

PLUMBING

Plumbers install, maintain, and repair many different types of pipe systems. For example, some systems move water to a municipal water treatment plant and then to residential, commercial, and public buildings. Other systems dispose of waste products. Piping provides gas to stoves and furnaces, or supply air conditioning. Pipe systems in power plants carry the steam that powers huge turbines. Pipes also are used in manufacturing plants, wineries and to move material through production processes. CITC's five-year training program prepares plumbers to do new construction as well as maintenance work safely and following code. Major topics include installing and servicing Potable Water Systems; Drain, Waste & Vent Systems; Basic Electricity; Medical Gas Piping; and Piping for Fuel Gas and Fuel Oil Systems.



NOTE: IT IS CRUCIAL THAT STUDENTS HAVE REQUIRED BOOKS PRIOR TO THE FIRST CLASS MEETING. A STUDENT WHO DOES NOT HAVE BOOKS BY THE END OF THE SECOND WEEK MAY BE SENT HOME AND BE CHARGED WITH AN ABSENCE.

PLUMBING LEVEL 1

Minimum: 216 hours per year

PLUMBING 101: FALL QUARTER

Students will thoroughly review construction site safety and shop safety and are introduced to trade mathematics; safe use of basic hand and power tools; blueprint reading; rigging and are provided with an overview of plumbing careers, plumbing safety and plumbing math. *Schedule for lab dates will be handed out the first night of class each quarter. Spokane students complete 8 hours of outside projects per month.*

PLUMBING 102: WINTER QUARTER

Students are introduced to plumbing drawings; and learn about plastic pipe and fittings, copper pipe and fittings, cast iron pipe and fittings and related articles of the Uniform Plumbing Code (UPC) and Washington State Amendments. Includes OSHA 10 and First Aid/CPR Training. *Spokane students complete 8 hours of outside projects per month.*

PLUMBING 103: SPRING QUARTER

Students will learn about carbon steel pipe and fittings, plumbing fixtures, are introduced to drain, waste and venting (DWV) systems, and are introduced to water distribution systems and related articles of the Uniform Plumbing Code (UPC) and Washington State Amendments. *Spokane students complete 8 hours of outside projects per month.*

REQUIRED BOOKS - PLUMBING LEVEL 1

It is the student's responsibility to have the following book(s) on the first night of class:

| | |
|--|----------------------------------|
| NCCER Plumbing Level 1 Trainee Guide, 4th Edition | 978-0-13-292143-5 |
| NCCER Core Curriculum Trainee Guide, 5th Edition | 978-0-13-413098-9 |
| 2015 Uniform Plumbing Code Book (UPC) - Illustrated or 2015 Uniform Plumbing Code Book (UPC) - Softcover | 978-1938936807 978-1938936647 |
| Washington State Amendments | Available through L&I website |

PLUMBING LEVEL 2

Minimum: 216 hours per year

PLUMBING 201: FALL QUARTER

Students will learn advanced plumbing math; reading commercial drawings; structural penetrations, insulation and fire stopping; installing and testing of DWV piping and related articles of the Uniform Plumbing Code (UPC) and Washington State Amendments. *Schedule for lab dates will be handed out the first night of class each quarter. Spokane students complete 8 hours of outside projects per month.*

PLUMBING 202: WINTER QUARTER

Students will continue learning about installing and testing DWV piping; installing roof, floor and area drains; installing and testing water supply piping; types of valves; and related articles of the Uniform Plumbing Code (UPC) and Washington State Amendments and will review green building practices. *Spokane students complete 8 hours of outside projects per month.*

PLUMBING 203: SPRING QUARTER

Students will learn about installing fixtures and valves; installing water heaters; basic electricity for plumbing; fuel gas and fuel oil systems; and related articles of the Uniform Plumbing Code (UPC) and Washington State Amendments. *Spokane students complete 8 hours of outside projects per month.*

REQUIRED BOOKS - PLUMBING LEVEL 2

It is the student's responsibility to have the following book(s) on the first night of class:

| | |
|--|----------------------------------|
| NCCER Plumbing Level 2 Trainee Guide, 4th Edition | 978-0-13-314850-3 |
| NCCER Your Role in the Green Environment Trainee Guide, 3rd Ed | 978-0-13-294863-0 |
| 2015 Uniform Plumbing Code Book (UPC) - Illustrated or 2015 Uniform Plumbing Code Book (UPC) - Softcover | 978-1938936807 978-1938936647 |
| Washington State Amendments | Available through L&I website |

NCCER BOOKSTORE

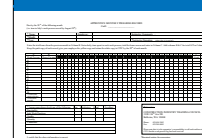
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your NCCER books

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OFF

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on your first order*

www.nccer.org/bookstore

APPRENTICESHIP MONTHLY WORK LOGS



Apprenticeship monthly work logs can be submitted to the apprenticeship department via email: worklogs@citcwa.org; fax: (425) 289-0085; mail to the CITC main office: 1930 116th Ave NE Bellevue, WA 98004; or in person to the CITC front office.

PLUMBING LEVEL 3

Minimum: 216 hours per year

PLUMBING 301: FALL QUARTER

Students will learn applied plumbing math; sizing and protecting water supply piping; potable water treatment and related articles of the Uniform Plumbing Code (UPC) and Washington State Amendments. *Schedule for lab dates will be handed out the first night of class each quarter. Spokane students complete 8 hours of outside projects per month.*

PLUMBING 302: WINTER QUARTER

Students will learn types of venting; sizing DWV and storm systems; sewage pumps and sump pumps; and related articles of the Uniform Plumbing Code (UPC) and Washington State Amendments. *Spokane students complete 8 hours of outside projects per month.*

PLUMBING 303: SPRING QUARTER

Students will learn about; corrosive-resistant waste piping; compressed air systems; service plumbing; and related articles of the Uniform Plumbing Code (UPC) and Washington State Amendments. *Spokane students complete 8 hours of outside projects per month.*

REQUIRED BOOKS - PLUMBING LEVEL 3

| It is the student's responsibility to have the following book(s) on the first night of class: | |
|--|----------------------------------|
| NCCER Plumbing Level 3 Trainee Guide, 4th Edition | 978-0-13-340424-1 |
| 2015 Uniform Plumbing Code Book (UPC) - Illustrated or 2015 Uniform Plumbing Code Book (UPC) - Softcover | 978-1938936807 978-1938936647 |
| Washington State Amendments | Available through L&I website |

PLUMBING LEVEL 4

Minimum: 216 hours per year

PLUMBING 401: FALL QUARTER

Students will learn about business principles; skills for crew leaders; water pressure booster and recirculation systems; and related 2015 Plumbing Code and Washington State Amendments. *Schedule for lab dates will be handed out the first night of class each quarter. Spokane students complete 8 hours of outside projects per month.*

PLUMBING 402: WINTER QUARTER

Students will learn about indirect and special waste installation procedures; hydronic and solar heating systems; various local, state and international codes; servicing piping systems, fixtures and appliances; and related 2015 Plumbing Code and Washington State Amendments. *Spokane students complete 8 hours of outside projects per month.*

PLUMBING 403: SPRING QUARTER

Students will learn about private water supply well systems; private waste disposal systems; swimming pools and hot tubs; plumbing for mobile homes and mobile home parks; and related 2015 Plumbing Code and Washington State Amendments. *Spokane students complete 8 hours of outside projects per month.*

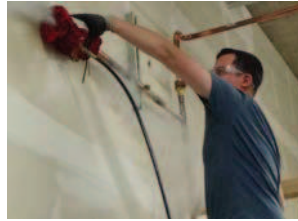
REQUIRED BOOKS - PLUMBING LEVEL 4

| It is the student's responsibility to have the following book(s) on the first night of class: | |
|--|----------------------------------|
| NCCER Plumbing Level 4 Trainee Guide, 4th Edition | 978-0-13-382422-3 |
| 2015 Uniform Plumbing Code Book (UPC) - Illustrated or 2015 Uniform Plumbing Code Book (UPC) - Softcover | 978-1938936807 978-1938936647 |
| Washington State Amendments | Available through L&I website |

PLUMBING LEVEL 5

5th Year State-Registered Plumbing Apprentices

For 5th year state-registered plumbing apprentices taking classes through CITC, contact your apprenticeship coordinator at (877) 428-0442 for a list of classes.



PLUMBING INSTRUCTORS

As a part of our dedication and commitment to training, we take pride in delivering top quality instructors. CITC's instructors are highly skilled journey-level workers who bring their knowledge and years of trade experience into the classroom. All CITC instructors have been certified by the National Center for Construction Education and Research.

Ben Aloisio started in the trade in 2003. CITC faculty member since 2016.

Nick Aloisio started in the trade in 2000. CITC faculty member since 2007.

Terry Deems started in the trade in 1976. Awarded 2015/2016 CITC Craft Training Instructor of the Year. CITC faculty member since 2007.

Andrew Gaylor started in the trade in 2012 and graduated from CITC in 2017. Faculty member since 2017.

Yevgeniy Likhonin started in the trade in 2005. CITC graduate in 2009. Awarded 2018/19 CITC Southwest Washington Craft Training Instructor of the Year. CITC faculty member since 2017.

Kurt Sarkinen started in the trade 2000. CITC graduate in 2007. CITC faculty member since 2016.

Robbie Stewart started in the trade 1995. Completed plumbing apprenticeship program in 1999. CITC faculty member since 2013.

Steve Sullivan started in the trade in 1991. Awarded 2015/2016 CITC Continuing Education Instructor of the Year. CITC faculty member since 2004.

Steven Triggs started in the trade in 1997. CITC faculty member since 2015.

Plumbing Schedule & Tuition

Eastern Washington Region

| PLUMBING LEVEL 1 | | | | | | | |
|------------------|-----|------|------------|---------|-------|---|------------------|
| Spokane | 101 | Fall | 3 wk/63 hr | Fri/Sat | 8a-5p | September 27 & 28; October 25 & 26; November 22 & 23 + Assignments | Tuition: \$1,125 |
| Spokane | 102 | Wtr | 4 wk/90 hr | Fri/Sat | 8a-5p | January 3 & 4; January 31 & February 1; February 28 & 29; March 27 & 28 + Assignments | Tuition: \$1,125 |
| Spokane | 103 | Spr | 3 wk/63 hr | Fri/Sat | 8a-5p | April 24 & 25; May 29 & 30; June 19 & 20 + Assignments | Tuition: \$1,125 |
| PLUMBING LEVEL 2 | | | | | | | |
| Spokane | 201 | Fall | 4 wk/90 hr | Fri/Sat | 8a-5p | September 20 & 21; October 18 & 19; November 15 & 16; December 20 & 21 + Assignments | Tuition: \$1,125 |
| Spokane | 202 | Wtr | 3 wk/63 hr | Fri/Sat | 8a-5p | January 24 & 25; February 21 & 22; March 20 & 21 + Assignments | Tuition: \$1,125 |
| Spokane | 203 | Spr | 3 wk/63 hr | Fri/Sat | 8a-5p | April 17 & 18; May 15 & 16; June 12 & 13 + Assignments | Tuition: \$1,125 |
| PLUMBING LEVEL 3 | | | | | | | |
| Spokane | 301 | Fall | 4 wk/90 hr | Fri/Sat | 8a-5p | September 6 & 7; October 4 & 5; November 1 & 2; December 6 & 7 + Assignments | Tuition: \$1,125 |
| Spokane | 302 | Wtr | 3 wk/63 hr | Fri/Sat | 8a-5p | January 10 & 11; February 7 & 8; March 6 & 7 + Assignments | Tuition: \$1,125 |
| Spokane | 303 | Spr | 3 wk/63 hr | Fri/Sat | 8a-5p | April 3 & 4; May 1 & 2; June 5 & 6 + Assignments | Tuition: \$1,125 |
| PLUMBING LEVEL 4 | | | | | | | |
| Spokane | 401 | Fall | 4 wk/90 hr | Fri/Sat | 8a-5p | September 13 & 14; October 11 & 12; November 8 & 9; December 13 & 14 + Assignments | Tuition: \$1,125 |
| Spokane | 402 | Wtr | 3 wk/63 hr | Fri/Sat | 8a-5p | January 17 & 18; February 14 & 15; March 13 & 14 + Assignments | Tuition: \$1,125 |
| Spokane | 403 | Spr | 3 wk/63 hr | Fri/Sat | 8a-5p | April 24 & 25; May 8 & 9; June 12 & 13 + Assignments | Tuition: \$1,125 |

Western Washington Region

| PLUMBING LEVEL 1 | | | | | | | |
|------------------|-----|------|-------------|---------|-------|--|------------------|
| Bellevue | 101 | Fall | 15 wk/90 hr | Tue/Thu | 6p-9p | September 3 - December 17 + 1 Saturday | Tuition: \$1,500 |
| Bellevue | 102 | Wtr | 11 wk/63 hr | Tue/Thu | 6p-9p | January 7 - March 10 + 1 Saturday | Tuition: \$1,500 |
| Bellevue | 103 | Spr | 9 wk/63 hr | Tue/Thu | 6p-9p | April 7 - June 9 + 1 Saturday | Tuition: \$1,500 |
| Marysville | 101 | Fall | 15 wk/90 hr | Tue/Thu | 5p-8p | September 3 - December 17 + 1 Saturday | Tuition: \$1,500 |
| Marysville | 102 | Wtr | 11 wk/63 hr | Tue/Thu | 5p-8p | January 7 - March 10 + 1 Saturday | Tuition: \$1,500 |
| Marysville | 103 | Spr | 9 wk/63 hr | Tue/Thu | 5p-8p | April 7 - June 9 + 1 Saturday | Tuition: \$1,500 |
| Tacoma | 101 | Fall | 15 wk/90 hr | Tue/Thu | 6p-9p | September 3 - December 17 + 1 Saturday | Tuition: \$1,500 |
| Tacoma | 102 | Wtr | 11 wk/63 hr | Tue/Thu | 6p-9p | January 7 - March 10 + 1 Saturday | Tuition: \$1,500 |
| Tacoma | 103 | Spr | 9 wk/63 hr | Tue/Thu | 6p-9p | April 7 - June 9 + 1 Saturday | Tuition: \$1,500 |
| Vancouver 1A | 101 | Fall | 13 wk/72 hr | Thu | 5p-9p | September 5 - December 12 + 3 Saturdays | Tuition: \$1,500 |
| Vancouver 1A | 102 | Wtr | 13 wk/72 hr | Thu | 5p-9p | December 19 - March 12 + 3 Saturdays | Tuition: \$1,500 |
| Vancouver 1A | 103 | Spr | 12 wk/72 hr | Thu | 5p-9p | March 26 - June 11 + 3 Saturdays | Tuition: \$1,500 |
| Vancouver 1B | 101 | Fall | 14 wk/72 hr | Tue | 5p-9p | September 10 - December 10 + 3 Saturdays | Tuition: \$1,500 |
| Vancouver 1B | 102 | Wtr | 13 wk/72 hr | Tue | 5p-9p | December 17 - March 17 + 3 Saturdays | Tuition: \$1,500 |
| Vancouver 1B | 103 | Spr | 13 wk/72 hr | Tue | 5p-9p | March 24 - June 9 + 3 Saturdays | Tuition: \$1,500 |



All first year classes include
OSHA 10 for Construction



Plumbing Schedule & Tuition

Western Washington Region *continued*

| PLUMBING LEVEL 2 | | | | | | | |
|------------------|-----|------|-------------|---------|-------|--|------------------|
| Bellevue | 201 | Fall | 15 wk/90 hr | Mon/Wed | 6p-9p | September 5 - December 18 + 1 Saturday | Tuition: \$1,500 |
| Bellevue | 202 | Wtr | 11 wk/63 hr | Mon/Wed | 6p-9p | January 6 - March 11 + 1 Saturday | Tuition: \$1,500 |
| Bellevue | 203 | Spr | 9 wk/63 hr | Mon/Wed | 6p-9p | April 6 - June 10 + 1 Saturday | Tuition: \$1,500 |
| Tacoma | 201 | Fall | 15 wk/90 hr | Tue/Thu | 6p-9p | September 3 - December 17 + 1 Saturday | Tuition: \$1,500 |
| Tacoma | 202 | Wtr | 11 wk/63 hr | Tue/Thu | 6p-9p | January 7 - March 10 + 1 Saturday | Tuition: \$1,500 |
| Tacoma | 203 | Spr | 9 wk/63 hr | Tue/Thu | 6p-9p | April 7 - June 9 + 1 Saturday | Tuition: \$1,500 |
| Vancouver 2A | 201 | Fall | 13 wk/72 hr | Thu | 5p-9p | September 5 - December 12 + 3 Saturdays | Tuition: \$1,500 |
| Vancouver 2A | 202 | Wtr | 13 wk/72 hr | Thu | 5p-9p | December 19 - March 12 + 3 Saturdays | Tuition: \$1,500 |
| Vancouver 2A | 203 | Spr | 12 wk/72 hr | Thu | 5p-9p | March 26 - June 11 + 3 Saturdays | Tuition: \$1,500 |
| Vancouver 2B | 201 | Fall | 14 wk/72 hr | Tue | 5p-9p | September 10 - December 10 + 3 Saturdays | Tuition: \$1,500 |
| Vancouver 2B | 202 | Wtr | 13 wk/72 hr | Tue | 5p-9p | December 17 - March 17 + 3 Saturdays | Tuition: \$1,500 |
| Vancouver 2B | 203 | Spr | 13 wk/72 hr | Tue | 5p-9p | March 24 - June 9 + 3 Saturdays | Tuition: \$1,500 |
| PLUMBING LEVEL 3 | | | | | | | |
| Vancouver 3A | 301 | Fall | 13 wk/72 hr | Thu | 5p-9p | September 5 - December 12 + 3 Saturdays | Tuition: \$1,500 |
| Vancouver 3A | 302 | Wtr | 13 wk/72 hr | Thu | 5p-9p | December 19 - March 12 + 3 Saturdays | Tuition: \$1,500 |
| Vancouver 3A | 303 | Spr | 12 wk/72 hr | Thu | 5p-9p | March 26 - June 11 + 3 Saturdays | Tuition: \$1,500 |
| Vancouver 3B | 301 | Fall | 14 wk/72 hr | Tue | 5p-9p | September 10 - December 10 + 3 Saturdays | Tuition: \$1,500 |
| Vancouver 3B | 302 | Wtr | 13 wk/72 hr | Tue | 5p-9p | December 17 - March 17 + 3 Saturdays | Tuition: \$1,500 |
| Vancouver 3B | 303 | Spr | 13 wk/72 hr | Tue | 5p-9p | March 24 - June 9 + 3 Saturdays | Tuition: \$1,500 |
| PLUMBING LEVEL 4 | | | | | | | |
| Bellevue | 401 | Fall | 15 wk/90 hr | Mon/Wed | 6p-9p | September 5 - December 18 + 1 Saturday | Tuition: \$1,500 |
| Bellevue | 402 | Wtr | 11 wk/63 hr | Mon/Wed | 6p-9p | January 6 - March 11 + 1 Saturday | Tuition: \$1,500 |
| Bellevue | 403 | Spr | 9 wk/63 hr | Mon/Wed | 6p-9p | April 6 - June 10 + 1 Saturday | Tuition: \$1,500 |
| Tacoma | 401 | Fall | 15 wk/90 hr | Tue/Thu | 6p-9p | September 3 - December 17 + 1 Saturday | Tuition: \$1,500 |
| Tacoma | 402 | Wtr | 11 wk/63 hr | Tue/Thu | 6p-9p | January 7 - March 10 + 1 Saturday | Tuition: \$1,500 |
| Tacoma | 403 | Spr | 9 wk/63 hr | Tue/Thu | 6p-9p | April 7 - June 9 + 1 Saturday | Tuition: \$1,500 |
| Vancouver | 401 | Fall | 13 wk/72 hr | Thu | 5p-9p | September 5 - December 12 + 3 Saturdays | Tuition: \$1,500 |
| Vancouver | 402 | Wtr | 13 wk/72 hr | Thu | 5p-9p | December 19 - March 12 + 3 Saturdays | Tuition: \$1,500 |
| Vancouver | 403 | Spr | 12 wk/72 hr | Thu | 5p-9p | March 26 - June 11 + 3 Saturdays | Tuition: \$1,500 |

MEDICAL GAS PIPING CERTIFICATION

This course provides four days of intense training on medical gas pipeline equipment, such as proper alarm and valve placement, compressors, vacuum pumps and manifolds. NFPA 99 requirements are also covered, including types of facilities and requirements, medical gas source equipment, piping, testing and certification requirements for medical gas equipment. A written exam and brazing practical with samples evaluated by an independent Certified Welding Instructor (CWI) conclude the training.

This course is **mandatory in over forty states** prior to working on any medical gas or vacuum system.

Register online at ceu.citcwa.org or toll-free at (877) 238-8646

