

16 Hours For 2022 License Renewal (2020 NEC Changes) (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
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	90.20	NFPA 70E Purpose and Scope.	8
77	100.00	Article 100 Definitions. Arc Rating.	8
78	100.00	Article 100 Definitions. Boundary, Arc Flash.	8
79	100	Article 100 Definitions. Boundary, Limited and Restricted Approach.	8
80	100.00	Article 100 Definitions. Incident Energy.	8
81	100.00	Article 100 Definitions. Qualified Person.	8
82	100.00	Article 100 Definitions. Working Distance.	8
83	110.1(I)	Job Safety Planning and Job Briefing.	8
84	110.2(A)(1)	Training Requirements. Qualified Person.	8
85	110.4	Test Instruments and Equipment.	8
86	110.4(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)	Energized Electrical Work Permit.	8
96	130.4	Shock Protection Boundaries.	8
97	Table 130.4(D)(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 8 Hours Time Requirement			16 Hours (800 Minutes)