

16 Hours For 2020 License Renewal (2020 NEC Updates) (Course Outline) (Timed)

| | NEC Code Section | NEC Subject Topic | Time (Minutes) |
|-------------------------|-------------------|---|----------------|
| 2020 NEC Changes | | | |
| 1 | Article 100 | Accessible as Applied to Equipment. | 8 |
| 2 | Article 100 | Fault Current & Available Fault Current. | 8 |
| 3 | Article 100 | Free Air (as applied to conductors). | 8 |
| 4 | 110.12(C) | Mechanical Execution of Work. Cables and Conductors. | 8 |
| 5 | 110.21(A)(2) | Reconditioned Equipment. | 8 |
| 6 | 110.22(A) | Identification of Disconnecting Means. General. | 8 |
| 7 | 110.24(A) | 110.24(A) Field Marking. | 8 |
| 8 | 110.26(C)(2) | Large Equipment. | 8 |
| 9 | 210.80 | Ground-Fault Circuit-Interrupter Protection for Personnel. | 8 |
| 10 | 210.8(A) | GFCI Protection. Dwelling Units. | 8 |
| 11 | 210.8(B) | GFCI Protection. Other Than Dwelling Units. | 8 |
| 12 | 210.8(D) | Specific Appliances. | 8 |
| 13 | 210.8(E) | Equipment Requiring Servicing. | 8 |
| 14 | 210.8(F) | Outdoor Outlets. | 8 |
| 15 | 210.11(C)(3) | Bathroom Branch Circuits. | 8 |
| 16 | 210.11(C)(4) | Garage Branch Circuits. | 8 |
| 17 | 210.12(C) | Guest Rooms, Guest Suites, and Patient Sleeping Rooms in Nursing Homes and Limited-Care Facilities. | 8 |
| 18 | 210.12(D) | Branch Circuit Extensions or Modifications — Dwelling Units, Dormitory Units, and Guest Rooms and Guest Suites. | 8 |
| 19 | 210.19(A)(1) | Branch Circuits. General. | 8 |
| 20 | 210.52(B)(1) | Receptacle Outlets Served. | 8 |
| 21 | 210.52(C) | Countertops and Work Surfaces. | 8 |
| 22 | 210.52(C)(2) | Island and Peninsular Countertops and Work Surfaces. | 8 |
| 23 | 210.63 | Equipment Requiring Servicing. | 8 |
| 24 | 210.70(C) | Lighting Outlets Required. All Occupancies. | 8 |
| 25 | 215.10 | Ground-Fault Protection of Equipment. | 8 |
| 26 | 225.10 | Wiring on Buildings (or Other Structures). | 8 |
| 27 | 230.46 | Spliced and Tapped Conductors. | 8 |
| 28 | 230.62 | Barriers. | 8 |
| 29 | 230.66 | Marking. | 8 |
| 30 | 230.67 | Surge Protection. | 8 |
| 31 | 230.71 | Maximum Number of Disconnects. | 8 |
| 32 | 230.75 | Disconnection of Grounded Conductor. | 8 |
| 33 | 230.85 | Emergency Disconnects. | 8 |
| 34 | 240.21(B) | Feeder Taps. | 8 |
| 35 | 240.24(A) | Accessibility. | 8 |
| 36 | 240.33 | Vertical Position. | 8 |
| 37 | 240.62 | Reconditioned Equipment. | 8 |
| 38 | 240.67 | Arc Energy Reduction. | 8 |
| 39 | 240.86 | Series Ratings and Motor Contribution. | 8 |
| 40 | 240.87(A) and (B) | Arc Energy Reduction. Documentation and Method to Reduce Clearing Time. | 8 |
| 41 | 240.87(C) | Performance Testing. | 8 |
| 42 | 250.28(A) | Main Bonding Jumper and System Bonding Jumper. Material. | 8 |
| 43 | 250.53(C) | Bonding Jumper. | 8 |
| 44 | 250.64(A) | Aluminum or Copper-Clad Aluminum Conductors. | 8 |
| 45 | 250.68(C) | Grounding Electrode Conductor Connections. | 8 |
| 46 | 310.12 | Single-Phase Dwelling Services and Feeders. | 8 |
| 47 | Table 310.15(B) | Ambient Temperature Correction Factors. | 8 |
| 48 | Table 310.16 | Ampacity Tables. | 8 |
| 49 | 314.16(B)(5) | Equipment Grounding Conductor Fill. | 8 |
| 50 | 314.27(C) | Boxes at Ceiling-Suspended (Paddle) Fan Outlets. | 8 |
| 51 | 330.80(C) | Thermal Insulation. | 8 |
| 52 | 334.30 | Securing and Supporting. | 8 |
| 53 | 338.10(B)(4) | Installation Methods for Branch Circuits and Feeders. | 8 |

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| 54 | 406.9(C) | Bathtub and Shower Space. | 8 |
| 55 | 406.12 | Tamper-Resistant Receptacles. | 8 |
| 56 | 408.4(A) | Circuit Directory or Circuit Identification. | 8 |
| 57 | 408.60 | Short-Circuit Current Rating. | 8 |
| 58 | 408.80 | Reconditioning of Equipment. | 8 |
| 59 | 408.18(C) | Connections. | 8 |
| 60 | 410.10(D) | Bathtub and Shower Areas. | 8 |
| 61 | 410.69 | Identification of Control Conductor Insulation. | 8 |
| 62 | 410.12 | Access to Other Boxes. | 8 |
| 63 | 410 Part XVI | Special Provisions for Horticultural Lighting Equipment. | 8 |
| 64 | 422.50 | Ground-Fault Circuit-Interrupter (GFCI) Protection for Personnel. | 8 |
| 65 | 518.60 | Illumination. | 8 |
| 66 | 590.4(G) | Splices. | 8 |
| 67 | 590.8 | Overcurrent Protective Devices. | 8 |
| 68 | 680.40 | Inspections After Installation. | 8 |
| 69 | 680.21(C) & (D) | GFCI Protection. | 8 |
| 70 | 690.12(B)(2) | Rapid Shutdown. Inside the Array Boundary. | 8 |
| 71 | 690.31(D) | Direct-Current Circuits on or in Buildings. | 8 |
| 72 | 700.12(I)(2) | Installation of Unit Equipment. | 8 |
| 73 | 700.16(B) | System Reliability. | 8 |
| 74 | 705.12 | Load-Side Source Connections. | 8 |
| 75 | 725.144(B) | Use of Class 2-LP or Class 3-LP Cables to Transmit Power and Data. | 8 |
| NFPA 70E Electrical Safety | | | |
| 76 | 90.2 | NFPA 70E Purpose and Scope. | 8 |
| 77 | 100 | Article 100 Definitions. Arc Rating. | 8 |
| 78 | 100 | Article 100 Definitions. Boundary, Arc Flash. | 8 |
| 79 | 100 | Article 100 Definitions. Boundary, Limited and Restricted Approach. | 8 |
| 80 | 100 | Article 100 Definitions. Incident Energy. | 8 |
| 81 | 100 | Article 100 Definitions. Qualified Person. | 8 |
| 82 | 100 | Article 100 Definitions. Working Distance. | 8 |
| 83 | 110.5(I) | Job Safety Planning and Job Briefing. | 8 |
| 84 | 110.6(A)(1) | Training Requirements. Qualified Person. | 8 |
| 85 | 110.8 | Test Instruments and Equipment. | 8 |
| 86 | 110.8(E) | Operation Verification. | 8 |
| 87 | 120.4(A)(4) | Simple Lockout/Tagout Procedure. | 8 |
| 88 | 120.4(A)(5) | Complex Lockout/Tagout Procedure. | 8 |
| 89 | 120.4(B)(1-3) | Elements of Control. | 8 |
| 90 | 120.4(B)(4-6) | Elements of Control. | 8 |
| 91 | 120.4(B)(7) | Temporary Protective Grounding. | 8 |
| 92 | 120.4(B)(11) | Lockout/Tagout Application. | 8 |
| 93 | 120.5(1-6) | Process for Establishing and Verifying an Electrically Safe Work Condition. | 8 |
| 94 | 120.5(7) | Testing for Absence of Voltage. | 8 |
| 95 | 130.2(B) | Elements of an Energized Electrical Work Permit. | 8 |
| 96 | 130.4(E) | Shock Protection Boundaries. | 8 |
| 97 | Table 130.4(E)(a) | Shock Protection Approach Boundaries. | 8 |
| 98 | 130.5(C) | Estimate of the Likelihood of Occurrence of an Arc Flash Incident for ac and dc Systems. Exercise 1. | 8 |
| 99 | 130.7(C)(15)(a) | Arc-Flash Hazard PPE Categories for Alternating Current (ac) Systems. Exercise 1. | 8 |
| 100 | 130.7(C)(15)(c) | Protective Clothing and Personal Protective Equipment (PPE). | 8 |
| Total Time (In minutes): | | | 800 |
| UT 16 Hours Time Requirement | | | 16 Hours (800 Minutes) |