

# CompEx Design Ex12 training course



Ex12 was developed in 2011 with an Industry Working Group to deliver a Competency Certificate to professional application design engineers to ensure they understand the risks of potentially explosive atmospheres and select the appropriate electrical equipment.

Ex12 meets the competency requirements of IEC 60079-14 for designers (design and selection).

The course consists of classroom-based theoretical training, individual exercises, group exercises and written assignments.

Exercises contain scenarios where equipment selection, markings and environmental protection is relevant. The course also includes the intrinsically safe system concept and associated calculations required to ensure correct and safe installation is achieved.

## Course objectives

Upon completion of the CompEx Design Ex12 course, the student will be able to demonstrate:

- Understanding of Ex markings
- Ability to select Ex equipment based on area classification
- Perform IS Loop calculations for single barrier
- Define proper installation methodology based on method of protection

## 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 of skill will be presented and demonstrated in a classroom environment. Lab exercises and practical demonstrations of skill will be accomplished by the student.
- **Assessments**  
Multiple choice and written exams will be administered throughout the course. The final exams are in written form and will be administered on the final day.
- **Documentation**  
The attendee will receive an attendance certificate from ATEC. Upon successful completion of the JTL exams, the attendee will receive a certificate that is valid for 5 years.

## Course details

### Course number

AH / AS / AD-CMP-412

### Target audience

Candidates should have experience and exposure to explosive environments or exposure to Ex equipment, a solid background on explosive atmospheres and area classification would be essential to complete the course.

### 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

Proof of electrical qualification by employer letter or copy of IEC 60079-14.

### Certification issued

Certificate of Competence issued by JTL. Valid for 5 years; Certificate of Attendance.

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