

CompEx NEC 500 Hazardous Area Competency Modules Ex01–04 training course



This course provides competence-based training and assessment for electrical and instrumentation personnel working in hazardous areas. The instructor-led knowledge reinforcement training takes place in a classroom environment.

The focus of this training is NFPA 70 2014, NEC 500 Code of Practice, API RP 500 for Area Classification, and API RP 14F Recommended Practice for Class and Division Electrical Equipment Installation.

Practical “hands-on” training and assessment takes place in a realistic simulated environment, giving attendees a comprehensive learning experience that will transfer to their working setting and enhance the real-world experience.

Ex01

Candidates demonstrate ability to select appropriate conduit components and cable glands for use in Class I, Division 1 & 2, explosive atmosphere applications. Each candidate is required to complete a partial-installation of Ex devices used for power and control circuits in Class I, Division 1 & 2 locations. This exercise uses protection types ExP and NI.

Ex02

Each student is required to perform a Hazardous Area Equipment Inspection to identify pre-prepared installation errors. Pre-installed Ex devices using protection types ExP and NI in Ex devices used for power and control circuits in Class I, Division 1 & 2 locations.

Ex03

Students complete a partial installation of Ex devices using the Intrinsic Safety (IS) system protection concept as used in Class I, Division 1 & 2 locations. They are observed and assessed while completing their work for the proper use methodology and installation requirements.

Ex04

Students perform inspections that identify installation errors in IS devices used for instrumentation and control circuits in Class I, Division 1 & 2 locations.

Course objectives

Upon completion of the NEC 500 Hazardous Area Electrical Training course, the student will be able to:

- Demonstrate installation and inspection skills in hazardous areas
- Understand basics of explosive atmosphere protection methods used under the NEC 500 Standard practice and where each may be used
- Demonstrate understanding of equipment markings
- Understand which activities are and are not allowed with regards to maintenance and repairs required to be placed on equipment

Learning techniques

In order to provide the highest quality training experience, this course will consist of the following instructional elements:

- **Instructor-led presentation**
The core elements will be presented in a classroom environment.
- **Lab exercises**
Practical demonstrations of skill will be completed by the student in a realistic lab environment.
- **Final exam**
The final exam will be a time-restricted multiple choice test with 60 questions chosen from a test bank and will be administered locally via an online service. Lab assessments will also be administered.

Course details

Course number

AH – CMP 500

Target audience

Electrical installation and inspection personnel using the Class and Division concept in the USA (NFPA 70, Articles 500–508).

Location

Eaton Experience Center

3413 N. Sam Houston Parkway West
Suite 212A
Houston, TX 77086

Duration

5 days, 8 a.m. to 4 p.m.

Prerequisites

Candidates must provide documentation of experience in working in or around hazardous areas (explosive atmospheres), or provide a letter from their employer stating that the person is employed and required to work in such locations.

Certification issued

The attendee will receive a JTL Certificate of Core Competency for CompEx NEC500 certificate upon successful completion of the assessment and online examination. The certificate is valid for 5 years.

To register, visit
Eaton.com/EECTraining