



<b>Course Name</b>	Equipment Grounding & Bonding (2020 NEC)
<b>Credit Hours</b>	4 Hours
<b>Course Description</b>	<p>This course will cover equipment grounding and bonding according to the 2020 National Electrical Code. The following topics will be covered: general grounding and bonding, equipment grounding and bonding conductors, methods of equipment grounding, grounding and bonding circuits of 1000 volts, and general application of equipment grounding and bonding. This course is designed for licensed electricians and has no prerequisites.</p>
<b>Reference Materials</b>	NFPA 70 National Electrical Code 2020 Edition
<b>Learning Outcomes</b>	<p>At the completion of the course, learners will to be able to:</p> <ul style="list-style-type: none"><li>• Define the term bonding jumper for equipment.</li><li>• Describe equipment grounding and bonding requirements for a second building.</li><li>• Describe why raceways in a hazardous location are required to be bonded together.</li><li>• Identify which conditions require grounding.</li><li>• Interpret Table 250.122 for minimum size equipment grounding conductors for grounding raceway and equipment.</li><li>• List five acceptable connections for a grounding-type receptacle when replacing a nongrounding receptacle.</li><li>• Identify where a grounded circuit conductor can ground non-current-carrying metal parts of equipment.</li><li>• Describe the general grounding requirements for non-current-carrying metal parts of equipment operating at over 1000 volts.</li><li>• Identify grounding and bonding requirements for aluminum and bare conductors.</li><li>• Identify equipment grounding and bonding requirements for luminaires.</li><li>• Describe equipment grounding and bonding requirements for patient care facilities.</li></ul>

- Describe equipment grounding and bonding requirements for swimming pools.

**Course Timed Syllabus**

Attached

**Method of Presentation**

This online course uses text and graphics. Multiple choice questions are used to test how well the student understands the material. Each answer choice has a response which tells the student whether the selected answer is correct or not. A running score is displayed so each person can track their progress through the class. The learning event is asynchronous and formatted as a visual lecture.

**Attendance Verification**

This course uses personal identification questions to verify attendance. A set of five simple personal ID questions are asked of a licensee before they start a course and then again, randomly, throughout the course (at least one question is asked every 30 minutes). All questions have four preset answer choices. The licensee must answer in the same way as they did at the start of the course to be able to continue training.

This course employs an inactivity timer, which will automatically log a licensee out of the training if the system does not sense a mouse click within 30 minutes. At the end of the course, the licensee must affirm their name, that they are the one who completed the course, and verify that their registration information is correct.

**Method of Assessment**

The licensee must complete all 51 multiple choice questions with a score of at least 75% in order to get credit for the course. Question choices are randomized, so each participant will have a unique testing experience. The course is also timed; participants will not get credit until they spend at least 200 active minutes in the course. Lastly, 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.

**Schedule and Location**

This course may be taken at any time at [www.JadeLearning.com](http://www.JadeLearning.com). The student may sign in and out of the course as many times as needed to complete the course.

**Online Review Access**

To review this course, go to [www.JadeLearning.com](http://www.JadeLearning.com). Click on the orange Login button on the top right and sign into the learning system using the login information below.

Username: UTEtester

Password: UTEtester

**Cost**

\$55.00

**Instructor(s)**

Jerry Durham