

# Mathematics for Construction

Mathematics for Construction presents mathematical concepts as they apply to realistic construction-related examples and actual construction applications. The concepts progress from simple to those with relatively complex solutions. Many of the problems require participants to work with illustrations, such as those found on the construction job site, in trade and building code books, and on architectural drawings.

## Objective

The objective of this course is to provide participants with a simple approach to solving mathematical problems found on architectural drawings and within building codes and to apply the solutions to their job function.

## Who Should Attend

This course is designed to benefit entry-level carpenters, masonry and concrete workers, plumbers, roofers, drywall installers and electricians.

## Course Content

- Basic math
- Shapes & operations
- Concrete
- Concrete blocks
- Board feet
- Base material & asphalt
- Tanks
- Cones
- Land measurement
- Contractor's instruments
- Yardage
- Cubic inches in a motor
- Speed
- Elevations and contours
- Construction terms

Course length: 1 day  
CEU credits: 0.8  
Fee: \$205



# OSHA 10-Hour for Construction

(English or Spanish)

This course combines one-hour modules to bring the attendee a relevant course addressing employee safety and health awareness. Attendees will be introduced to OSHA policies, procedures, and standards, as well as construction industry safety and health principles. Upon completion of this course, the attendee will be able to identify the common causes of accidents and fatalities in hazardous areas of construction as well as to identify abatement techniques for hazards found in construction.

## Objective

The purpose of this course is to train construction personnel in OSHA construction standards with an overall goal of reducing accidents at the work site.

## Who Should Attend

This course is designed to benefit entry-level carpenters, masonry and concrete workers, plumbers, roofers, drywall installers and electricians.

## Course Content

- Introduction to OSHA, OSHA Act/General Duty Clause 5(a)(1), and Subpart C: General safety and health provisions, competent person
- Subpart K: Electrical
- Subpart M: Fall protection
- Struck by and caught in/between
- Subpart E: Personal protective equipment
- Subpart H: Material handling, storage use and disposal
- Subpart I: Tools, hand & power
- Subpart L: Scaffolding
- Subpart N: Cranes, derricks, hoists, elevators and conveyors
- Subpart P: Excavations
- Subpart X: Stairways & ladders
- Lead & asbestos hazards in construction
- Subpart Z: Toxic & hazardous substances

Course length: 10 hours  
CEU credits: 1.0  
Fee: \$185



*"PCC's safety training has been a **big help** to our employees. All our guys not only have taken the training - I've heard them refer to what they learned while on the job. This means they absorbed the concepts and this is amazing! The classes were **"hands on"** and kept their interest plus the lessons have spilled over into their work. You can't ask for **better results.** When are the next classes?"*

CARLA M. BARELA  
President  
Cortez Construction Co., Inc.

## Print Reading for Construction

This course will introduce participants to reading and interpreting blueprints for residential, commercial, and industrial construction. In addition, a general overview of the construction standards used in each area will be discussed.

### Objective

Upon completion, this course will provide the fundamentals that are critical for an individual, in a construction environment, to have when interfacing with foremen, contractors and, in some cases, architects.

### Who Should Attend

This course is designed to benefit entry-level carpenters, masonry and concrete workers, plumbers, roofers, drywall installers, and electricians.

### Course Content

- Introducing & working with drawing prints
- Basics of working drawings
- Symbols & abbreviations
- Floor plans
- Elevation views
- Sectional views
- Detail views
- Trade information
- Construction materials
- Plans
- Specifications
- Plans - store & apartment
- Light frame construction
- Frame plans
- Wendy's Restaurant plans and specs



Course length: 1 day  
CEU credits: 0.8  
Fee: \$205

## OSHA 30-Hour for Construction

(English or Spanish)

This is a 30-hour comprehensive course intended for entry level employees and those in supervisory positions. This OSHA-approved curriculum includes 24 hours of required topics which may be expanded upon to complete the required 30 hours, or supplemented with other topics appropriate for construction. Participants who attend the required time and pass a final examination will receive a certificate of completion from the US Department of Labor, Occupational Safety & Health Administration.

### Objective

The purpose of this 30-hour training course is to explain current regulations and promote compliance with those regulations.

### Who Should Attend

Course is designed to benefit anyone who wants to gain hands-on skills to better meet OSHA regulations and build an employee training program that fulfills OSHA requirements and qualify for 30 hours of voluntary OSHA compliance training.

### Course Content

- Subpart C: General safety and health provisions, competent person
- Subpart D: Occupational health and environmental controls

- Subpart D: Health hazards in construction
- Subpart E: Personal protective equipment
- Subpart F: Fire protection and prevention
- Subpart H: Materials handling, storage, use and disposal
- Subpart I: Tools, hand & power
- Subpart J: Welding and cutting
- Subpart K: Electrical
- Subpart L: Scaffolding
- Subpart N: Cranes, derricks, hoists, elevators and conveyors
- Subpart O, W, and G: Motor vehicles, mechanized equipment and marine operations; rollover protective structures and overhead protection; and signs, signals and barricades
- Subpart P: Excavations
- Subpart Q: Concrete and masonry construction
- Subpart X: Stairways and ladders
- Confined space entry
- Health hazards in construction
- Struck by
- Caught in/between

### Elective Topics

- Subpart R: Steel erection
- Process Safety Management
- Lead hazards in construction
- 29 CFR 1904, Recordkeeping, OSHA Form 300



Course length: 30 hours  
CEU credits: 3.0  
Fee: \$470