



Course Name	2023 NEC Changes Part 2
Credit Hours	8 Hours
Instructor(s)	Jerry Durham
Fee	\$95.00
Reference Materials	NFPA 70 National Electrical Code 2023 Edition

Course Description

This online course reviews the last 100 of the most important changes to the 2023 National Electrical Code. Changes from Section 406 through Annex K will be covered.

Learning Objectives

At the completion of the course, licensees will be able to:

- List new locations requiring tamper-resistant receptacles.
- Outline new requirements for receptacles, cord connectors, and attachment plugs found in Chapter 4 of the 2023 NEC.
- Describe new requirements for switchboards, switchgear, and panelboards found in Chapter 4 of the 2023 NEC.
- Identify changes for luminaires, lampholders, and lamps in Chapter 4 of the 2023 NEC.
- Describe changes and additions to appliance requirements found in Chapter 4 of the 2023 NEC.
- Identify updates, additions, and changes to Chapter 5 of the 2023 National Electrical Code.
- Describe the changes to Class III Division 1 and Division 2 locations found in Chapter 5 of the 2023 NEC.
- Outline new requirements for protection of electrical and electronic equipment in hazardous locations.
- Identify changes to threading in explosion-proof or dust ignition-proof equipment.
- Describe changes to permission for flexible connections and restricted industrial establishments in Class I, Division 1 and Division 2 locations.
- Identify new requirements for bonding cable trays, metal strut, angles, and channels found in Chapter 5 of the 2023 NEC.
- Outline new wiring methods for Class III Division 1 locations.
- Explain the new requirements for cannabis oil equipment and cannabis oil systems using flammable materials found in Chapter 5 of the 2023 NEC.
- Identify changes in requirements for electrical construction and installation criteria in health care facilities.
- Describe new and changed requirements for agricultural buildings in Chapter 5 of the 2023 NEC.

- Identify changes to requirements for mobile homes, manufactured homes, and mobile home parks.
- Outline new requirements for RVs and RE parks.
- Identify updates, additions, and changes to Chapter 6 of the 2023 National Electrical Code.
- Describe new and changed requirements for branch circuits for car lights, machine rooms, controls rooms, machine spaces, control spaces and truss interiors.
- Outline new and changed requirements for electric vehicle power transfer systems found in Chapter 6 of the 2023 NEC.
- Define the change in scope for Article 626: Electrified Truck Parking Spaces.
- Explain the new and changed requirements for construction and installation of electrical wiring for swimming pools, fountains, and similar installations.
- Identify changed requirements for labeling of photovoltaic equipment floating on bodies of water and rapid shutdown of PV system circuits.
- Define the change in scope for Article 695: Fire Pumps.
- Identify updates, additions, and changes to Chapter 7 of the 2023 National Electrical Code.
- Outline new and changed requirements for emergency systems in Chapter 7 of the 2023 NEC.
- Define the changes in scope for Article 701: Legally Required Standby Systems.
- Identify changed requirements concerning signage and portable generators for optional standby systems found in Chapter 7 of the 2023 NEC.
- Describe new wiring requirements for Class 4 fault-managed power systems.
- Summarize the requirements for Class 1 power-limited circuits and Class 1 power-limited remote-control and signaling circuits covered in Article 724.
- Summarize the requirements for Class 2 and Class 3 power-limited circuits covered in Article 725.
- Outline revisions made to the listing requirements for energy management systems found in Chapter 7 of the 2023 NEC.
- Identify changed requirements for installation of circuits and supply-side overvoltage protection in fire alarm systems.
- Identify updates, additions, and changes to Chapter 8, Chapter 9, and the Annexes of the 2023 National Electrical Code.
- Describe changes in how Chapters 1 through 7 apply to Chapter 8 of the 2023 NEC.
- List changes to requirements for bonding conductors and grounding electrode conductors in buildings with and without grounding means.
- Identify new requirements for grounding or bonding of antenna systems.
- Outline new and changed requirements for network-powered broadband communication systems found in Chapter 8 of the 2023 NEC.
- Identify the update regarding measurement of nipples in Table 1 of Chapter 9 of the 2023 NEC.
- Outline new and changed requirements for conduits Annex C of the 2023 NEC.
- Summarize the information regarding use of medical electrical equipment in dwellings and residential board-and-care occupancies covered in Annex K of the 2023 NEC.

Equipment Requirements

You must have an active, working internet connection to access this course online, as well as a platform to access the internet, such as a computer, tablet, or phone. All popular web browsers

are supported, including Google Chrome, Mozilla Firefox, Safari, and Opera. No specialized software, speaker, microphone, or web camera is required.

Schedule and Location

This course is available online at any time at www.JadeLearning.com. Upon enrolling in the course, students will have access until the agency-issued course expiration date. After the access expiration date, the course will be removed from the student's account and any progress in the course will be lost. Before the access expiration date, the student may sign in and out of the course as many times as needed to complete the course.

Student Support

Both general and technical support is available to the student before, during, and after taking the course online. Students have access to general customer support via phone, chat, and email. Students have access to the course instructor via a contact form in the course and email. All questions, concerns, and comments received will be responded to within one business day.

Participation/Interactivity Verification

Inactivity Timer - Students are automatically logged out of the training after 30 minutes if the system does not sense interactivity (e.g., a mouse click or typing).

Timed Logs - Per our company's record retention policy, each student's every log-in, log-out, and lesson/assessment completion time is tracked and retained as part of the student record.

Assessment - At least one content question is delivered at the bottom of each page of text and the section is not considered complete until the related question has been answered. The licensee must complete all multiple-choice questions with a score of at least 70% in order to get credit for the course. Question choices are randomized so each participant will have a unique testing experience. This course is set up to allow users to go back through the section questions and re-answer questions while they meet the time requirement.

Global Timer - Students will not get credit until they spend a minimum of 400 active minutes total in the course.

Identity Verification

Unique Username/Password - Each student that wants to complete a training course with us must create an account by registering a unique personal email address and password. The student must enter this unique identifier every time they want to access the course after logging out or being logged out.

2023 NEC Changes Part 2 Timed Syllabus

Section	Title	Questions	Minutes
Chapter 4			
1	406.12 Tamper-Resistant Receptacles.	1	5
2	408.4(B) Source of Supply.	1	5
3	408.38 Enclosure.	1	5
4	408.43 Panelboard Orientation.	1	5
5	410.10(D) Bathtub and Shower Areas.	1	5
6	410. Part XVII. Special Provisions for Germicidal Irradiation Luminaires.	1	5
7	422.16(B) Specific Appliances.	1	5
8	422.18 Ceiling-Suspended (Paddle) Fans.	1	5
9	422.22 Utilizing Separable Attachment Fittings.	1	5
10	424.93 Installation.	1	5
11	430.113 Energy from More Than One Source.	1	5
12	440.8 Single Machine and Location.	1	5
13	440.11 General.	1	5
14	445.19 Emergency Shutdown of Prime Mover.	1	5
Chapter 5			
15	500.1 Scope.	1	5
16	500.5(D) Class III Locations.	1	5
17	500.7 Protection Techniques.	1	5
18	500.8(E)(3) Unused Openings.	1	5
19	501.10(A)(2) Flexible Connections.	1	5
20	501.30(B) Bonding.	1	5
21	502.30(B), 503.30(B) Bonding.	1	5
22	503.10(A) Class III, Division 1.	1	5
23	505.8 Protection Techniques.	1	5
24	505.15(C) Zone 2.	1	5
25	505.16(B) Zone 1.	1	5
26	Article 512, Cannabis Oil Equipment and Cannabis Oil Systems Using Flammable Materials.	1	5
27	517.6 Patient Care-Related Electrical Equipment.	1	5
28	517.10(B) Not Covered.	1	5
29	517.14 Panelboard Bonding.	1	5
30	517.20(A) Receptacles and Fixed Equipment.	1	5
31	517.22 Demand Factors.	1	5
32	517.30 Sources of Power.	1	5
33	517.70 Applicability.	1	5
34	518.5 Supply.	1	5
35	547.26 Physical Protection.	1	5
36	547.44 Equipotential Planes and Bonding of Equipotential Planes.	1	5
37	550.16(C)(1) Exposed Non-Current-Carrying Metal Parts.	1	5
38	550.32 Service Equipment.	1	5
39	550.33(A) Feeder Equipment.	1	5
40	551.40(D) Loss of Ground Device.	1	5
41	555.14 Equipotential Planes and Bonding of Equipotential Planes.	1	5
42	555.15 Replacement of Equipment.	1	5
43	555.36(C) Emergency Electrical Disconnect.	1	5
Chapter 6			
44	620.22 Branch Circuits for Car Lighting, Receptacles, Ventilation, Heating, and Air Conditioning.	1	5

45	620.23 Branch Circuits for Machine Room, Control Room/Machinery Space, Control Space, or Truss Interior Lighting and Receptacle(s).	1	5
46	625.40 Electric Vehicle Branch Circuit.	1	5
47	625.42 Rating.	1	5
48	625.43 Disconnecting Means.	1	5
49	625.49 Island Mode.	1	5
50	625.102 Installation.	1	5
51	626.1 Scope.	1	5
52	630.8 Ground-Fault Circuit-Interrupter Protection for Personnel.	1	5
53	646.19 Entrance to and Egress from Working Space.	1	5
54	680.5 GFCI and Special Purpose GFCI (SPGFCI) Protection.	1	5
55	680.12 Equipment Rooms, Vaults, and Pits.	1	5
56	680.21(D) Pool Pump Motor Replacement.	1	5
57	680.22(A) Receptacles.	1	5
58	680.26 Equipotential Bonding.	1	5
59	680.32 Ground Fault Protection Required.	1	5
60	680.43 Indoor Installations.	1	5
61	680.54(B),(C), Bonding, Equipotential Bonding of Splash Pads.	1	5
62	680.58 GFCI, SPGFCI Protection for Adjacent Receptacle Outlets.	1	5
63	680.59 GFCI and SPGFCI Protection for Permanently Installed Nonsubmersible Pumps.	1	5
64	680.83 Equipotential Bonding.	1	5
65	690.4(G) PV Equipment Floating on Bodies of Water.	1	5
66	690.12(D) Buildings with Rapid Shutdown.	1	5
67	694.7 Construction and Maintenance.	1	5
68	695.1 Fire Pumps. Scope.	1	5
Chapter 7			
69	700.3 Tests and Maintenance.	1	5
70	700.4(B) Selective Load Management.	1	5
71	700.11 Wiring, Class-2-Powered Emergency Lighting Systems.	1	5
72	700.12(C) Supply Duration.	1	5
73	700.12(E) Stored-Energy Power Supply Systems (SEPS).	1	5
74	701.1 Scope.	1	5
75	701.12(C)(3) Public Gas System, Municipal Water Supply.	1	5
76	701.32 Selective Coordination.	1	5
77	702.7(A) Standby.	1	5
78	702.12(B) Portable Generators 15kw or Less.	1	5
79	705.10 Identification of Power Sources.	1	5
80	706.7 Commissioning and Maintenance.	1	5
81	Article 724, Class 1 Power-Limited Circuits and Class 1 Power-Limited Remote-Control and Signaling Circuits.	1	5
82	Article 725, Class 2 and Class 3 Power-Limited Circuits.	1	5
83	725.3(A) Spread of Fire or Products of Combustion.	1	5
84	Article 726, Class 4 Fault-Managed Power Systems.	1	5
85	750.6 Listing.	1	5
86	760.24 Mechanical Execution of Work.	1	5
87	760.33 Supply-Side Overvoltage Protection.	1	5
Chapter 8			
88	800.3 Other Articles.	1	5
89	800.100(B)(2) Electrode. In Buildings or Structures with Grounding Means.	1	5
90	800.100(B)(3) In Buildings or Structures Without an Intersystem Bonding Termination or Grounding Means.	1	5
91	800.113 Installation of Cables Used for Communication Circuits, Communications Wires, Cable Routing Assemblies, and Communications Raceways.	1	5

92	800.179 Wires and Cables.	1	5
93	810.15 Grounding or Bonding.	1	5
94	830.40(B) Low-Power Circuits.	1	5
95	830.47 Underground Network-Powered Broadband Communications Cables Entering Buildings.	1	5
96	830.133(C) Splicing of Medium-Powered Network-Powered Communications Cables.	1	5
97	830.160 Bends.	1	5
Chapter 9 and Annexes			
98	Chapter 9, Table 1.	1	5
99	Annex C, Table C.1 Conduit, Tubing, and Cable Tray Fill Tables for Conductors and Fixture Wires of the Same Size.	1	5
100	Annex K, Use of Medical Electrical Equipment in Dwellings and Residential Board-and-Care Occupancies.	1	5
Totals:		100	500
Student Minimum Time Required:			400