

Overcurrent Protection (2020 NEC) **Course Name**

Credit Hours 4 Hours

Course Description This course will cover overcurrent protection definitions in

2020 NEC and requirements in the 2020 NEC for electrical installations with regards to overcurrent protection, including circuits, temperature, conductors, feeder taps, transformers, plugs, fuses, fuseholders, panelboards, appliances, motor circuits, circuit breakers, flexible cords,

cables, and fixture wires.

Reference Materials NFPA 70 National Electrical Code 2020 Edition

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

- Describe the main purpose of overcurrent protection.
- Define five terms relevant to overcurrent protection.
- Explain how to determine the minimum interrupting rating using available fault current.
- Interpret Table 310.16 in the 2020 National Electrical Code.
- Identify when ground fault protection is required for equipment.
- Calculate the minimum ampacity required for feeder taps.
- List the ampacity requirements for transformer secondary conductors.
- List the 2020 National Electrical Code requirements and applications for circuit breakers.
- Explain how a supervised industrial location affects overcurrent protection requirements.
- Identify when an overcurrent device is permitted to be installed in the grounded conductor.
- List and describe four specific rules for overcurrent devices installed in panelboards.
- List the steps to size a motor feeder overcurrent protective device.
- Identify the required overcurrent protection for transformers.
- List the locations where GFCI receptacles must be installed.
- Identify where AFCI protection is required.

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 also 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 50 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. 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. 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 \$49.00