

2023 NEC Significant Changes Course Outline:

This course is scheduled for an 8-hour presentation that will include an overview of the significant changes to 2023 National Electrical Code. The program objective will provide an understanding of significant changes to the 2023 NEC and proper application thereof to help prepare attendees with understanding those changes as North Dakota moves forward and adopts the 2023 NEC. The program will use the IAEI Analysis of Changes PowerPoint presentation and be presented by Scott Halle, the Training and Compliance Administrator for the North Dakota State Electrical Board.

Class start time 8:00 AM

Introduction and course outline and expectations: 10 min.

Code-Wide Changes: 10 min.

1. review of changes impacting multiple requirements across the code and relocation of all definitions.

Review of new Articles for the 2023 NEC & Article 90: 10 min.

General Requirements: 30 min.

1. Article 100: review of new and revised definitions.
2. Article 110: review of changes to general installation requirements.

Wiring and Protection: 45 min.

1. Article 210: review changes for branch circuit requirements including countertop receptacle location, minimum circuit requirements, changes to GFCI requirements and show window receptacles.

Break: 15 min.

Resume Wiring and Protection: 75 min.

2. Article 215 and 220: review of changes related to barriers for feeders and load calculations
3. Article 225: review of changes related to feeder disconnects for dwelling units.
4. Article 230 and 240: review of changes related to emergency service disconnects, new surge protection requirements, number of service disconnects and copper clad aluminum conductors.
5. Article 245: New Article for Branch Circuits, Feeders, and Services Over 1000 volts
6. Article 250: review of significant changes related to bonding and grounding requirements and supply side bonding.

Wiring Methods: 45 min.

1. Article 300: review of changes impacting general requirements for wiring methods and materials
2. Article 315: New Article for Medium Voltage Conductors
3. Articles 312 – 370: review changes impacting various wiring methods and materials including Insulated Bus Pipe and Flexible Bus Systems.

Break for Lunch**60 min.****Equipment for General Use:****90 min.**

1. Articles 404 – 406: review changes impacting switch and receptacle terminations, replacements, and bath/shower location restrictions.
2. Articles 408 – 480: review various changes for panelboards, switchboard access, industrial control panels, appliances, motors, air conditioning equipment and generators.

Special Occupancies:**30 min.**

1. Review changes impacting Hazardous (Classified) Locations including commercial repair and storage garages, motor fuel dispensing facilities and spray application, dipping and coating processes.
2. Article 512: New Article for Cannabis Oil Equipment.

Break:**15 min.****Resume Special Occupancies:****25 min.**

3. Article 517: review significant changes impacting health care facilities.
4. Article 555: review changes impacting the scope and protection requirements for Marinas, Boatyards, and Commercial and Noncommercial Docking Facilities.

Special Equipment:**50 min.**

1. Review changes for electric signs, cranes and hoists and elevators.
2. Article 625: review significant changes impacting electric vehicles including requirements for wireless charging technology.
3. Article 680: review of changes affecting swimming pools and similar installations and including SPGFCI protection and splash pad bonding.
4. Article 690: review of new and revised requirements impacting solar photovoltaic installations.

Special Conditions:**20 min.**

1. Review significant changes in Articles 700 – 770 including new information for Class 4 Systems.

Communications Systems:**10 min.**

1. Review significant changes to Articles 800 – 840 .

Class End Time 5:00 PM