

Course Descriptions - Fall 2024



Applied Construction Math

TECM 1001

16 Sessions

48 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.

Backflow Awareness (16 CEU hours)

PFPB 2000

2 Sessions

16 Hours

Prerequisite: Student must have a current Backflow Prevention Assembly Testers License.

This course offers Texas Commission of Environmental Quality (TCEQ) continuing education hours for those who have already received their BPAT license. The course consists of 16 hours of class and lab work, which will include all new and updated information from the industry and governmental bodies. The class is split with 4 hours in the lab and 12 hours in the classroom. Lunch will be provided.

Note 1: Students must bring a copy of the 10th Edition USC Manual for Cross-Connection Control, as required by TCEQ. Books are available for purchase upon request. Contact the CEF office for book cost and to request a copy PRIOR to the first day of class.

Note 2: This course also meets TCEQ Backflow continuing education requirements for Irrigation/Landscape Inspector License.

Backflow Practical Skills Refresher (8 CEU hours)

PFPB 1000

1 Sessions

8 Hours

Prerequisite: Student must have a current Backflow Prevention Assembly Testers License (BPAT).

This course offers Texas Commission of Environmental Quality (TCEQ) continuing education hours for those who have already received their Backflow Prevention Assembly Testers License (BPAT). The course consists of 8 hours of class and lab work, which will include all new and updated information from the industry and governmental bodies. The class is split with 7 hours in the lab and 1 hour in the classroom. Lunch will be provided.

Note: This course also meets TCEQ Backflow continuing education requirements for Irrigation/Landscape Inspector License.

Backflow Prevention Assembly Tester License

PFPB 1047

5 Sessions

40 Hours

Prerequisite: Student is required to have two (2) years experience in a water related industry such as Plumbing, Sprinkler Fitting, Fire Alarm, Irrigation, etc. This course offers Texas Commission of Environmental Quality (TCEQ) certification in Backflow Prevention, using our new state-of-the-art classrooms and labs with expert instruction that is required for certification and testing of backflow assemblies in the state of Texas. Topics include: The History of Backflow Prevention; Testing and Repair of Assemblies; (RPZA, DCVA, PVB, and SRVB) Cross Connection Control Program With State and Local Ordinance Information and All Related Subjects. This 40-hour course is approved for 8-hour CEU in Customer Service Inspectors License, Irrigator License, Wastewater Operators License, Water Operators License and Water Treatment Specialist License.

Lunch is provided all 5 days.

Note: This course also meets TCEQ Backflow requirements for Irrigation/Landscape Inspector License.

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.

Commercial Field Engineering I

SRVY 1015

16 Sessions

56 Hours

All testing must be completed no later than Friday August 16, 2024.

Prerequisite: English or Spanish Math OR Applied Construction Math class.

NOTE: If the Math test is taken in Spanish, student must take an ESL test as well.

This course will introduce the students with the role of a site layout technician, including drawings used in construction buildings today. Using the Site Layout 1 guide, the course topics will include: Introduction to Site Layout; Surveying Math; Surveying Equipment Use and Care, and Blueprint Reading for Surveyors.

Commercial Field Engineering III

CNBT 1015

18 Sessions

80 Hours

Prerequisite: Commercial Field Engineering II

The course is an overview of the Surveying Field practices as it applies to the Field Engineering profession. It will start with proper equipment, daily schedules, good notes, communicating and end with using the laser properly. The course topics include: Construction Surveying, Communication, Fieldwork Practices, Distance Measurement-Chaining, Angle Measurement, Distance and Angle Measurement, Total Station, Leveling, and Lasers.

Commercial Field Engineering V

SRVY 2048

18 Sessions

80 Hours

Prerequisite: Commercial Field Engineering IV

This course including lab covers the advanced mathematical principles used for field surveying and measurement as applied to construction field engineering. The course topics include: Horizontal Curves, Vertical Curves, Quantities, Layout Techniques, Construction Control, One-Person Surveying, and Field Observations.

Commercial HVAC Service I-A

HART 1007

18 Sessions

80 Hours

Prerequisite: English or Spanish Math or Applied Construction Math class; ESL test or class if taking the Math test in Spanish.

All testing must be completed no later than Friday August 16, 2024.

The course topics include Basic Safety, Introduction to HVAC, Trade Mathematics, Basic Electricity, Fasteners, Hardware and Wiring, Basic Cooper & Plastic Pipe Practices, and Soldering & Brazing.

Note 1: EPA Section 608 Universal Certification is highly recommended to graduate from this program.

Note 2: Graduation Requirement; Students enrolled in HVAC I-B will be required to take the EPA Section 608 Refrigerant Recovery Exams. This EPA Section 608 Refrigerant Recovery class is MANDATORY for all students enrolled in HVAC I-B, unless the student has already received the EPA Core and Type II Certification. Proof of EPA Certification is required.

Commercial HVAC Service I-A

HART 1007

12 Sessions

48 Hours

Prerequisite: English or Spanish Math or Applied Construction Math class; ESL test or class if taking the Math test in Spanish.

All testing must be completed no later than Friday August 16, 2024.

The course topics include Basic Safety, Introduction to HVAC, Trade Mathematics, Basic Electricity, Fasteners, Hardware and Wiring, Basic Cooper & Plastic Pipe Practices, and Soldering & Brazing.

Note 1: EPA Section 608 Universal Certification is highly recommended to graduate from this program.

Note 2: Graduation Requirement; Students enrolled in HVAC I-B will be required to take the EPA Section 608 Refrigerant Recovery Exams. This EPA Section 608 Refrigerant Recovery class is MANDATORY for all students enrolled in HVAC I-B, unless the student has already received the EPA Core and Type II Certification. Proof of EPA Certification is required.

Commercial HVAC Service II-A

CBFM 2017

18 Sessions

80 Hours

Prerequisite: Commercial HVAC Service I-B

The course topics are: Metering Devices, Compressors, Refrigerants and Oils, Leak Detection, Evacuation, Recovery and Charging, Alternating Current, Sheet Metal Duct Systems, and Fiberglass & Flexible Duct Systems.

Note: EPA Section 608 EPA Core and Type II Certification is pre-requisite for students going into HVAC III-A. If you have not passed this section of the exam, you should register to retake the EPA Exam prior to the completion of HVAC Level II-B.

Commercial HVAC Service II-A

CBFM 2017

18 Sessions

80 Hours

Prerequisite: Commercial HVAC Service I-B

The course topics are: Metering Devices, Compressors, Refrigerants and Oils, Leak Detection, Evacuation, Recovery and Charging, Alternating Current, Sheet Metal Duct Systems, and Fiberglass & Flexible Duct Systems.

Note: EPA Section 608 EPA Core and Type II Certification is pre-requisite for students going into HVAC III-A. If you have not passed this section of the exam, you should register to retake the EPA Exam prior to the completion of HVAC Level II-B.

Commercial HVAC Service III-A

HART 2036

18 Sessions

80 Hours

Prerequisite: Commercial HVAC Service Level II-B

The course topics are Customer Relations; Fasteners, Hardware, and Wiring Terminations; Commercial Hydronic Systems; Control Circuit and Motor Troubleshooting; Troubleshooting Cooling; and Troubleshooting Heat Pumps.

Commercial HVAC Service III-A

HART 2036

16 Sessions

80 Hours

Prerequisite: Commercial HVAC Service Level II-B

The course topics are Customer Relations; Fasteners, Hardware, and Wiring Terminations; Commercial Hydronic Systems; Control Circuit and Motor Troubleshooting; Troubleshooting Cooling; and Troubleshooting Heat Pumps.

Commercial HVAC Service IV-A

CBFM 2011

18 Sessions

80 Hours

Prerequisite: Commercial HVAC III-B

Course topics are: Construction Drawings & Specifications, Air Quality Equipment, Indoor Air Quality, Commercial Airside Systems, System Air Balancing, and Energy Conservation Equipment.

Construction Site Leadership

CNBT 1009

10 Sessions

30 Hours

Prerequisite: None Required.

Introduction to skills and concepts necessary to effectively manage individuals and teams. Students will be exposed to leadership techniques that target communication, conflict resolution, problem solving, team organization and trust building.

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 I-A

ELPT 1021

17 Sessions

80 Hours

Prerequisite: English or Spanish Math Test or Applied Construction Math Class and ESL Placement Test if test is taken in Spanish.

All testing must be completed no later than Friday August 16, 2024.

The course topics are: Build Your Future in Construction, Occupational Overview (The Electrical Industry), Basic Safety, Safety for Electricians, Introduction to Hand Tools, Introduction to Power Tools, Hand Bending, Device Boxes, Introduction to Basic Rigging, Introduction to Construction Math, Introduction to Electrical Circuit, Electrical Test Equipment, Basic Communication Skills, and Basic Employability Skills.

Electrical I-A

ELPT 1021

17 Sessions

80 Hours

Prerequisite: English or Spanish Math Test or Applied Construction Math Class and ESL Placement Test if test is taken in Spanish.

All testing must be completed no later than Friday August 16, 2024.

The course topics are: Build Your Future in Construction, Occupational Overview (The Electrical Industry), Basic Safety, Safety for Electricians, Introduction to Hand Tools, Introduction to Power Tools, Hand Bending, Device Boxes, Introduction to Basic Rigging, Introduction to Construction Math, Introduction to Electrical Circuit, Electrical Test Equipment, Basic Communication Skills, and Basic Employability Skills.

Electrical I-A

ELPT 1021

17 Sessions

80 Hours

Prerequisite: English or Spanish Math Test or Applied Construction Math Class and ESL Placement Test if test is taken in Spanish.

All testing must be completed no later than Friday August 16, 2024.

The course topics are: Build Your Future in Construction, Occupational Overview (The Electrical Industry), Basic Safety, Safety for Electricians, Introduction to Hand Tools, Introduction to Power Tools, Hand Bending, Device Boxes, Introduction to Basic Rigging, Introduction to Construction Math, Introduction to Electrical Circuit, Electrical Test Equipment, Basic Communication Skills, and Basic Employability Skills.

Electrical II-A

HART 1001

17 Sessions

80 Hours

Prerequisite: Electrical I-B

The course topics are: Alternating Current, Motors: Theory & Application, Electrical Lighting, Conduit Bending, Pull and Junction Boxes, and Conductor Installations.

Note: Students must have a copy of the 2023 NEC edition.

Electrical II-A

HART 1001

17 Sessions

80 Hours

Prerequisite: Electrical I-B

The course topics are: Alternating Current, Motors: Theory & Application, Electrical Lighting, Conduit Bending, Pull and Junction Boxes, and Conductor Installations.

Note: Students must have a copy of the 2023 NEC edition.

Electrical II-A

HART 1001

17 Sessions

80 Hours

Prerequisite: Electrical I-B

The course topics are: Alternating Current, Motors: Theory & Application, Electrical Lighting, Conduit Bending, Pull and Junction Boxes, and Conductor Installations.

Note: Students must have a copy of the 2023 NEC edition.

Electrical II-A

HART 1001

17 Sessions

80 Hours

Prerequisite: Electrical I-B

The course topics are: Alternating Current, Motors: Theory & Application, Electrical Lighting, Conduit Bending, Pull and Junction Boxes, and Conductor Installations.

Note: Students must have a copy of the 2023 NEC edition.

Electrical III-A

ELPT 1045

18 Sessions

80 Hours

Prerequisite: Electrical II-B

The course topics: are Load Calculations (Branch and Feeders Circuits), Conductor Selection and Calculations, Practical Applications of Lighting, Hazardous Locations, and Overcurrent Protection.

Note: Students must have a copy of the 2023 NEC edition.

Electrical IV-A

ELPT 1041

18 Sessions

80 Hours

Prerequisite: Electrical III-B

This level is crucial for Journeyman Exam Preparation. Course topics are: Load Calculations (Feeders & Services), Health Care Facilities, Standby & Emergency Systems, Basic Electronic Theory, and Fire Alarm Systems.

Note: Students must have a copy of the 2023 NEC edition.

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.

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.).

English as a Second Language I

COMG 1000

16 Sessions

48 Hours

Prerequisite: Introductory to ESL I or test out.

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.

English as a Second Language II

COMG 1001

16 Sessions

48 Hours

Prerequisite: English as a Second Language I or test out

Students are taught to communicate orally in public and work environments. Emphasis is placed on developing language functions, pronunciation, listening skills, improving social and intercultural communication skills. Students acquire reading skills, vocabulary development, critical thinking skills, and the use of resources.

A los estudiantes se les enseña a comunicarse oralmente en entornos públicos y laborales. Se pone énfasis en el desarrollo de las funciones del lenguaje, la pronunciación, las habilidades auditivas y la mejora de las habilidades de comunicación social e intercultural. Los estudiantes adquieren habilidades de lectura, desarrollo de vocabulario, habilidades de pensamiento crítico y el uso de recursos.

English as a Second Language III

COMG 1004

16 Sessions

48 Hours

Prerequisite: English as a Second Language II

This course is a continuation of ESL II. This course prepares students to communicate orally in both public and work environments. Emphasis is placed on developing language functions, pronunciation, listening skills, improving social and intercultural communication skills. The lessons instruct students in reading skills vocabulary development, critical thinking skills, and the use of resources.

Este curso es una continuación de ESL II. Este curso prepara a los estudiantes para comunicarse oralmente en entornos públicos y laborales. Se pone énfasis en el desarrollo de las funciones del lenguaje, la pronunciación, las habilidades auditivas y la mejora de las habilidades de comunicación social e intercultural. Las lecciones instruyen a los estudiantes en el desarrollo del vocabulario de habilidades de lectura, habilidades de pensamiento crítico y el uso de recursos.

English as a Second Language IV

COMG 1005

16 Sessions

48 Hours

Prerequisite: English as a Second Language III

Students are taught to communicate orally in public and work environments. Emphasis is placed on developing language functions, pronunciation, listening skills, improving social and intercultural communication skills. Students acquire reading skills, vocabulary development, critical thinking skills, and the use of resources.

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A los estudiantes se les enseña a comunicarse oralmente en entornos públicos y laborales. Se pone énfasis en el desarrollo de las funciones del lenguaje, la pronunciación, las habilidades auditivas y la mejora de las habilidades de comunicación social e intercultural. Los estudiantes adquieren habilidades de lectura, desarrollo de vocabulario, habilidades de pensamiento crítico y el uso de recursos.

Excel Beginner

ITSW 1022

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

Introduction to Bluebeam

ITSC 1043

4 Sessions

12 Hours

This course is designed to introduce new users to the core features of Bluebeam Revu. You will learn the foundational skills necessary to organize, markup, edit and track comments in a PDF drawing set. Use Revu's measurement tools for takeoffs and estimates. Learn how to calibrate your drawing set, conduct a visual search and apply count measurements. Streamline your estimating workflow by creating custom columns to calculate material and labor costs and generate summary reports to distribute data to key project team members

Introductory to English as a Second Language

COMG 1015

15 Sessions

48 Hours

Prerequisite: None Required

English language instruction for beginners, helps students build a foundation for the English language. Integrated into the curriculum are listening, speaking, reading, and writing skills, while also building the English vocabulary. This course prepares students to progress on to the next level, ultimately achieving self-sufficiency in three principle areas of life- the workplace, social and academic settings.

La instrucción del idioma inglés para principiantes ayuda a los estudiantes a construir una base para el idioma inglés. Integradas en el plan de estudios están las habilidades de escuchar, hablar, leer y escribir, al mismo tiempo que se desarrolla el vocabulario en inglés. Este curso prepara a los estudiantes para avanzar al siguiente nivel y, en última instancia, lograr la autosuficiencia en tres áreas principales de la vida: el entorno laboral, social y académico.

PHCC Plumbing I-A

PFPB 1003

4 Sessions

40 Hours

Prerequisite: None Required

The course topics are: Plumbing History, Codes and Principles, Tools of the Plumbing Trade, Rough-In Tools: Copper Tools, Rough-In Tools: Plastic Pipe Tools, Rough-In Tools: Iron Soil Pipe Tools, Rough-In Tools: Steel Pipe Tools, Rough-In Tools: Compressed Air Tools and Hydraulic Tools, and First Aid and Safety.

PHCC Plumbing I-B

PFPB 1025

4 Sessions

40 Hours

Prerequisite: PHCC Plumbing I-A

The course topics are: Basic Math for Plumbing, Water Supply, Waster Sources, Waste Disposal, and Sewage Disposal, Mech Properties Protection Bldg Materials and Structures, Piping Materials Used in Plumbing Work, Joining Methods for DMV/Pressure Piping, Squares, Square Roots, and Basic Geometry, and Sanitary Drainage.

PHCC Plumbing I-D

PFPB 1035

4 Sessions

40 Hours

Prerequisite: PHCC Plumbing I-C

The course topics are: Water Heaters, Building Plans & Drawings, and Sketching.

PHCC Plumbing II-A

PFPB 1023

4 Sessions

40 Hours

Prerequisite: PHCC Plumbing I-D

The course topics are: Plastic Pipe and Fitting , Communication Skills & Professionalism, Pipe Joining Techniques, Special Applications of Plastic Pipe and Fittings, Introduction to Welding, Soldering, Brazing, Cutting, and Gas Welding, and Piping Materials, Sources, and Distribution for Potable Water.

PHCC Plumbing II-C

WLDG 1041

4 Sessions

40 Hours

Prerequisite: PHCC Plumbing II-B

The course topics are: Drains and Stacks, Applied Plumbing Mathematics, Applied Geometric Concepts and Properties of Water and Air.

PHCC Plumbing II-D

PFPB 2015

4 Sessions

40 Hours

Prerequisite: PHCC Plumbing II-C

The course topics are: Venting, Plumbing & Drainage Systems, Sump Pumps, Sewage Pumps, & Sewage Ejectors, Plumbing Traps, Fixture Supports, Hoisting and Rigging, Safety Concepts, Rough-in Single Line Drawings & Isometric Drawings and Details, Sections & Exploded View Drawings.

PHCC Plumbing III-B

PFPB 2030

4 Sessions

40 Hours

Prerequisite: PHCC Plumbing III-A

The course topics are: Drawings and Plans Test, Blueprints and Specifications, Drawing Types, Floor Plans, and Site Plans, Structural Plumbing, Electrical, HVAC, and Detail Plans, National Fuel Gas Code, Materials and Types of Fuel Gases, Fuel Gas Pipe Sizing, and Gas Appliances, Regulators, Meters, and Appliance Controls.

PHCC Plumbing III-C

PFPB 1051

4 Sessions

40 Hours

Prerequisite: PHCC Plumbing III-B

The course topics are: Combustion Air and Venting, Liquefied Petroleum Gas, Level Transit Elevation & Grade, Builders Level Transit Trench Safety, Offsets and Ratios, Capacities and Volume, and Storm Drains.

PHCC Plumbing IV-A

PFPB 2034

4 Sessions

40 Hours

Prerequisite: PHCC Plumbing III-D

The course topics are: Service and Repair Fixtures, Water and Fuel Gas Distribution, DWV Systems Service and Repair, Sizing DWV and Storm Drainage Systems, Sizing Water Distribution and Fuel Gas Piping Systems, Indirect and Special Waste, Protection of Water Supply, and Steam Heating

PHCC Plumbing IV-B

PFPB 1038

4 Sessions

40 Hours

Prerequisite: PHCC Plumbing IV-A

The course topics are: Hydraulic Heating and Controls, Forced Air heating and alternative Heating Systems, Pumps, Blueprint Isometric and Material Takeoff, Plumbing Code Administration & Licensing, Plumbing fixtures and minimum fixture requirements Conservation Methods, Plumbing Codes Water Heaters, and Water Supply and Distribution.

PHCC Plumbing IV-C

PFPB 2057

4 Sessions

40 Hours

Prerequisite: PHCC Plumbing IV-B

The course topics are: History of Backflow, Hydraulics, Elements of a Cross Connection Control Program, Facilities, Equip & Sys and Samples and Forms.

Pipefitting I-A

PFPB 1008

18 Sessions

80 Hours

Prerequisite: English or Spanish Math test, OR Applied Construction Math class or ESL class.

All testing must be completed no later than Friday August 16, 2024.

NOTE: If the Math test is taken in Spanish, student must take an ESL test as well.

Course topics are Core: Build Your Future in Construction, Orientation to the Pipefitting Craft; Basic Safety (Construction Site Safety Orientation); Ladders and Scaffolds; Introduction to Hand tools; Pipefitting Hand Tools; Introduction to Power Tools; and Pipefitting Power Tools and Introduction to Construction Math.

Pipefitting I-A

PFPB 1008

20 Sessions

80 Hours

Prerequisite: English or Spanish Math test, OR Applied Construction Math class or ESL class.

All testing must be completed no later than Friday August 16, 2024.

NOTE: If the Math test is taken in Spanish, student must take an ESL test as well.

Course topics are Core: Build Your Future in Construction, Orientation to the Pipefitting Craft; Basic Safety (Construction Site Safety Orientation); Ladders and Scaffolds; Introduction to Hand tools; Pipefitting Hand Tools; Introduction to Power Tools; and Pipefitting Power Tools and Introduction to Construction Math.

Pipefitting II-A

WLDG 1035

18 Sessions

80 Hours

Prerequisite: Pipefitting I-B

Course topics are: Piping Systems, Drawings and Detail Sheets, Identifying Installing Valves, Pipefitting Trade Math, and Threaded Pipe Fabrication.

Pipefitting III-A

PFPB 2041

17 Sessions

80 Hours

Prerequisite: Pipefitting II-B

Course topics will include: Introduction to Basic Rigging, Rigging Practices, Standards and Specifications, Advanced Pipefitting Math, Pipe Off Sets, and Motorized Equipment Two.

Pipefitting IV-A

PFPB 2043

18 Sessions

80 Hours

Prerequisite: Pipefitting III-B

Course topics are: Advanced Pipe Fabrication, Special Piping, and Stress Relieving and Aligning.

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.

Plumbing I-A

PFPB 1013

17 Sessions

80 Hours

Prerequisite: English or Spanish Math OR Applied Construction Math class.

All testing must be completed no later than Friday August 16, 2024.

NOTE: If the Math/Reading test is taken in Spanish, student must take an ESL test as well.

The course topics are: Build Your Future in Construction; Basic Safety (Construction Site Safety Orientation); Plumbing Safety; Introduction to Plumbing Profession; Introduction to Hand Tools; Introduction to Power Tools; Tools of the Plumbing Trade; Introduction to Construction Math; Introduction to Plumbing Math; Copper Tube & Fittings; and Cast-Iron Pipe and Fittings.

Plumbing I-A

PFPB 1013

17 Sessions

80 Hours

Prerequisite: English or Spanish Math OR Applied Construction Math class.

All testing must be completed no later than Friday August 16, 2024.

NOTE: If the Math/Reading test is taken in Spanish, student must take an ESL test as well.

The course topics are: Build Your Future in Construction; Basic Safety (Construction Site Safety Orientation); Plumbing Safety; Introduction to Plumbing Profession; Introduction to Hand Tools; Introduction to Power Tools; Tools of the Plumbing Trade; Introduction to Construction Math; Introduction to Plumbing Math; Copper Tube & Fittings; and Cast-Iron Pipe and Fittings.

Plumbing I-A

PFPB 1013

20 Sessions

80 Hours

Prerequisite: English or Spanish Math OR Applied Construction Math class.

All testing must be completed no later than Friday August 16, 2024.

NOTE: If the Math/Reading test is taken in Spanish, student must take an ESL test as well.

The course topics are: Build Your Future in Construction; Basic Safety (Construction Site Safety Orientation); Plumbing Safety; Introduction to Plumbing Profession; Introduction to Hand Tools; Introduction to Power Tools; Tools of the Plumbing Trade; Introduction to Construction Math; Introduction to Plumbing Math; Copper Tube & Fittings; and Cast-Iron Pipe and Fittings.

Plumbing II-A

PFPB 1043

18 Sessions

80 Hours

Prerequisite: Plumbing I-B

The course topics are: Plumbing Math Two, Reading Commercial Drawings, Structural Penetrations/Insulation and Fire Stopping, Installing & Testing DWV Piping, Installing Roof/Floor & Area Drains, and Types of Valves.

Plumbing II-A

PFPB 1043

18 Sessions

80 Hours

Prerequisite: Plumbing I-B

The course topics are: Plumbing Math Two, Reading Commercial Drawings, Structural Penetrations/Insulation and Fire Stopping, Installing & Testing DWV Piping, Installing Roof/Floor & Area Drains, and Types of Valves.

Plumbing III-A

PFPB 1053

18 Sessions

80 Hours

Prerequisite: Plumbing II-B

The course topics are: Applied Math, Sizing & Protecting the Water Supply System, Potable Water Supply Treatment, and Types of Venting.

Plumbing III-A

PFPB 1053

20 Sessions

80 Hours

Prerequisite: Plumbing II-B

The course topics are: Applied Math, Sizing & Protecting the Water Supply System, Potable Water Supply Treatment, and Types of Venting.

Plumbing IV-A

PFPB 1050

18 Sessions

80 Hours

Prerequisite: Plumbing III-B

The course topics are: Business Principles for Plumbers; Fundamentals of Crew Leadership; Water Pressure Booster & Recirculation System; and Indirect & Special Waste.

Roofing I-A

CRPT 1011

11 Sessions

88 Hours

Prerequisite: None Required.

Course Topics: Build Your Future in Construction, Basic Safety (Construction Site Safety & OSHA 10), Introduction to Construction Math, Introduction to Hand Tools, Introduction to Power Tools, Introduction to Construction Drawings, Introduction to Basic Rigging, Basic Communication Skills, Basic Employability Skills, and Introduction to Material Handling.

Este curso consta de 80 horas por semestre incluyendo laboratorios (area de practica). Temas del curso: Construya su futuro en la construccion, Seguridad basica orientacion sobre seguridad en las obras de construccion, Introduccion a las matematicas de la construccion, Introduccion a las herramientas manuales, Introduccion a las herramientas electricas, Introduccion a los planos para la construccion, Introduccion a los principios basicos del aparejamiento, Capacidades basicas de comunicacion, Habilidades basicas para buscar empleo, y Introduccion al manejo de materiales.

Roofing I-A

CRPT 1011

11 Sessions

88 Hours

Prerequisite: None Required.

Course Topics: Build Your Future in Construction, Basic Safety (Construction Site Safety & OSHA 10), Introduction to Construction Math, Introduction to Hand Tools, Introduction to Power Tools, Introduction to Construction Drawings, Introduction to Basic Rigging, Basic Communication Skills, Basic Employability Skills, and Introduction to Material Handling.

Este curso consta de 80 horas por semestre incluyendo laboratorios (area de practica). Temas del curso: Construya su futuro en la construccion, Seguridad basica orientacion sobre seguridad en las obras de construccion, Introduccion a las matematicas de la construccion, Introduccion a las herramientas manuales, Introduccion a las herramientas electricas, Introduccion a los planos para la construccion, Introduccion a los principios basicos del aparejamiento, Capacidades basicas de comunicacion, Habilidades basicas para buscar empleo, y Introduccion al manejo de materiales.

Sheet Metal I-A

MCHN 1001

18 Sessions

80 Hours

Prerequisite: English Math Test

All testing must be completed no later than Friday August 16, 2024.

The course topics are: Core (Build Your Future in Construction), Introduction to Construction Math, Sheet Metal Math and Measurements, Basic Safety (Construction Site Safety Orientation), Introduction to Hand Tools, Introduction to Power Tools, Sheet Metal Tools and Equipment, Plasma Arc Cutting, Introduction to Basic Rigging, Introduction to Material Handling, and Occupational Overview (The Sheet Metal Industry).

Sheet Metal II-A

MCHN 1053

17 Sessions

80 Hours

Pre-requisite: Sheet Metal I-B

The course topics are Field Measurements, Calculations, and Fittings; Construction and Sheet Metal Drawings; and Radial Line Development.

Spanish for Construction Sites

COMG 1011

8 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.

Texas Lien & Bond Claim Seminar

NA

1 Sessions

7 Hours

It's more important than ever to protect your rights to get paid!

Lien rights are very valuable and shouldn't be waived without knowing it. To keep from waiving your lien rights, you must know when to take action and what action to take. Time deadlines and filing the correct forms are crucial. You cannot afford to miss this valuable information and instruction.

Presented by

Regan O'Steen,

Thomas, Feldman & Wilshusen, LLP of Dallas

Sponsored by ASA & CEF

The firm of Thomas, Feldman & Wilshusen, LLP specializes in construction law. They represent general contractors, subcontractors, and suppliers in all aspects of construction law, including review and negotiations of contracts, processing delay claims, jury trials and appeals, arbitrations, and perfecting lien and bond claims. Thomas, Feldman & Wilshusen, LLP is the legal counsel for the American Subcontractors Association/North Texas Chapter, ASA of Texas and the Texas Construction Association (TCA).

Welding Construction I

WLDG 1023

34 Sessions

160 Hours

All testing must be completed no later than Friday August 16, 2024.

Prerequisite: English or Spanish Math OR Applied Construction Math class.

NOTE: If the Math test is taken in Spanish, student must take an ESL test as well.

Consists of 160 hours; 70% hands-on per semester. Course topics will include: Basic Safety (Construction Site Safety), Introduction to Math; Introduction to Hand Tools, Introduction to Power Tools, Basic Communication Skills, Introduction to Construction Drawings; Basic Employability Skills, Introduction to Basic Rigging; Introduction to Material Handling; Joint Fit-Up and Alignment; Oxyfuel Cutting, Welding Safety; Welding Quality, SMAW (Equipment and Set Up, Beads and Fillet Welds, Open Root Groove Welds/Plate, and Groove Welds with Backing, Electrodes, Weld Quality), Plasma Arc Cutting, and Base Metal Preparation.

Welding Construction III

WLDG 2013

34 Sessions

160 Hours

Prerequisite: Welding Construction II-B

Consists of 80 hours: 70% hands-on per semester. Course topics will include Physical Characteristics & Mechanical Properties of Metal, SMAW-Open Root Pipe Welds; SMAW- Stainless Steel Plate & Pipe Groove Welds, Preheat and Postheating of Metals; GTAW- Plate and GTAW - Carbon Steel Pipe, GTAW - Equipment and Filler Metals, GTAW- Plate, SMAW- Open Root Pipe Welds, and GTAW- Carbon Steel Pipe.