

## AutoDesk Civil 3D 2013

This course is designed for the professional who utilizes this state-of-the-art application software and is looking for outstanding drafting, mapping, and analysis efficiency as well as productivity. AutoDesk Civil 3D incorporates all the features of Map 3D and Land Development Desktop. This course emphasizes the use of points, point groups, 2D geometry, alignments, profiles, cross sections, parcels surfaces, contours, spot shots and labels.

### Objective

This course is designed to provide the attendee with the fundamentals associated with AutoDesk Civil 3D 2007. After completing this course, the participants will have a better understanding of the areas that this software can positively impact in their operations and efficiency.

### Who Should Attend

This course is designed to benefit the entry level civil engineer or technician seeking a better understanding of this powerful application software. This course is also useful for the person needing an update refresher on the features of this release.

### Course Content

- Components and interface of Civil 3D
- Point identification and utilization
- Land geometry, distances and bearings
- 3D surface modeling
- Profiles and Sections
- Site grading and design
- Piping for storm sewers and drainage
- Surveying

Course length: 3 days

CEU credits: 2.4

Fee: \$629



## 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: \$249



## 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
- Civil Drawings

Course length: 1 day

CEU credits: 0.8

Fee: \$249



## AutoCAD 2012

Productivity – it is mission critical for an industry that creates, consumes or manages design information. A new standard in CAD productivity began with AutoCAD 2004 software release and has been growing exponentially. AutoCAD's new features, the ribbon menu and more user friendly designed applications make this software easy to use today but many students still feel the need for assistance in navigating the program.

### Objective

This course is designed to provide the attendee with the fundamentals associated with AutoCAD 2012. After completing this course, the participants will have a better understanding of the areas that this software can positively impact in their operations and efficiency.

### Who Should Attend

This course is designed to benefit the entry level drafters, machinists, architects, engineers, designers, technicians and other staff who need to improve their skills and familiarity with this powerful design software. This course is also useful for the person needing an update refresher on the features of this release.

### Course Content

- Drawing commands
- Modifying commands
- Layers, colors, linetypes & other property features
- Annotation including text & dimensioning
- Block creation & insertion
- Inquiry tools
- Plotting
- Paper space vs. model space

Course length: 4 days

CEU credits: 3.2

Fee: \$799

