

Course Descriptions - Summer 2023

Applied Construction Math

TECM 1001

10 Sessions

40 Hours

Prerequisite: None Required

This course is designed for students who need a refresher in basic math skills. Upon completion, this course will provide an understanding of fundamental operations using whole numbers, fractions, decimals and percentages. Basic math skills are strengthened through applications found in the construction industry. Students are introduced to logical problem solving.

Basic Commercial Blueprint Reading

DFTG 1023

10 Sessions

30 Hours

Prerequisite: None required.

This course is designed for office, field and professional support staff. Topics include: Evolution of the Construction Project (The Development of the Drawings & Specifications); Background Principles (Cracking the Code); Drawing Types Used in All Categories Drawings; Reading Drawings for Information; Overview of Architectural MEP Drawings and Specifications.

Basic to Advanced Welding Skills

WLDG 1000

12 Sessions

48 Hours

This course will consist of all types of welding from basic cutting to advanced welding. The student is allowed to choose what type of welding process he or she wants to learn. The course is designed to be 99% hands on for the beginning hobbyist to the advanced welder.

Electrical Blueprint Reading

ELPT 2043

12 Sessions

48 Hours

Prerequisite: None Required.

Students will read and understand electrical drawings and specifications; learn to interface with other trade contractors' drawings to avoid installation conflicts; review architectural drawings, details and drawings and elevation drawings as they apply to installation of electrical items.

Electrical Journeyman Prep

ELPT 2001

12 Sessions

48 Hours

Prerequisite (all are required): (1) At least three years experience in Electrical Trade. (2) Basic math skills with ability to solve simple algebraic equations.

This class will consist of: an intensive NEC review of Services and Service Equipment; Wiring Methods and Installation; Cabinets; Panelboards; Switchboards; Boxes and Conduit Bodies; Conductors; Motors and Generators; Utilization Equipment and Devices; Special Occupancies and Uses; Ambient Temperature and Other Conductor Derating Factors; Low Voltage Systems NEC requirements; and Hazardous locations.

Note: Students must have a copy of the 2020 NEC edition.

Electrical Master Prep

ELPT 1040

13 Sessions

52 Hours

Prerequisite (all are required): (1) At least three years experience in Electrical Trade and preferably some classroom hours. (2) Basic math skills with ability to solve simple algebraic equations.

This class will consist of: an intensive NEC review of Services and Service Equipment; Wiring Methods and Installation; Conductors; Special Occupancies and Uses; Ambient Temperature Derating; Electrical Calculations of Single Family, Multi-Family and Two Family Dwellings; and Electrical Calculations of Commercial Structures (i.e. Schools, Offices, Stores, Banks, Marinas, etc.).

Note: Students must have a copy of the 2020 NEC Edition.

English as a Second Language I

COMG 1000

16 Sessions

48 Hours

Prerequisite: None required.

This course prepares students to communicate orally in both public and work environments. Emphasis is placed on developing language functions, pronunciation, listening skills, and improving social and intercultural skills.

NOTE: Test-Out available for Level I at no extra charge.

Este curso prepara al alumno para comunicarse con confianza en situaciones sociales y en el trabajo. Se desarrollan las varias funciones del lenguaje, se mejora la pronunciación y comprensión auditiva y se practica la comunicacion social y transcultural.

Aprobación por medio de examen disponible para Nivel I sin cargo extra.

EXCEL Beginner

ITSW 1058

4 Sessions

12 Hours

Prerequisite: None required.

An introduction to using Microsoft Excel. Topics include: Data entry/editing, Creating formulas and functions, Formatting spreadsheets, Creating charts, Proofreading sheets

EXCEL Intermediate

ITSW 1046

4 Sessions

12 Hours

Prerequisite: None required.

Review basics: (data entry/correction, building formulas/functions, formatting, basic charts), Database features to include: (Sorting, ,Querying, Filtering, Data validation, Subtotals), Using solver, scenarios for what-if analysis, Grouping spreadsheets for fast data entry of repetitive data (such as monthly data), Doing calculations across spreadsheets, Moving data between Word, Excel, and Access, Slightly more advanced charts, Pivot tables and pivot charts, Maybe Hlookup and Vlookup functions

G8 Procore - Trades/Subcontractors

ITSC 1018

4 Sessions

12 Hours

Prerequisite: None required.

Procore is designed to streamline your workflow by connecting the office to the field. After finishing this course, the attendees will have a strong foundation in Procore Project Permissions and Procore Company Permissions. They will know how to create custom fields and custom field sets, how to configure the Correspondence and Action Plan tools, and the best practices for directory management.

Piping Isometric

PFPB 1006

16 Sessions

48 Hours

Prerequisite: None Required

This class defines an Isometric Drawing. It incorporates commercial drawings, mechanical pipe and plumbing details, and shows how to draw in an isometric format. Emphasis is stressed on how to utilize isometrics in construction day to day operations, including planning of material takeoffs, scheduling manpower, equipment, etc.

Procore - Project Managers

ITSC 1018

10 Sessions

30 Hours

Prerequisite: None required.

This class is designed for company employees that have purchased Procore. It will be an in-depth review of the tools most used in a Project Manager role. This includes: Directory, Documents, Tasks, RFIs, Daily Log, Reports, Specifications, Submittals, Drawings, Emails, Correspondence, Schedule, Meetings, Commitments and Change Events. Attendees will be assigned the standard Procore permission for the Project Manager role which may slightly vary from their company permissions.

Procore - Superintendents

ITSC 1043

7 Sessions

20 Hours

Prerequisite: None required.

Procore - Trades/Subcontractors

ITSC 1018

4 Sessions

12 Hours

Prerequisite: None required.

Procore is designed to streamline your workflow by connecting the office to the field. After finishing this course, the attendees will have a strong foundation in Procore Project Permissions and Procore Company Permissions. They will know how to create custom fields and custom field sets, how to configure the Correspondence and Action Plan tools, and the best practices for directory management.

Spanish for Construction Sites

COMG 1011

5 Sessions

16 Hours

Prerequisite: None required

This is a comprehensive Spanish language program that provides immediate access to functional language skills for non-Spanish-speaking construction site personnel. This course will also cover the many issues involved with effectively supervising Spanish-speaking employees. The language component utilizes phonetic encoding to present the most important Spanish commands, questions, and phrases pertinent to the construction site.

STP 1 - Leadership & Motivation

BMGT 1020

6 Sessions

24 Hours

Prerequisite: None Required.

This course will describe the value of effective supervision of workers and improve the construction supervisor's ability to lead and motivate others. Topics include: The Dollar and Sense of People in Construction (The Role of the Construction Supervisor); Helping People Perform Better; Motivating and Leading Others; Positive Feedback; Training and Orienting Crew Members; Team Building; and Leadership Skills in Action.

STP 2 - Communication

BMGT 1022

6 Sessions

24 Hours

Prerequisite: None Required

The course presents a body of knowledge and skills that today's construction supervisors need in order to be effective communicators on their job site. Topics include: Effective Communication; Learning to Listen; Carrying on Conversations; Persuasion; Negotiation and Confrontation; Communicating With Your Crew; Putting It in Writing; Meetings That Work; Electronic Communication; and Improving Communication.

STP 3 - Planning & Scheduling

CNBT 1072

5 Sessions

20 Hours

Prerequisite: None Required.

This course will help construction supervisors understand ways in which planning and scheduling saves time and money, while increasing quality in the construction process. Topics include: Preparing The Project Plan; Communicating The Plan; The Critical Path; Computer Use in Scheduling; Using The Schedule on The Jobsite; Updating The Construction Schedule; The Schedule As Documentation; and Using Planning And Scheduling.

STP 4 - Contract Documents

CNBT 1073

5 Sessions

20 Hours

Prerequisite: None Required.

This course will provide information about contract documents and construction law to help supervisors recognize the roles and responsibilities of all contracted parties, develop and understand how contract documents can be helpful to solve problems and resolve conflicts, and to develop positive relationships between all parties in the construction process. Topics include: Introduction To Contract Documents and Construction Law; Creating a Positive Environment Through Partnering Contractual Relationships; Contract Forms and Documents; Managing General Conditions; Good Documentation Practice Changes; Differing Site Conditions; Time Impacts; and Negotiation of Resolutions.

STP 5 - Improving Productivity & Managing Project Cost

BMGT 1021

8 Sessions

30 Hours

Prerequisite: None Required.

This course will cover: understanding how project estimates are compiled, how to compare actual project costs with those estimated, and how to control costs to meet the estimate. This course also details how productivity is measured, how the supervisor plays a major role in increasing jobsite productivity, and how a small increase in productivity can have a significant impact on the time and cost of a project.

Topics include: Construction Estimates; Who Controls Project Costs; Reporting and Analyzing Actual Costs; Planning for Cost Control cost control strategies; Labor Cost Variances; Working With Project Partners; Managing Risk and Loss Potentials; Cost Control Strategies; Post-Project Evaluations; Benchmarking Construction Productivity; Improving Productivity Through Pre-Planning; New Skills For Effective Supervision; Personnel Management; Equipment Management For Productivity Improvement; Jobsite Productivity; Planning and Scheduling; Quantifying Lost Labor Productivity and Record Keeping; Control, Changes, & Defect Analysis.

STP 6 - Risk Management & Problem Solving

OSHT 1015

6 Sessions

24 Hours

Prerequisite: None Required.

This course will cover the roles and responsibilities of a construction supervisor in accident prevention and loss control. Topics include: Safety Leadership; Communication and Expectations; Planning for Site Safety; Site Safety Management; Site Security and Protection; Multi-Employer Jobsite Safety; Construction Risk Management; Safety and Human Resources; and Regulatory Procedures, Record Keeping & Documents.