit Breakers

(New) 240.88(B) Components

(New) 240.102 Reconditioned Equipment

**Article 242: 50 minutes**

Article 242 Overvoltage Protection

(New) 242.1 Scope

(New) 242.6 Uses Not Permitted

(New) 242.8 Listing

(New) 242.10 Short-Circuit Current Rating

(New) 242.12 Type 1 SPDs

(New) 242.12(A) Installation

(New) 242.12(B) At the Service

(New) 242.14 Type 2 SPDs

(New) 242.14(A) Service-Supplied Building or Structure

(New) 242.14(B) Feeder-Supplied Building or Structure

(New) 242.14(C) Separately Derived System

(New) 242.16 Type 3 SPDs

(New) 242.18 Type 4 and other Component Type SPDs

(New) 242.20 Number Required

(New) 242.22 Location

(New) 242.24 Routing of Connections

(New) 242.26 Connection

(New) 242.28 Conductor Size

(New) 242.30 Connection Between Conductors

(New) 242.32 Grounding Electrode Conductor Connections and Enclosures

(New) 242.40 Uses Not Permitted

(New) 242.42 Surge Arrester Selection

(New) 242.42(A) Rating

(New) 242.42(A)(1) Solidly Grounded Systems

(New) 242.42(A)(2) Impedance or Ungrounded System

(New) 242.42(B) Silicon Carbide Types

(New) 242.44 Number Required

(New) 242.46 Location

(New) 242.48 Routing of Surge Arrester Equipment Grounding Conductors

(New) 242.50 Connection

(New) 242.52 Surge-Arrester Conductors

(New) 242.54 Interconnections

(New) 242.54(B)(1) Ungrounded or Unigrounded Primary System

(New) 242.54(B)(2) Multigrounded Neutral Primary System

(New) 242.54(C) By Special Permission

(New) 242.56 Grounding Electrode Conductor Connections and Enclosures

**Article 250: 35 minutes**

(New) 250.25 Grounding Systems Permitted to Be Connected on the Supply Side of the Disconnect

(New) 250.25(A) Grounded System

(New) 250.25(B) Ungrounded Systems

(New) 250.53(C) Bonding Jumper

(Revised) 250.64(A) Aluminum or Copper-Clad Aluminum Conductors

(Revised) 250.64(B)(2) Exposed to Physical Damage

(Revised) 250.98 Bonding Loosely Jointed Metal Raceways

(Revised) 250.104(D)(1) Metal Water Piping System(s)

(New) 250.109 Metal Enclosures

(Revised) 250.120(B) Aluminum and Copper-Clad Aluminum Conductors

(Revised) 250.102(C) Equipment Grounding Conductors Smaller than 6 AWG

(New) 250.121 Restricted Use of Equipment Grounding Conductors

250.121(A) Grounding Electrode Conductor

(New) 250.121(B) Metal Frame of Building or Structure

(Revised) 250.122 Size of Equipment Grounding Conductors

250.122(A) General

(New) 250.122(B) Increased in Size

(Revised) 250.122(C) Multiple Circuits

(Revised) 250.136 Equipment Secured to Grounded Metal Supports

**Article 300: 10 minutes**

(Revised) 300.4(G) Fittings

300.7 Raceways Exposed to Different Temperatures

(Revised) 300.7(A) Sealing

(New) 300.25 Exit Enclosures (Stair Towers)

(Revised) 300.45 Danger Signs

**Article 310: 30 minutes**

310.3 Conductors

(Revised) 310.3(A) minimum Size of Conductors

(Revised) 310.3(C) Stranded Conductors

(Revised) 310.8(A) Required Information

310.8(B) Method of Marking

(Revised) 310.8(B)(1) Surface Marking

(New) 310.12(A) Services

(New) 310.12(B) Feeders

(New) 310.12(C) Feeder Ampacities

(New) 310.12(D) Grounded Conductors

310.15 Ampacity Tables

(New) 310.15(A) General

(New) 310.15(B)(2) Rooftop

310.15(C) Adjustment Factors

(New) 310.15(C)(1) More than Three Current-Carrying Conductors

(New) 310.15(C)(2) Raceway Spacing

(New) 310.15(D) Bare or Covered Conductors

(Revised) 310.15(F) Grounding or Bonding Conductor

(New) 310.16 Ampacities of Insulated Conductors in Raceway, Cable, or Earth (Directly Buried)

(New) 310.17 Ampacities of Single-Insulated Conductors in Free Air

(New) 310.18 Ampacities of Insulated Conductors in Raceway or Cable

(New) 310.19 Ampacities of Single-Insulated Conductors in Free Air

(New) 310.20 Ampacities of Conductors Supported on a Messenger

(New) 310.21 Ampacities of Bare or Covered Conductors in Free Air

**Article 311: 15 minutes**

(Revised) 311.1 Scope

(New) Electrical Ducts

(New) Medium Voltage Cable, Type MV

(New) Thermal Resistivity

(New) 311.10 Constructions and Applications

(New) 311.10(A) Conductor Application and Insulation

(New) 311.12(B) Conductor Material

(New) 311.12(C) Stranded Conductors

**Article 312: 5 minutes**

312.1 Scope

(New) 312.8(B)(1) Identification

(New) 312.8(B)(3) Conductors

**Article 314: 15 minutes**

(Revised) 314.16(B)(5) Equipment Grounding Conductor Fill

(Revised) 314.17(B) Boxes and Conduit Bodies

(New) 314.17(B)(2) Conductors Entering Through Cable Clamps

(New) 314.17(B)(4) Temperature Limitation

(Revised) 314.29 Boxes, Conduit Bodies, and Handhole Enclosures to Be Accessible

(New) 314.29(A) In Buildings and Other Structures

(New) 314.29(B) Underground

**Article 330: 10 minutes**

(New) 330.80(C) Thermal Insulation

(Revised) 330.104 Conductors

(New) 300.130 Hazardous (Classified) Locations

**Article 334: 5 minutes**

(Revised) 334.30 Securing and Supporting

(Revised) 334.104 Conductors

**Article 336: 5 minutes**

336.1 Scope

(Revised) 336.104 Conductors

(New) 336.130 Hazardous (Classified) Location Cable

**Article 337: 10 minutes**

(New) 337.1 Scope

(New) 337.2 Definition

(New) Type P. Cable

(New) 337.31 Single Conductors

(New) 337.104 Conductors

(New) 337.108 Equipment Grounding Conductor

**Article 338: 10 minutes**

338.1 Scope

(Revised) Service-Entrance Conductor Assembly

(Revised) 338.10(B)(4) Installation Methods for Branch Circuits and Feeders

338.100 Construction

(New) 338.100(A) Assemblies

**Article 342: 10 minutes**

(New) 342.10(E) Severe Physical Damage

(Revised) 342.14 Dissimilar Metals

**Article 344: 5 minutes**

(New) 344.10(E) Severe Physical Damage

(Revised) 344.14 Dissimilar Metals

**Article 356: 5 minutes**

(Revised) 356.10 Uses Permitted

**Article 358: 5 minutes**

(New) 358.10(E) Physical Damage

(Revised) 358.14 Dissimilar Metals

**Article 370: 5 minutes**

(Revised) 370.20(B) Termination

(Revised) 370.80 Ampacity of Conductors

**Article 374: 5 minutes**

(New) 374.6 Listing Requirements

**Article 404: 10 minutes**

(Revised) 404.14(B) Alternating-Current and Direct-Current General-Use Snap Switch

(Revised) 404.14(C) CO/ALR Snap Switches

(Revised) 404.14(D) Alternating-Current General-Use Snap Switches Rated for 347 Volts

(Revised) 404.14(E) Dimmer and Electronic Control Switches

**Article 406: 15 minutes**

406.5(G) Receptacle Orientation

(New) 406.5(G)(1) Countertop and Work Surfaces

(New) 406.5(G)(2) Under Sinks

(Revised) 406.9(C) Bathtub and Shower Space

(Revised) 406.12 Tamper-Resistant Receptacles

(New) 406.13(A) Locking or Latching Type

(New) 406.13(B) Identification

(New) 406.13(C) Interchangeability

(New) 406.13(D) Connecting and Disconnecting

**Article 408: 15 minutes**

(New) 408.6 Short-Circuit Current Rating

(New) 408.7 Unused Openings

(New) 408.8(A) Panelboards

(New) 408.8(B) Switchboards and Switchgear

(New) 408.18(C) Connections

(New) 408.18(C)(1) Equipment Grounding Conductors

(New) 408.18(C)(2) Grounded Circuit Conductors

**Article 410: 10 minutes**

(Revised) 410.10(D) Bathtub and Shower Areas

(New) 410.10(D)(1)

(New) 410.10(D)(2)

(Revised) 410.36(A) Luminaires Supported by Outlet Boxes

(New) 410.52 Conductor Insulation

**Article 422: 10 minutes**

(Revised) 422.5(A) General

(Revised) 422.10(A) Individual Branch Circuits

(Revised) 422.13 Storage-Type Water Heaters

(Revised) 422.40 Polarity in Cord-and-Plug-Connected Appliances