

## Certified Excavations and Trenching Construction Safety Specialist (CETS)

32 Hours / 3.6 CEU,s

Course Fees: \$895.00

Note: Refresher certification is required every three years to maintain professional credential.

Renewal Fee: \$150.00

### Course Introduction:

Cave-ins are perhaps the most feared trenching hazard. But other potentially fatal hazards exist, including asphyxiation due to lack of oxygen in a confined space, inhalation of toxic fumes, drowning, etc. Electrocutation or explosions can occur when workers contact underground utilities. OSHA requires that workers in trenches and excavations be protected, and that safety and health programs address the variety of hazards they face.

### Learning Outcome:

Upon successful completion of this course, the student will be able to identify safety and health concerns as they relate to excavations & trenches. Students will also gain knowledge in practical soil mechanics and its relationship to the stability of shored and unshored slopes and walls of excavations, be introduced to various types of shoring (wood timbers and hydraulic), soil classification, and use of protective systems.

Testing methods are demonstrated and students participate in workshops in the use of instruments such as penetrometers, torvane shears, and engineering rods. Upon course completion students will have the ability to assess their employer's compliance with the OSHA Excavation standard, utilize soil testing methods to classify soil types, protective systems for excavation operations, and training requirements

Course Topics: This course covers OSHA standard 1926 subpart P as it relates to:

- Soil classification
- Sloping and benching

- Timber shoring
- Aluminium hydraulic shoring
- Requirements for protective systems
- Manufactured tabulated data
- Site specific engineering
- General requirements and competent person responsibilities

This course also covers the 29 CFR 1910.146 standard as it relates to:

- Identifying permit requirements for confined spaces
- Use of gas monitoring equipment
- Proper ventilation of confined space
- Alternate entry procedures

#### Audience

- Construction Managers
- Construction Workers
- Building Contractors
- Safety and health professionals
- Supervisors Training Managers
- Industrial Hygienists

Testing: Students completing the course must take a proctored final exam. A score of 80% on the final exam is necessary to receive your professional credential. The student gets three (3) attempts to pass the course.