



Seattle Area Pipe Trades

APPRENTICESHIP

WINTER 2020  
JOURNEYMAN & CONTINUING  
EDUCATION SCHEDULE

## coordinator's message

HAPPY NEW YEAR!

We are well underway with our expansion of courses and seminars in this continuing education schedule. As we finish building out labs, you can expect to see more offerings meeting new and evolving industry practices

This quarter, we are launching our Intro to Technology and Service Plumber Boiler Maintenance classes. These are just two examples of the content we are building for our members.

We've called this publication a "journeyman schedule," but these courses are available for all members. No matter if you came up through apprenticeship or organized into the United Association, there's a place for you to engage with others in our Continuing Education courses. We also believe that truly engaging classes bring together people at all levels of their career.

In every quarterly publication, you will see courses listed by arrangement. We offer these courses when we have a full cohort AND available instructor. You can be added to a waitlist for an arranged course by calling 425.271.5900 or emailing [registrations@seattlepipetrades.org](mailto:registrations@seattlepipetrades.org). When we schedule an arranged class, you will be notified of the dates via email.

If you have ideas for course topics, guest speakers, or instructors, we want to hear from you. I can be reached at [pjmoss@seattlepipetrades.org](mailto:pjmoss@seattlepipetrades.org).

In Solidarity,

P.J. Moss, Training Coordinator

# service plumber training in continuing education

**We're changing the way we deliver  
training today, in preparation for  
tomorrow.**

Over the next two years, members will see new, shorter, and service-content classes and seminars added in the continuing education schedule.

The construction economy has surpassed historic highs in the Puget Sound. Even as building trades thrive, now is the time to take your service skills to the next level.

In partnership with **UA Local 32** and the **Mechanical Contractors Association of Western Washington**, Seattle Area Pipe Trades (SAPT) is developing a new series of courses designed especially for new and experienced service plumbers.

## 2020-2021 SERVICE COURSES

### ***Electrical Troubleshooting for Plumbers***

Available winter 2020!

### ***Boiler Maintenance & Service for Plumbers***

Available winter 2020!

### ***Backflow Prevention***

Available again spring 2020!

### ***Backflow Professional Growth***

Available again spring 2020!

### ***Intro to Drain Cleaning***

Coming in 2020!

### ***Advanced Customer Service***

Coming in 2020!



## A PATHWAY FOR PLUMBER APPRENTICES

We enroll commercial plumber apprentices into service-based coursework, based on your goals and aptitude. You can complete an endorsement with the apprenticeship at your own pace.



## JOURNEYMAN CONTINUING EDUCATION

We submit service-based curriculum to the State of Washington to make sure the courses you take count towards your licensure requirements.



## SERVICE PLUMBER MECHANICS

Service Plumbing Mechanics can choose to enroll in apprentice courses as program space permits, or select from continuing education courses that fill gaps in their previous experience.

# regularly offered courses | winter 2020

available now for enrollment

## First Aid/CPR

If your First Aid card has expired or you have never had one, you must attend these classes covering basic first aid and life-saving skills. (4 hours of CEU for Plumber & Electrical Licenses)

WINTER DATE: Saturday, January 11, 2020 – Class is FULL, please call for waitlist

## UPC Upgrade

This course is a refresher to the theories & principles of properly installed plumbing systems. Each will be able to identify all components of plumbing systems with respect to design, function & current code application. (12 hours of CEU for Plumbers in either in-person or online course)

WINTER DATES: Wednesdays, January 8 through January 29, 2020

## Electrical Safety

This course combines theory study and hands on use of testers. Upon completion of the course each student will be able to identify the principals of electricity & solve minor field related problems. (4 hours of CEU for Plumber License).

WINTER DATE: Wednesday, February 19, 2020

## General Welding

Practice all of your welding skills from Beginning Arc to Advanced Arc. All welding process are offered – Arc, TIG, MIC, and Oxy-Ace Welding. The course objective is to prepare for WABO or UA tests.

WINTER SHOP DATES: Tuesdays & Thursdays, January 7 through February 27, 2020

## Service! Boiler Maintenance & Service

Boilers are crucial to the delivery of hot water to both potable and hydronic systems. This course is designed to teach apprentices the basic structure and anatomy of boilers, to provide an overview of the order of operations, and to give an introduction to boiler safety. **Service Apprentices will be automatically enrolled in this class.**

WINTER DATES: Thursdays, February 20 through March 19, 2020

## New – Space is Limited! Intro to Technology

This course offers an overview of primary technologies being used in today's pipe trade industry: Bluebeam, Navisworks, and Revit. The student will gain basic understandings of Bluebeam and Navisworks functions, and how this software ties to Revit. Students will use these functions to navigate a real-world project, and use these skills for basic worksite planning, information gathering, and decision-making. Students will also gain valuable skills in organizing and using project details and technology through established modes of communication.

**Prerequisite: Attendance at November 20, 2019 Tech Committee Meeting.**

WINTER DATES: Tuesdays, March 17, 24 and 31, 2020; Thursdays, March 19, 26 and April 2, 2020

## Service! Electrical Troubleshooting for Plumbers

In this one-night seminar, foundational electrical safety, diagnosis and troubleshooting will be introduced. This class is intended to help service plumbers recognize and apply what they can do when tasks require both electrical and plumbing skills. Students will gain familiarity with ladder

diagrams and learn to use an electrical multi-meter. (4 hours of CEU for Plumber OR Electrical License).

WINTER DATE: [Tuesday, February 19, 2020 from 4:00pm to 8:00pm](#)

## **RCW/WAC**

This course will provide safety information on equipment grounding as it relates to the National Electrical Code (NEC) and the RCW / WAC for the state of Washington. (4 hours of CEU for Electrical License in either in-person or online course)

WINTER DATES: [Thursday, February 6, 2020](#)

## **NEC Code**

This is a refresher course on the state laws, regulations & the changes to the National Electrical Code as amended by the State of Washington. Has been approved by the state for CEU's toward electrical license renewal & Plumber Cont. Ed. (8 hours of CEU for Electrical License in either in-person or online course)

WINTER DATES: [Tuesday, February 18, 2020 & Thursday, February 20, 2020](#)

## **New! Saturday Welding Classes**

Practice all of your welding skills from Beginning Arc to Advanced Arc. All welding processes are offered - Arc, TIG, and MIG Welding. The course objective is to prepare the student for the WABO or UA tests.

WINTER DATES: [Saturday, January 4 through March 28, 2020 – call to sign up!](#)

## **courses by arrangement | winter 2010**

scheduled by popular demand

[Courses offered by arrangement are opened for registration when we have enough people on a waitlist, and instructor availability. If you do not respond to open enrollment notifications for waitlisted classes, you will be removed from the waitlist.](#)

## **First Aid/CPR**

If your First Aid card has expired or you have never had one, you must attend these classes covering basic first aid and life-saving skills. (4 hours of CEU for Plumber & Electrical Licenses)

## **General Welding**

Practice all of your welding skills from Beginning Arc to Advanced Arc. All welding processes are offered - Arc, TIG, MIG, and Oxy-Ace Welding. The course objective is to prepare the student for the WABO or UA tests.

## **Variable Frequency Drives**

This course familiarizes students with A/C motor theory, A/C Drive Theory, Square D Drive products, enclosures, and providing jobsite reference materials. (8 hours Electrical License CEU)

## **REGISTRATION IS EASY**

425.271.5900

[registrations@seattlepipetrades.org](mailto:registrations@seattlepipetrades.org)

[seattlepipetrades.org](http://seattlepipetrades.org)

## **NFPA 70 E**

Students will become familiar with the standards for electrical safety in the workplace and work with the NFPA 70E workbook and Ugly's electrical reference handbook. (4 hours of CEU for Electrical)

## **Conduit Bending**

The students will become familiar with understanding how to select the correct tubing size for the number of conductors, as well as proper tube bending practices. (4 hours of CEU for Plumbers)

## **Basic Electrical Theory**

This course will help you understand electricity, and perform basic electrical calculations for everyday use. Basic understanding of motor and transformers is also covered. Students will be introduced to the important subject of how and why grounding works. This 48 hour course supports individuals with Electrical Trainee Cards.

## **Intro to Trimble**

This course is intended to introduce students to a Robotic Total Station and how to properly care for and use the equipment for laying out designated points of reference on construction sites.

## **Electrical Controls for CO2/R-744**

This class will give the students information on CO2/R7-44 Refrigeration Systems for the development of troubleshooting electric controls within the system (8 hours of CEU for Electrical License)

## ***Service!* Backflow Prevention Certification**

This course will give you classroom instruction and hands-on training in the installation, service and repair and testing of backflow prevention devices. Each student will be given a state-monitored exam. [Registration/\\$50; Exam fee/\\$200; Book/\\$99.00](#) [Registration/Exam fees are non-refundable] (USC, AWWA materials) (12 Hours CEU for Plumbers)

## ***Service!* Backflow Professional Growth**

Professional growth class for those that are preparing for the hands on test to maintain their BAT certificate. Course is one, 8-hour session in duration. The student will refresh skills to properly test the SPVA, PVBA, DCVA, and RPBA. Also, this course will apply Chapter 6 of the Uniform Plumbing Code requirements for their installation and maintenance. (4 hours of CEU for Plumbers)

## **Equipment Grounding**

This course will provide safety information on equipment grounding as it relates to the National Electrical Code (NEC) and the RCW / WAC for the state of Washington. Approved for 4 hours of electrical continuing education. (4 hours of CEU for Electrical License)

**REGISTRATION IS EASY**

425.271.5900

[registrations@seattlepipetrades.org](mailto:registrations@seattlepipetrades.org)

[seattlepipetrades.org](http://seattlepipetrades.org)



## Washington State Rigging Qualifications

The student will have a basic understanding of sling and rigging hardware, and will become familiar with the limitations, practices, associated hazards and inspection requirements. The student will understand load calculations, center of gravity, effects of angles on rigging components, load turning, knots and tag line use, chain and lever action hoists, and winch, block and basic hand signals. (4 hours of CEU for Plumbers)

## OSHA 30

A continuation of OSHA 10, this 30 hour course provides further instruction on construction industry safety & health topics for all construction personnel. Students receive certificates from OSHA. (4 hours of CEU for Plumbers)

## NEC Code

This is a refresher course on the state laws, regulations & the changes to the National Electrical Code as amended by the State of Washington. Has been approved by the state for CEU's toward electrical license renewal & Plumber Cont. Ed. (8 hours of CEU for Electrical License in either in-person or online course)

## Signal Person Qualifications

This course will convey the knowledge and standards required for the safe operation of mobile and tower cranes. Students will be given a written and practical exam by the NCCCO. (4 hours of CEU for Plumbers)

## UPC Upgrade

This course is a refresher to the theories & principles of properly installed plumbing systems. Each will be able to identify all components of plumbing systems with respect to design, function & current code application. (12 hours of CEU for Plumbers in either in-person or online course)

## Electrical Safety

This course will provide safety information on equipment grounding as it relates to the National Electrical Code (NEC) and the RCW / WAC for the state of Washington. (4 hours of CEU for Plumbers)

## RCW/WAC

This course will provide safety information on equipment grounding as it relates to the National Electrical Code (NEC) and the RCW / WAC for the state of Washington. (4 hours of CEU for Electrical License in either in-person or online course)

## UA Medical Gas Certification

**PREREQUISITE:** [UA 51 Weld Certification](#)

This course focuses on the proper procedures & requirements needed to successfully install or retrofit a Med Gas System. You must pass a written & brazing exam to be UA certified. (12 hours Plumbers CEU) Registration/\$50; Exam/\$116; Book \$79.39 [Registration/Exam fees non-refundable]. **NOTE:** If your Med Gas card has lapsed with the state of Washington, you must take the exam with Washington State Department of Labor & Industries to renew it, rather than take the NITC test.

# online options

available anytime | fast registration | no cost

## **NFPA 70 E**

Students will become familiar with the standards for electrical safety in the workplace and work with the NFPA 70E workbook and Ugly's electrical reference handbook. (4 hours of CEU for Electrical)

## **Equipment Grounding**

This course will provide safety information on equipment grounding as it relates to the National Electrical Code (NEC) and the RCW / WAC for the state of Washington. (4 hours of CEU for Electrical License)

## **NEC Code**

This is a refresher course on the state laws, regulations & the changes to the National Electrical Code as amended by the State of Washington. (8 hours of CEU for Electrical License in either in-person or online course)

## **UPC Upgrade**

This course is a refresher to the theories & principles of properly installed plumbing systems. Each student will be able to identify all components of plumbing systems with respect to design, function & current code application. (12 hours of CEU for Plumbers in either in-person or online course)

## **Electrical Safety**

This course will provide safety information on equipment grounding as it relates to the National Electrical Code (NEC) and the RCW / WAC for the state of Washington. (4 hours of CEU for Plumber License in either in-person or online course)

## **RCW/WAC**

This course will provide safety information on equipment grounding as it relates to the National Electrical Code (NEC) and the RCW / WAC for the state of Washington. (4 hours of CEU for Electrical License in either in-person or online course)

## **Intro to Variable Frequency Drives**

Student will learn electrical basics, electrical motor theory, electronically commutated motors (ECM's) and an introduction to Variable Frequency Drives, and their usage in the HVAC/R Industry. In addition, the participant will learn electrical safety and some of the inherent dangers of Electronics and VFD Drives. (4 hours of CEU for Electrical License)

## **REGISTRATION IS EASY**

425.271.5900

[registrations@seattlepipetrades.org](mailto:registrations@seattlepipetrades.org)

[seattlepipetrades.org](http://seattlepipetrades.org)





# continuing education requirements

## Plumber

All Journey Level and Residential Specialty Plumbers must obtain 16 hours of continuing education within a 2-year renewal cycle:

- A minimum of 8 hours of Plumbing Code (Code); plus
- A minimum of 4 hours Industry-Related Electrical (IRE); plus
- 4 additional hours from Code, IRE, or Industry-Related Plumbing.

All Pump and Irrigation & Domestic Pump Plumbers must obtain 24 hours of continuing education with a minimum of 12 hours plumbing or combination classes within a 3-year cycle.

## Electrical

Master Electrician or Electricians are required to complete 24 hours of continuing education within three years of certification renewals:

- 8 hours of CEUs must be on currently adopted National Electrical Code changes; and
- 4 hours must be on currently adopted Revised Code of Washington (RCW) 19.28 and related Washington Administrative Code (WAC).

The remaining 12 hours of continuing education credit can be chosen from the list of approved courses through Washington State Department of Labor & Industries (indicated as CEUs on this schedule).

# weld testing & continuities | winter 2020

## How to Register

You must be registered no later than one week prior to a test date. Space is limited for all tests, and we cannot accommodate walk-ins at this time. If you arrive late for a test, you will not be tested. Additionally, there are fees associated with testing that must be paid in advance:

- WABO costs \$55 and must be paid by check or money order payable to WABO AFTER X-Ray Results
- Med Gas Braze costs \$74, or \$50 for re-qualification, and must be paid at time of registration –**JA 51 is PREREQUISITE FOR TAKING MED GAS CLASS SINCE OF FALL 2019**

## Winter 2020 Weld Test Dates & Times

- Saturday, January 18, 2020 begins at 8:00am
- Saturday, February 15, 2020 begins at 8:00am
- Saturday, March 21, 2020 begins at 8:00am
- Saturday, April 18, 2020 begins at 8:00am

## Winter 2020 Continuities Dates & Times

- Wednesday, January 8, 2020 begins at 2:30pm
- Wednesday, February 5, 2020 begins at 2:30pm
- Wednesday, March 4, 2020 begins at 2:30pm
- Wednesday, April 1, 2020 begins at 2:30pm

# pipe trades technology courses

**We're updating content to match  
industry practice.**

Software used to design, build and maintain our systems changes rapidly. There is a greater expectation that it can be used at the jobsite. As more companies switch to Navisworks, Bluebeam and REVIT, Seattle Area Pipe Trades will offer courses to introduce these programs.

## Course Levels in 2020 -2021

### **INTRODUCTION TO TECHNOLOGY**

This will be the perfect fit for workers who are looking for essential skills to navigate technology onsite, particularly for job planning.

### **DROP-IN TECH SUPPORT**

Got questions? Need tips or a shortcut to optimize your use of software, such as Revit, Bluebeam, Navisworks or AutoCAD? This is a monthly one-to-one opportunity to work with a Tech Committee member. Lab space is limited to 12 people. **Must register at least a week in advance and describe support needed.**

### **REVIT FOR DETAILERS**

**Prerequisite:** [Intro to Tech](#) or [Tech Committee Interview](#)

This interactive AND online class is being designed with established Detailers in mind. Must interview and demonstrate detailing proficiencies. Companies are shifting from AutoCAD to Revit based detailing platforms, and this course will assist the Detailer End user in transferring skill sets and assisting companies in navigating to new software and project management practices.

### **INTERMEDIATE TECH: PRACTICAL APPLICATIONS**

**Prerequisite:** [Intro to Tech](#) or [Tech Committee Interview](#)

This course continues content from the Intro to Technology course by diving into aspects of software that can get in the way of progress. Students will gain skills to troubleshoot common errors in using and interpreting detailed drawings, and navigating software. Students will get ideas to assist field and office alike in using and optimizing detailers.



Finding the right fit  
for you

We're structuring  
entrance into  
technology  
courses with a  
team of field  
experts who will  
assess tech skills,  
and help us place  
you into the right  
class.

