



## Applied Construction Math I

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.

## 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.

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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 II

SRVY 1001

16 Sessions

80 Hours

Prerequisite: Commercial Field Engineering I

This course covers the basic mathematical principles used for field surveying and measurement as applied to basic construction field engineering. Topics include: Dimensional; Conversions to Decimal Equivalents; Unit Conversion; Algebra; Geometry-Perimeters; Area; Volumes; Trigonometry-Sine, Cosine & Tangents; Right Triangles; Law of Sine, Cosine Solving Oblique triangles; Instrument Setup Level Loops Records & Documentation Cut Fill Computation; Coordinate Geometry; Traverse Computations; Traverse Data Collection, Instrument Set Up; Horizontal Curves; and Vertical Curves.

## Commercial Field Engineering IV

SRVY 1009

16 Sessions

80 Hours

Prerequisite: Commercial Field Engineering III

This course including lab covers an overview of the surveying profession as it applies to Field Engineering. Part two covers the Office Work and the Calculations. The course topics include: Filed Procedures, Equipment Calibration, Office Practice, Math Essentials, Chain Corrections, Traverse Computations, and Coordinate Geometry.

## Commercial Field Engineering VI

CBNT 2075

16 Sessions

80 Hours

Prerequisite: Commercial Field Engineering V

This course including lab covers an overview of the automated processes of office and field work commonly used by Field Engineers on construction sites today. This practical application of theory will focus on the handling of large amounts of design and as-built data using total station, data collector, and engineering & drafting computer software. Topics include: Start job in Carlson/ Drawing Set-up/Layer Set-up; Draw/Edit Commands: Ortho, Draw, Current Layer, Save, Offset, Osnap; Draw/Edit Commands: Erase, Move, Copy, Scale, Rotate, Mirror; Draw/Edit Commands: Trim, Extend, Fillet, Chamfer; REVIEW; Points Commands: Draw-Locate Points, List Points, Set Coordinate File; Clip Board, Insertion Point, CAD File from Architect, Plot/Print; Survey Commands: Enter Deed Description, Annotate Commands; Export Points, Data Collector Job Set-up, Import Points to Data Collector; 2D Stake-out, 3D Stake-out, Survey (Data Collection); Export Points from Data Collector, AS-Built Layer, Import Points; and Draw/Locate Points, Line Work, Text, Leaders.

## Commercial HVAC Service DT I-A

HART 1007

16 Sessions

80 Hours

Prerequisite: English or Spanish NCCER 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 January 16, 2026.

For Spring, students enrolled in HVAC I-A must also be enrolled in the Wednesday HVAC I-B class.

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 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 DT I-B

HART 1001

17 Sessions

80 Hours

Prerequisite: Commercial HVAC Service I-A

For Spring 2026, only students enrolled in HVAC I-A will be enrolled in the Wednesday HVAC I-B class.

The course topics are: Basic Carbon Steel Piping Practices; Introduction to Cooling, Introduction to Heating; Air Distribution Systems; and EPA Training/Testing.

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-B

HART 1001

16 Sessions

80 Hours

Prerequisite: Commercial HVAC Service I-A

For Spring 2026, only students enrolled in HVAC I-A will be enrolled in the Wednesday HVAC I-B class.

The course topics are: Basic Carbon Steel Piping Practices; Introduction to Cooling, Introduction to Heating; Air Distribution Systems; and EPA Training/Testing.

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-B

HART 1001

16 Sessions

80 Hours

Prerequisite: Commercial HVAC Service I-A

For Spring 2026, only students enrolled in HVAC I-A will be enrolled in the Wednesday HVAC I-B class.

The course topics are: Basic Carbon Steel Piping Practices; Introduction to Cooling, Introduction to Heating; Air Distribution Systems; and EPA Training/Testing.

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-B

HART 1003

16 Sessions

80 Hours

Prerequisite: Commercial HVAC Service Level II-A

The course topics are: Chimneys; Vents & Flues; Basic Maintenance; Heat Pumps; Commercial Airside Systems; and Air Quality Equipment.

## Commercial HVAC Service II-B

HART 1003

16 Sessions

80 Hours

Prerequisite: Commercial HVAC Service Level II-A

The course topics are: Chimneys; Vents & Flues; Basic Maintenance; Heat Pumps; Commercial Airside Systems; and Air Quality Equipment.

## Commercial HVAC Service III-B

HART 2041

16 Sessions

80 Hours

Prerequisite: Commercial HVAC Service Level III-A

The course topics are Troubleshooting Accessories, Retail Refrigeration System, Customer Relations, Air Quality Equipment, Commercial Airside Systems, and Steam Systems.

## Commercial HVAC Service IV-B

HART 2002

16 Sessions

80 Hours

Prerequisite: Commercial HVAC Service Level IV-A

The course topics are: Fundamentals of Crew Leadership; Commercial/Industrial Refrigeration Systems; System Startup and Shutdown; Heating & Cooling System Design; Alternative and Specialized Heating and Cooling Systems.

## Construction Site Leadership

BMGT 1019

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 DT I-A

ELPT 1021

16 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 January 16, 2026.

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 DT I-B

ELPT 1011

16 Sessions

80 Hours

Prerequisite: Electrical I-A

This course consists of 80 hours per semester, including labs. Course topics include Electrical Theory, Multiwire Branch Circuits, overcurrent protection, GFCIs, GFPEs, AFCIs, SPD, Fundamentals NEC, Box Fill, Wire Resistance Voltage Drop, Introduction to the NEC, NEC Articles 90 through 340. Labs: (CEPT) Commercial Electrical Productivity Training - hands on training.

## Electrical I-B

ELPT 1011

16 Sessions

80 Hours

Prerequisite: Electrical I-A

This course consists of 80 hours per semester, including labs. Course topics include Electrical Theory, Multiwire Branch Circuits, overcurrent protection, GFCIs, GFPEs, AFCIs, SPD, Fundamentals NEC, Box Fill, Wire Resistance Voltage Drop, Introduction to the NEC, NEC Articles 90 through 340. Labs: (CEPT) Commercial Electrical Productivity Training - hands on training.

## Electrical I-B

ELPT 1011

16 Sessions

80 Hours

Prerequisite: Electrical I-A

This course consists of 80 hours per semester, including labs. Course topics include Electrical Theory, Multiwire Branch Circuits, overcurrent protection, GFCIs, GFPEs, AFCIs, SPD, Fundamentals NEC, Box Fill, Wire Resistance Voltage Drop, Introduction to the NEC, NEC Articles 90 through 340. Labs: (CEPT) Commercial Electrical Productivity Training - hands on training.

## Electrical II-B

ELPT 1020

16 Sessions

80 Hours

Prerequisite: Electrical II-A

This course consists of 80 semester hours including labs and is a continuation of the study of OSHA's construction safety rules and focuses on the initial chapters of the NEC. Topics include Surge Protective Devices, Conductors for General Wiring, Cabinets, Cutout Boxes, and Meter Socket Enclosures. Voltage – Drop Calculations, Electrical Metallic Tubing (EMT), Multi Outlet Assemblies, Surface Metal Raceways, Armored Cable (Type AC) and Metal-Clad Cable (Type (MC), Cables NM, NMC, TC, SE, USE and Cable Trays. Residential and commercial wiring methods and practices will also be covered in depth.

## Electrical II-B

ELPT 1020

16 Sessions

80 Hours

Prerequisite: Electrical II-A

This course consists of 80 semester hours including labs and is a continuation of the study of OSHA's construction safety rules and focuses on the initial chapters of the NEC. Topics include Surge Protective Devices, Conductors for General Wiring, Cabinets, Cutout Boxes, and Meter Socket Enclosures. Voltage – Drop Calculations, Electrical Metallic Tubing (EMT), Multi Outlet Assemblies, Surface Metal Raceways, Armored Cable (Type AC) and Metal-Clad Cable (Type (MC), Cables NM, NMC, TC, SE, USE and Cable Trays. Residential and commercial wiring methods and practices will also be covered in depth.

## Electrical III-B

ELPT 1057

17 Sessions

80 Hours

Prerequisite: Electrical III-A

The course topics are: Distribution Equipment; Transformers; Commercial Electrical Services; Motors Calculations; Voice, Data, and Video; and Motor Controls.

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

## Electrical III-B

ELPT 1057

17 Sessions

80 Hours

Prerequisite: Electrical III-A

The course topics are: Distribution Equipment; Transformers; Commercial Electrical Services; Motors Calculations; Voice, Data, and Video; and Motor Controls.

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

## Electrical IV-B

ELTN 1043

17 Sessions

80 Hours

Prerequisite: Electrical IV-A

This level is crucial for Journeyman Exam Preparation. Course topics are: Specialty Transformers; Advanced Controls; HVAC Controls; Heat Tracing and Freeze Protection; Motor Operation and Maintenance; Medium Voltage Terminations/Splices; Special Locations; Fundamentals of Crew Leadership; Unit 5- Raceway and box Calculations- Part A- Raceway sizing; Insulated conductors- Chapter 9 tables 5 and 8; Raceway Properties and Sizing; Annex C; Part B- Outlet Box Fill; Sizing Boxes for Conductors; Part C- Pull and Junction Boxes- Sizing Requirements; Unit 6-Part A- Conductor sizing and Protection- Conductor insulation; Conductor Sizes; Equipment Terminal Ratings; Part B- Conductor Ampacity; Ambient Temperature Corrections; Rooftop installations; Current Carrying Conductors; Conductor Sizing; Feeder Tap Rules; Unit 8- Motor and A/C Calculations; Part A- Motor calculations- scope of article 430; Motor Full Load Currents; Motor Nameplates; Branch Circuit Sizing; Feeder Conductor Sizing; Overcurrent Protection; Overload Protection Sizing; Short Circuit and Ground Fault Protection.

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 I

COMG 1000

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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.

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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 Introductory

COMG 1015

16 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.

## EPA Refrigerant Recovery Certification Training & Exam

HART 1043

1 Sessions

8 Hours

This course includes training and testing for Core, Types I, II, and III, required by the United States Environmental Protection Agency (EPA).

Course topics include: Refrigerant Transition and Recovery Certification.

Lunch is included.

Test is available in English or Spanish. A Spanish supplement to the English student handbook is available, upon request.

Note 1: ATTENTION, STUDENTS ENROLLED IN COMMERCIAL HVAC

SERVICE I-A will receive this training and the exam in Commercial HVAC Service I-B. Enrollment is not needed in this class.

Note 2: The instructor highly recommends that students pick up and study their EPA Section 608 book at least 2 weeks prior to the start of class. A book will not be issued until the class is paid. Early registration is encouraged.

Note 3: Students will need to bring their EPA Section 608 Book to the class. Students possessing an EPA Refrigerant Recovery card for one or more types must present the card to the Instructor the day of class, otherwise the student will be required to take all four types.

## 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 BIM

DFTG 1040

12 Sessions

48 Hours

Building Information Modeling (BIM) is the process of creating and managing 3D building data during its development. BIM is a complex multiphase process that gathers input from team members to model the components and tools that will be used during the construction process to create a unique perspective of the building process.

## Pipefitting DT I-A

PFPB 1008

16 Sessions

80 Hours

Prerequisite: English or Spanish NCCER 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 15, 2025.

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 DT I-B

PFPB 1043

17 Sessions

80 Hours

Prerequisite: Pipefitting I-A

For Spring 2026, only students enrolled in Pipefitting I-A will be enrolled in the Wednesday Pipefitting I-B class with the same instructor.

Course topics are: Introduction to Construction Drawings; Oxyfuel Cutting; Introduction to Construction Math; Fractions; Decimals; Angles; Degrees; Square, Square Roots and Right Triangle; Introduction to Construction Drawings; Motorized Equipment One; Basic Communication Skills; Basic Employability Skills; and Introduction to Material Handling.

## Pipefitting I-B

PFPB 1043

16 Sessions

80 Hours

Prerequisite: Pipefitting I-A

For Spring 2026, only students enrolled in Pipefitting I-A will be enrolled in the Wednesday Pipefitting I-B class with the same instructor.

Course topics are: Introduction to Construction Drawings; Oxyfuel Cutting; Introduction to Construction Math; Fractions; Decimals; Angles; Degrees; Square, Square Roots and Right Triangle; Introduction to Construction Drawings; Motorized Equipment One; Basic Communication Skills; Basic Employability Skills; and Introduction to Material Handling.

## Pipefitting I-B

PFPB 1043

16 Sessions

80 Hours

Prerequisite: Pipefitting I-A

For Spring 2026, only students enrolled in Pipefitting I-A will be enrolled in the Wednesday Pipefitting I-B class with the same instructor.

Course topics are: Introduction to Construction Drawings; Oxyfuel Cutting; Introduction to Construction Math; Fractions; Decimals; Angles; Degrees; Square, Square Roots and Right Triangle; Introduction to Construction Drawings; Motorized Equipment One; Basic Communication Skills; Basic Employability Skills; and Introduction to Material Handling.

## Pipefitting II-B

WLDG 1017

17 Sessions

80 Hours

Prerequisite: Pipefitting II-A

Course topics are: Socket Weld Pipe Fabrication; Butt Weld Pipe Fabrication; Butt Weld Pipe Fabrication; Excavations; and Underground Pipe Installation.

## Pipefitting II-B

WLDG 1017

17 Sessions

80 Hours

Prerequisite: Pipefitting II-A

Course topics are: Socket Weld Pipe Fabrication; Butt Weld Pipe Fabrication; Butt Weld Pipe Fabrication; Excavations; and Underground Pipe Installation.

## Pipefitting III-B

WLDG 2006

17 Sessions

80 Hours

Prerequisite: Pipefitting III-A

Course topics are Introduction to Aboveground Piping Installation; Field Routing and Vessel Trim; Pipe Hangers and Supports; and Testing Piping Systems and Equipment.

## Pipefitting IV-B

PFPB 1050

17 Sessions

80 Hours

Prerequisite: Pipefitting IV-A

Course topics are: Inline Specialties; Hot Taps; Fundamentals of Crew Leadership; Maintaining Valves; and Advanced Blueprint Reading.

## Piping Isometrics

PPFB 1006

17 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 DT I-A

PPFB 1013

16 Sessions

80 Hours

Prerequisite: English or Spanish NCCER 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 January 16 2026.

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 DT I-B

PPFB 1019

16 Sessions

80 Hours

Prerequisite: Plumbing I-A

For Spring 2026, only students enrolled in Plumbing I-A will be enrolled in the Thursday Plumbing I-B class with the same instructor.

The course topics are: Steel Pipe & Fittings; Introduction to Construction Drawings; Introduction to Plumbing Drawings; Plastic Pipe and Fittings; Introduction to Basic Rigging; Introduction to Plumbing Fixtures; Introduction to Drain, Waste, & Vent (DWV) Systems; Introduction to Water Distribution Systems; Basic Communication Skills; Basic Employability Skills; and Introduction to Material Handling.

## Plumbing I-B

PPFB 1019

16 Sessions

80 Hours

Prerequisite: Plumbing I-A

For Spring 2026, only students enrolled in Plumbing I-A will be enrolled in the Thursday Plumbing I-B class with the same instructor.

The course topics are: Steel Pipe & Fittings; Introduction to Construction Drawings; Introduction to Plumbing Drawings; Plastic Pipe and Fittings; Introduction to Basic Rigging; Introduction to Plumbing Fixtures; Introduction to Drain, Waste, & Vent (DWV) Systems; Introduction to Water Distribution Systems; Basic Communication Skills; Basic Employability Skills; and Introduction to Material Handling.

## Plumbing I-B

PFPB 1019

16 Sessions

80 Hours

Prerequisite: Plumbing I-A

For Spring 2026, only students enrolled in Plumbing I-A will be enrolled in the Thursday Plumbing I-B class with the same instructor.

The course topics are: Steel Pipe & Fittings; Introduction to Construction Drawings; Introduction to Plumbing Drawings; Plastic Pipe and Fittings; Introduction to Basic Rigging; Introduction to Plumbing Fixtures; Introduction to Drain, Waste, & Vent (DWV) Systems; Introduction to Water Distribution Systems; Basic Communication Skills; Basic Employability Skills; and Introduction to Material Handling.

## Plumbing I-B

PFPB 1019

16 Sessions

80 Hours

Prerequisite: Plumbing I-A

For Spring 2026, only students enrolled in Plumbing I-A will be enrolled in the Thursday Plumbing I-B class with the same instructor.

The course topics are: Steel Pipe & Fittings; Introduction to Construction Drawings; Introduction to Plumbing Drawings; Plastic Pipe and Fittings; Introduction to Basic Rigging; Introduction to Plumbing Fixtures; Introduction to Drain, Waste, & Vent (DWV) Systems; Introduction to Water Distribution Systems; Basic Communication Skills; Basic Employability Skills; and Introduction to Material Handling.

## Plumbing II-B

PFPB 2043

17 Sessions

80 Hours

Prerequisite: Plumbing II-A

The course topics are: Installing & Testing Water Supply Piping; Installing Fixtures and Valves; Basic Electricity; Installing Water Heaters; and Fuel Gas & Fuel Oil Systems.

## Plumbing II-B

PFPB 2043

17 Sessions

80 Hours

Prerequisite: Plumbing II-A

The course topics are: Installing & Testing Water Supply Piping; Installing Fixtures and Valves; Basic Electricity; Installing Water Heaters; and Fuel Gas & Fuel Oil Systems.

## Plumbing II-B

PFPB 2043

17 Sessions

80 Hours

Prerequisite: Plumbing II-A

The course topics are: Installing & Testing Water Supply Piping; Installing Fixtures and Valves; Basic Electricity; Installing Water Heaters; and Fuel Gas & Fuel Oil Systems.

## Plumbing III-B

PFPB 2036

16 Sessions

80 Hours

Prerequisite: Plumbing III-A

The course topics are: Sizing DWV & Storm Systems; Sewage Pumps & Sump Pumps; Corrosive-Resistant Waste Piping; Compressed Air and Service Plumbing.

## Plumbing IV-B

PFPB 1050

17 Sessions

80 Hours

Prerequisite: Plumbing IV-A

The course topics are: Hydronic & Solar Heating Systems; Codes; Private Water Supply Well Systems; Private Waste Disposal Systems; Swimming Pools & Hot Tubs; Plumbing for Mobile Home & Travel Trailer; and Introduction to Medical Gas & Vacuum Systems. Plumbing Journeyman Prep that will provide a review of subjects that are needed to pass the written exam for the plumber's journeyman license exam. For the practical portion of the exam the class will also include practice on our custom designed house, this house is comparable to the 2-story house used in the State of Texas Plumbing Exam in Austin.

## Sheet Metal III-B

MCHN 2072

17 Sessions

80 Hours

Prerequisite: Sheet Metal III-A

The course topics are Sheet Metal Duct Fabrication Standards; Bend Allowances; Soldering; Air Distribution Systems; Triangulation; and Shop Production and Organization.

## 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 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 II

WLDG 1057

32 Sessions

160 Hours

Prerequisite: Welding Construction I

Course topics will include Reading Welding Detailed Drawings; Air-Carbon Arc Cutting and Gouging; Plasma Arc Cutting; Air Carbon Arc Cutting and Gouging; SMAW- Open Root Pipe Welds and Welding Symbol.

## Welding Construction IV

WLDG 2047

33 Sessions

160 Hours

Course topics will include: GMAW and FCAW Equipment and Filler Metals, GMAW Plate; FCAW – Plate, FCAW- Pipe, GTAW – Aluminum Plate, GMAW – Plate, GMAW- Pipe, GTAW - Low Alloy and Stainless-Steel Pipe, GTAW, Aluminum Plate, and GTAW - Aluminum Pipe.