

# Course Descriptions - Summer 2022

## Applied Construction Math I

TECM 1001

12 Sessions

48 Hours

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

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 of 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.

## STP 1 - Leadership & Motivation

BMGT 1020

6 Sessions

24 Hours

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; Teams and Team Building; and Leadership Skills in Action.

## STP 2 - Communication

BMGT 1022

6 Sessions

24 Hours

Pre-requisite: 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

Pre-requisite: 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

Pre-requisite: 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, to develop and the understanding of 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 Practices; Changes; Differing Site Conditions; Time Impacts; and Negotiation of Resolutions.

### STP 5 - Improving Productivity & Managing Project Cost

BMGT 1021

8 Sessions

30 Hours

Pre-requisite: None Required

This course covers 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 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 and Defect Analysis.

### STP 6 - Risk Management & Problem Solving

OSHT 1015

6 Sessions

24 Hours

Pre-requisite: 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 Management; Site Security and Protection; Multi-Employer Jobsite Safety; Construction Risk Management; Safety and Human Resources; and Regulatory Procedures, Record Keeping and Documents.