Course Descriptions - Fall 2025

ABC Central Texas Pipefitting I-A

Prerequisite: None Required 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. WLDG 1035 ABC Central Texas Pipefitting II-A 17 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. PFPB 1013 ABC Central Texas Plumbing I-A 18 Sessions 80 Hours Prerequisite: None Required 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. PFPB 1043 **ABC Central Texas Plumbing II-A** 17 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. PFPB 1053 ABC Central Texas Plumbing III-A 17 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.



80 Hours

PFPB 1008

17 Sessions

ABC Central Texas Sheet Metal I-A

Prerequisite: None Required

The course topics are 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.

Applied Construction Math I	TCEM 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 educations 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	<u>(8 CEU hours)</u>	PFPB 1000
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8 Hours 1 Sessions

Prerequisite: Student must have a current Backflow Prevention Assembly Testers License (BPAT). This course offers Texas Commission of Environmental Quality (TCEQ) continuing educations 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.

MCHN 1001

17 Sessions 80 Hours

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 SPVB) Cross Connection Control Program with State and Local Ordinance Information and All

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.

Prerequisite: Student is required to have two (2) years experience in a water related industry such as Plumbing, Sprinkler

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 in	nclude: Evolution of the Cor	struction

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.

Commercial Field Engineering I	SRVY 1015	
	16 Sessions	56 Hours
Prerequisite: English or Spanish NCCER Math OR Applied Construction Math class. All testing must be completed no later than Friday, August 15, 2025.		

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.

Backflow Prevention Assembly Tester License

PFPB 1047

5 Sessions 40 Hours

Commercial Field Engineering III

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 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.

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

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

The course topics include Basic Safety, Introduction to HVAC, Trade Mathematics, Basic Electricity, Fasteners, Hardware

in Spanish. All testing must be completed no later than Friday August 15, 2025.

and Wiring, Basic Cooper & Plastic Pipe Practices, and Soldering & Brazing.

student has already received the EPA Core and Type II Certification. Proof of EPA Certification is required.

Commercial HVAC Service I-A

Commercial HVAC Service I-A

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 August 15, 2025.

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.

17 Sessions

CNBT 1015

80 Hours

80 Hours

SRVY 2048

HART 1007

17 Sessions

HART 1007

17 Sessions 80 Hours

Commercial HVAC Service II-A	CBFM 2017		
	17 Sessions	80 Hours	
Prerequisite: Commercial HVAC Service I-B The course topics are: Metering Devices, Compressors, Refrigerants and Oils, Leak Deter Charging, Alternating Current, Sheet Metal Duct Systems, and Fiberglass & Flexible Duct	ction, Evacuation, R Systems.	ecovery and	
Note: EPA Section 608 EPA Core and Type II Certification is prerequisite for students goi passed this section of the exam, you should register to retake the EPA Exam prior to the	ng into HVAC III-A. I completion of HVA	If you have not AC Level II-B.	
Commercial HVAC Service II-A	CBFM 2017		
	17 Sessions	80 Hours	
Prerequisite: Commercial HVAC Service I-B The course topics are: Metering Devices, Compressors, Refrigerants and Oils, Leak Deter Charging, Alternating Current, Sheet Metal Duct Systems, and Fiberglass & Flexible Duct	ction, Evacuation, R Systems.	ecovery and	
Note: EPA Section 608 EPA Core and Type II Certification is prerequisite 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		
	17 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		
	17 Sessions	80 Hours	
Prerequisite: Commercial HVAC III-B Course topics are: Construction Drawings & Specifications, Air Quality Equipment, Indoc Systems, System Air Balancing, and Energy Conservation Equipment.	or Air Quality, Comn	nercial Airside	
Construction Site Leadership	BMGT 1019		
	10 Sessions	30 Hours	
Prerequisite: None Required. Introduction to skills and concepts necessary to effectively manage individuals and team	ns. Students will be	exposed to	

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

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

Electrical I-A

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. 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.

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. 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-B 17 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.

HART 1001 **Electrical II-A** 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.

ELPT 2043

48 Hours 12 Sessions

ELPT 1021

17 Sessions 80 Hours

ELPT 1021

17 Sessions 80 Hours

ELPT 1011

Electrical II-A	HART 1001	
	17 Sessions	80 Hours
Prerequisite: Electrical I-B The course topics are: Alternating Current, Motors: Theory & Application, Electrical Ligh Junction Boxes, and Conductor Installations.	iting, Conduit Bendi	ng, Pull and
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 Ligh Junction Boxes, and Conductor Installations.	iting, Conduit Bendi	ing, Pull and
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 Selec Applications of Lighting, Hazardous Locations, and Overcurrent Protection.	tion and Calculatior	ns, Practical
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 Selec Applications of Lighting, Hazardous Locations, and Overcurrent Protection.	tion and Calculatior	ns, Practical
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 Calculatio Care Facilities, Standby & Emergency Systems, Basic Electronic Theory, and Fire Alarm S Note: Students must have a copy of the 2023 NEC edition.	ons (Feeders & Serv ystems.	ices), Health

Electrical Journeyman Prep

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

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 Hou

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

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.

Page 8 of 16

48 Hours

ELPT 2001

48 Hours 12 Sessions

ELPT 1040

13 Sessions

urs

52 Hours

COMG 1001

16 Sessions

English as a Second Language Introductory

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.

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.

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

COMG 1015

16 Sessions 48 Hours

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 Plum Tools, Rough-In Tools: Plastic Pipe Tools, Rough-In Tools: Iron Soil Pipe Tools, Ro Tools: Compressed Air Tools and Hydraulic Tools, and First Aid and Safety.	bing Trade, Rough-In Too ugh-In Tools: Steel Pipe T	ls: Copper ools, Rough-In
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, M Mech Properties Protection Bldg Materials and Structures, Piping Materials Used DMV/Pressure Piping, Squares, Square Roots, and Basic Geometry, and Sanitary	Waste Disposal, and Sewa d in Plumbing Work, Joini Drainage.	age Disposal, ng Methods for
PHCC Plumbing I-C	PFPB 1011	
	4 Sessions	40 Hours
Prerequisite: PHCC Plumbing I-B The course topics are: Water Closets, Fixtures, Faucets and Fixture Settings and V	Valves.	
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 & Professio Applications of Plastic Pipe and Fittings, Introduction to Welding, Soldering, Bra Piping Materials, Sources, and Distribution for Potable Water.	nalism, Pipe Joining Tech zing, Cutting, and Gas Wo	niques, Special elding, and
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.

80 Hours

Waste, Protection of Water Supply, and Steam Heating **PHCC Plumbing IV-B** Prerequisite: PHCC Plumbing IV-A **Pipefitting I-A** Tools; and Pipefitting Power Tools and Introduction to Construction Math. **<u>Pipefitting I-A</u>**

17 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.

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 **PFPB 1008**

PFPB 2034 4 Sessions 40 Hours

PHCC Plumbing IV-A

The course topics are: Service and Repair Fixtures, Water and Fuel Gas Distribution, DWV Systems Service and Repair,

Industrial and Institutional Fixtures and Appliances, Installation Methods, Fixture Fitting Trim Installation and Principles of Hydronic Systems.

The course topics are: PHCC Plumbing Workplace Etiquette and Productivity, Residential and Appliances, Commercial,

Prerequisite: PHCC Plumbing III-D

Sizing DWV and Storm Drainage Systems, Sizing Water Distribution and Fuel Gas Piping Systems, Indirect and Special

PFPB 1038 4 Sessions 40 Hours

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.

17 Sessions 80 Hours

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. WLDG 1035 **Pipefitting II-A**

Prerequisite: Pipefitting I-B

PHCC Plumbing III-A

Prerequisite: PHCC Plumbing II-D

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

PFPB 2035

4 Sessions 40 Hours

18 Sessions

PFPB 1008

<u>Pipefitting II-A</u>	WLDG 1035	
	18 Sessions	80 Hours
Prerequisite: Pipefitting I-B Course topics are: Piping Systems, Drawings and Detail Sheets, Identifying Installing Val Threaded Pipe Fabrication.	ves, Pipefitting Trac	le Math, and
Pipefitting III-A	PFPB 2041	
	17 Sessions	80 Hours
Prerequisite: Pipefitting II-B Course topics will include: Introduction to Basic Rigging, Rigging Practices, Standards an Pipefitting Math, Pipe Off Sets, and Motorized Equipment Two.	d Specifications, Ad	vanced
<u>Pipefitting IV-A</u>	PFPB 2043	
	18 Sessions	80 Hours
Prerequisite: Pipefitting III-B Course topics are: Advanced Pipe Fabrication, Special Piping, and Stress Relieving and A Equipment.	ligning, and Evergy	Conversation
Piping Isometric	PFPB 1006	
	16 Sessions	48 Hours
Prerequisite: None Required This class defines an Isometric Drawing. It incorporates commercial drawings, mechanic shows how to draw in an isometric format. Emphasis is stressed on how to utilize isome operations, including planning of material takeoffs, scheduling manpower, equipment,	cal pipe and plumbin etrics in constructio etc.	ng details, and n day to day
<u>Plumbing I-A</u>	PFPB 1013	
	17 Sessions	80 Hours
Prerequisite: English or Spanish NCCER Math Test or Applied Construction Math Class a taken in Spanish. All testing must be completed no later than Friday August 15, 2025. The course topics are: Build Your Future in Construction; Basic Safety (Construction Site Safety; Introduction to Plumbing Profession; Introduction to Hand Tools; Introduction t	nd ESL Placement T Safety Orientation o Power Tools; Too	est if test is); Plumbing Is of the

Plumbing Trade; Introduction to Construction Math; Introduction to Plumbing Math; Copper Tube & Fittings; and Cast-Iron Pipe and Fittings.

taken in Spanish. All testing must be completed no later than Friday August 15, 20 The course topics are: Build Your Future in Construction; Basic Safety (Constructio Safety; Introduction to Plumbing Profession; Introduction to Hand Tools; Introduc Plumbing Trade; Introduction to Construction Math; Introduction to Plumbing Ma Iron Pipe and Fittings.	025. on Site Safety Orientatic ction to Power Tools; To hth; Copper Tube & Fitti	on); Plumbing ols of the ngs; and Cast-
Plumbing I-A	PFPB 1013	
	17 Sessions	80 Hours
Prerequisite: English or Spanish NCCER Math Test or Applied Construction Math C taken in Spanish. All testing must be completed no later than Friday August 15, 20 The course topics are: Build Your Future in Construction; Basic Safety (Construction Safety; Introduction to Plumbing Profession; Introduction to Hand Tools; Introduc Plumbing Trade; Introduction to Construction Math; Introduction to Plumbing Ma Iron Pipe and Fittings.	Class and ESL Placement 025. on Site Safety Orientatic ction to Power Tools; To oth; Copper Tube & Fitti	Test if test is on); Plumbing ols of the ngs; and Cast-
<u>Plumbing II-A</u>	PFPB 1043	
	18 Sessions	80 Hours
Prerequisite: Plumbing I-B The course topics are: Plumbing Math Two, Reading Commercial Drawings, Struct Stopping, Installing & Testing DWV Piping, Installing Roof/Floor & Area Drains, and	ural Penetrations/Insulations	ation and Fire
<u>Plumbing II-A</u>	PFPB 1043	
	18 Sessions	80 Hours
Prerequisite: Plumbing I-B The course topics are: Plumbing Math Two, Reading Commercial Drawings, Struct Stopping, Installing & Testing DWV Piping, Installing Roof/Floor & Area Drains, and	ural Penetrations/Insulations	ation and Fire
Plumbing II-A	PFPB 1043	
	18 Sessions	80 Hours
Prerequisite: Plumbing I-B The course topics are: Plumbing Math Two, Reading Commercial Drawings, Struct Stopping, Installing & Testing DWV Piping, Installing Roof/Floor & Area Drains, and	ural Penetrations/Insul d Types of Valves.	ation and Fire
Plumbing III-A	PFPB 1053	
	18 Sessions	80 Hours
Prerequisite: Plumbing II-B		

The course topics are: Introduction to Plumbing Math; Sizing and Protecting the Water Supply System, Potable Water Supply Treatment, Types of Venting, Sizing DWV and Storm Systems, Sewage Pumps and Sub Pumps, Corrosive -Resistant Waste Piping, Compressed Air, and Service Plumber-Troubleshooting.

PFPB 1013

17 Sessions 80 Hours

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

Plumbing I-A

<u>Plumbing III-A</u>

Plumbing IV-A

Sheet Metal III-A

Prerequisite: Plumbing II-B

The course topics are: Introduction to Plumbing Math; Sizing and Protecting the Water Supply System, Potable Water Supply Treatment, Types of Venting, Sizing DWV and Storm Systems, Sewage Pumps and Sub Pumps, Corrosive - Resistant Waste Piping, Compressed Air, and Service Plumber-Troubleshooting.

 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.

 Sheet Metal I-A
 MCHN 1001

Prerequisite: English Math NCCER Test All testing must be completed no later than Friday August 15, 2025. 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).

<u>Sheet Metal III / </u>		
	18 Sessions	80 Hours
Prerequisite: Sheet Metal II-B The course topics are Sheet Metal Job Specifications; Architectural Sheet Metal; Blanke Insulation for Ducts; Welding and Brazing; Oxyfuel Cutting; Sheet Metal Business and To Crew Leadership	et Insulation for Duct echnology; and Fund	ts; Board Jamentals of

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.

PFPB 1053

18 Sessions 80 Hours

PFPB 1055

18 Sessions 80 Hours

MCHN 2072

STP 1 - Leadership & Motivation

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.

<u>STP 3 - Planning & Scheduling</u>	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.

<u>STP 4 - Contract Documents</u>	CNBT 1073		
	5 Sessions 2	0 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.

BMGT 1020

6 Sessions 24 Hours

24 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.
 24 Hours

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.

 Welding Construction I
 WLDG 1007

 34 Sessions
 160 Hours

 Prerequisite: English or Spanish Math NCCER 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.

Consists of 160 hours; 70% hands-on per semester. Course topics will include: Build Your Future in Construction, Basic Safety (Construction Site Safety), Introduction to Math; Introduction to Hand Tools, Introduction to Power Tools, Introduction to Construction Drawings; Introduction to Material Handling; Joint Fit-Up and Alignment; Oxyfuel Cutting, Welding Safety; Welding Quality, SMAW (Equipment and Set Up, Beads and Fillet Welds, Electrodes) and Weld Safety.

Welding Construction III

Prerequisite: Welding Construction II-B

Consists of 80 hours: 70% hands-on per semester. Course topics will include Physical Characteristics & Mechanical Properties of Meal, 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.

BMGT 1021

WLDG 2013

34 Sessions

8 Sessions 30 Hours

160 Hours