



NEC® 2020 Wiring Methods

Outline, Instructor, Presentation and Materials,
Attendance Verification / Certificate of Completion, Learning Objectives, Student Feedback

8 Course Elements, Approximately 1-Hour Each

Element 1 – NEC Overview – NEC® Overview gives a broad overview of how the NEC is formatted. Chapters 1-4 cover general requirements, Chapters 5-7 supplement or modify Chapters 1-7, and Chapter 8 covers Communication Systems. Also discussed are several Tables and Informative Annexes. Included are practice review questions and answers.

Total time: 59 minutes and 47 seconds

Element 2 – Chapter 9 Tables and Informative Annexes continued, Article 100

Definitions, Conductor Ampacity and Derating – Additional Chapter 9 Tables and Informative Annexes are further examined. Many common Article 100 Definitions are addressed that are important to understand to grasp the basic concepts of the NEC®. Finally, the 3 basic steps for determining conductor ampacity and derating are introduced. Included are practice review questions and answers.

Total time: 59 minutes and 56 seconds

Element 3 – Conductor Ampacity and Derating Continued – Conductor Ampacity and Derating continues with the consideration of the temperature ratings of terminations, ambient temperature correction factors, more than 3 current-carrying conductors in the same raceway, flexible cords and cables, and neutral conductors. Included are practice review questions and answers.

Total time: 59 minutes and 38 seconds

Element 4 – Conductor Ampacity and Derating Continued – Conductor Ampacity and Derating continues with Non-Metallic Sheathed Cable as well as many examples of applying the correction factors previously discussed. Included are practice questions and answers.

Total time: 57 minutes and 14 seconds

Element 5 – Conductor Ampacity and Derating Continued – Conductor Ampacity and Derating continues with sizing dwelling unit service conductors, flexible cords and cables, continuous loads, MC, and AC Cables, and using several additional ampacity Tables. Included are practice questions and answers.

Total time: 51 minutes and 21 seconds

Element 6 – Sizing Overcurrent Devices and Conductors – Sizing overcurrent devices rated 800 amperes or less and sizing overcurrent devices rated over 800 amperes as well as the conductors are discussed. Included are practice questions and answers.

Total time: 50 minutes and 58 seconds

Element 7 – Conduit and Tubing Fill including Nipples, Metal Wireways –

Conduit and Tubing Fill covers conductor fill based on Tables 1, 4, 5, and 5A of Chapter 9 and Informative Annex C. Also discussed is conductor fill for various type of nipples as well as Metal Wireways. Included are practice questions and answers.

Total time: 56 minutes and 24 seconds

Element 8 – Sizing Junction Boxes, Sizing Pull Boxes –

Sizing Junction Boxes and Sizing Pull Boxes illustrates how to size junction boxes that contain conductors ranging in size from 18 AWG through 6 AWG. Sizing pull boxes illustrates how to size junction boxes that contain conductors 4 AWG or larger. Also discussed is proper sizing of conduit bodies. Included are practice questions and answers.

Total time: 57 minutes and 18 seconds

Instructor

Larry D. Bobo has more than 40 years of experience working as an electrical contractor, business manager, general superintendent, project manager, service manager, estimator, foreman, and electrician. Larry has been conducting National Electrical Code and Continuing Education Workshops for over 30 years. Larry is a licensed Master Electrician in the state of Colorado (CO ME.0003118), is an education committee member, and instructor, for the International Association of Electrical Inspectors (IAEI) Rocky Mountain Chapter, and is certified by the Department of Labor and Industries for the state of Washington as an Electrical Administrator (AD BOBO*LD865QK).

Course Presentation and Materials

All training is based on the NEC and conducted by Larry D. Bobo. This course is presented in PowerPoint and includes over 300 slides with Code references, photographs, professional graphics, and pop-quiz questions. It is required that each student have their NEC® 2020 Codebook handy for reference during training.

Please visit our website to view a 5-minute sample of how this workshop is presented online.

Go to: **bobotechnologies.com/online-courses** Then select: **Introduction Video**

Attendance Verification / Certificate of Completion

Through our online host, Digital Chalk, we can see who has registered for the course, and what their level of completion is. Each student creates an account and can complete the course at their own pace; we always recommend at least 1 Element, or hour, per session. Interaction with the course is required via questions, or “checkpoints,” placed randomly throughout each 1-hour Element. Failure to respond to the question will stop the course from advancing. A certificate is generated upon completion of all 8 hours. Each certificate includes the student name, license number, course title, course ID, and our provider information.

Learning Objectives

Our objective is to provide NEC training that is current and engaging. We highlight areas of the NEC that have changed from previous editions, emphasizing those areas that directly affect the electrician in the field.

Student Comments/Feedback

We have a “Feedback” link on our website, and also thru our online host; we encourage each student to let us know how we did; where we got it right, and what we can improve upon.