

# SHEET METAL

Sheet metal workers mainly work in installing ductwork for heating, ventilation, air conditioning, and refrigeration (HVACR), but there are many other opportunities. Sheet metal craftsmen might install metal roofing and gutters, decorative “Architectural Metals,” install hoods and vents for restaurants or build grain silos for farmers. Some sheet metal workers specialize in fabricating ducts, hoods and gutters – others specialize in installation or service work. CITC’s four-year program is designed to prepare the student for a large range of possibilities, covering topics such as fabrication and installation of various types of ductwork, reading blueprints and specifications, and advanced architectural sheet metal.

## HYBRID LEARNING PROGRAM

CITC has taken company-wide measures to help prevent the spread of the COVID-19 virus to ensure the health and safety of students, faculty, staff and the community. Due to the COVID-19 Pandemic, CITC classes will be delivered in a hybrid format with theory classes being offered virtually and small in-person labs scheduled at our facilities throughout the year. All in-person lab sessions will be scheduled to ensure students and faculty can maintain social distancing protocols during lab activities and performance testing.

Students will be required to have access to a computer or tablet device with a working camera and microphone. Additionally, all students will need to have access to a reliable internet source when classes begin in the fall. For additional information on the technical requirements for this program please contact the CITC office at (425) 454-2482.

**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 dismissed from class and charged with an absence.**



## APPRENTICESHIP MONTHLY WORK LOGS

Apprenticeship monthly work logs can be submitted to the apprenticeship department via email: [worklogs@citcwa.org](mailto:worklogs@citcwa.org); fax: (425) 289-0085; mail to the CITC main office: 1930 116th Ave NE Bellevue, WA 98004; or placed in the Drop Box outside of CITC Facilities.

## NCCERCONNECT 2.0 WITH PEARSON eTEXT ACCESS CARD

NCCERConnect 2.0 is an online training program that enhances student learning with a range of visual, auditory, and interactive elements. Your Pearson eText Access Card will give you access to an eBook version of the textbook included in the package.



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**SHEET METAL LEVEL 1**

Minimum: 200 hours per year

**SHEET METAL 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 an overview of sheet metal careers. Schedule for lab dates will be handed out the first night of class each quarter.

**SHEET METAL 102: WINTER QUARTER**

Students will learn about sheet metal tools; are introduced to sheet metal layout and processes; sheet metal math; and fabrication of parallel line development.

**SHEET METAL 103: SPRING QUARTER**

Students will learn about installation of ductwork; installation of air distribution accessories; insulation; and architectural sheet metal. Includes OSHA 10 training.

**REQUIRED BOOKS - SHEET METAL LEVEL 1**

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

NCCER Core Curriculum Trainee Guide, 5th Edition, Softcover <i>or</i>	ISBN: 9780134130989
NCCER Core Curriculum Trainee Guide, 5th Edition, Hardcover <i>or</i>	ISBN: 9780134131436
NCCER Core Curriculum Trainee Guide, 5th Edition, Adobe Reader	ISBN: 9780134671147
NCCER Sheet Metal Level 1 Trainee Guide, 4th Edition <i>or</i>	ISBN: 9780136629511
NCCER Sheet Metal Level 1 Trainee Guide, Adobe Reader	

**SHEET METAL LEVEL 2**

Minimum: 200 hours per year

**SHEET METAL 201: FALL QUARTER**

Students will learn intermediate sheet metal trade mathematics, learn to read plans and specifications and learn layout and fabrication using radial line development. Schedule for lab dates will be handed out the first night of class each quarter.

**SHEET METAL 202: WINTER QUARTER**

Students will continue with radial line development then learn about sheet metal duct fabrication, air properties and distribution; and proper bend allowances and will review green building practices.

**SHEET METAL 203: SPRING QUARTER**

Students will learn a wide range of soldering tasks and techniques, basic piping practices and layout and fabrication of fiberglass duct.

**REQUIRED BOOKS - SHEET METAL LEVEL 2**

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

NCCER Sheet Metal Level 2 Trainee Guide, Perfect Bound, 3rd Edition	ISBN: 9780136044840
Your Role in the Green Environment, 4th Edition, Paperback <i>or</i>	ISBN: 9780136701200
Your Role in the Green Environment, 4th Edition, Adobe Reader	ISBN: 9780136639282



All first year classes include  
**OSHA 10 for Construction**



## SHEET METAL LEVEL 3

Minimum: 200 hours per year

### SHEET METAL 301: FALL QUARTER

Students will learn advanced sheet metal trade mathematics for field measuring and fitting; air systems; and principles of airflow. Schedule for lab dates will be handed out the first night of class each quarter.

### SHEET METAL 302: WINTER QUARTER

Students will learn about louvers, dampers and access doors; will do a comprehensive review of blueprint reading and specifications.

### SHEET METAL 303: SPRING QUARTER

Students will learn about fabrication techniques using triangulation; advanced architectural sheet metal.

#### REQUIRED BOOKS - SHEET METAL LEVEL 3

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

NCCER Sheet Metal Level 3 Trainee Guide, Paperback, 3rd Edition

ISBN: 9780136099628

## SHEET METAL LEVEL 4

Minimum: 200 hours per year

### SHEET METAL 401: FALL QUARTER

Students will learn about shop production and organization; air testing and air balancing. Schedule for lab dates will be handed out the first night of class each quarter.

### SHEET METAL 402: WINTER QUARTER

Students will learn about welding, brazing and cutting, fume and exhaust system design.

### SHEET METAL 403: SPRING QUARTER

Students will complete a comprehensive review of fabrication and will participate in crew leader training.

#### REQUIRED BOOKS - SHEET METAL LEVEL 4

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

NCCER Sheet Metal 4 Trainee Guide, Paperback, 3rd Edition

ISBN: 9780136099642



## Sheet Metal 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 Hanson** started in the trade in 1996. Became a CITC faculty member in 2016.

**David Price** started in the trade 1977 and became a CITC faculty member in 1989. Received CITC Instructor of the Year in 2008. NCCER Subject Matter Expert.

**Derrick Yancey** started in the trade in 1996 and joined the CITC faculty in 2006.

## Sheet Metal Schedule & Tuition

### Eastern Washington Region

SHEET METAL LEVEL 1								
Pasco	101	Fall	16 weeks	87 hours	Mon/Wed	5p-8p	September 2 - December 16 + 1 Saturday	Tuition: \$1,160
Pasco	102	Wtr	10 weeks	63 hours	Mon/Wed	5p-8p	January 4 - March 10 + 1 Saturday	Tuition: \$1,160
Pasco	103	Spr	7 weeks	51 hours	Mon/Wed	5p-8p	April 12 - May 24 + 2 Saturdays	Tuition: \$1,160
SHEET METAL LEVEL 2								
Pasco	201	Fall	15 weeks	87 hours	Mon/Wed	5p-8p	September 2 - December 9 + 2 Saturdays	Tuition: \$1,160
Pasco	202	Wtr	9 weeks	63 hours	Mon/Wed	5p-8p	January 4 - March 3 + 2 Saturdays	Tuition: \$1,160
Pasco	203	Spr	7 weeks	51 hours	Mon/Wed	5p-8p	April 12 - May 24 + 2 Saturdays	Tuition: \$1,160
SHEET METAL LEVEL 3								
Pasco	301	Fall	15 weeks	87 hours	Tue/Thu	5p-8p	September 3 - December 10 + 1 Saturday	Tuition: \$1,160
Pasco	302	Wtr	10 weeks	63 hours	Tue/Thu	5p-8p	January 5 - March 9 + 1 Saturday	Tuition: \$1,160
Pasco	303	Spr	8 weeks	51 hours	Tue/Thu	5p-8p	April 6 - May 25 + 1 Saturday	Tuition: \$1,160
SHEET METAL LEVEL 4								
Pasco	401	Fall	15 weeks	87 hours	Tue/Thu	5p-8p	September 3 - December 10 + 1 Saturday	Tuition: \$1,160
Pasco	402	Wtr	9 weeks	63 hours	Tue/Thu	5p-8p	January 5 - March 2 + 2 Saturdays	Tuition: \$1,160
Pasco	403	Spr	8 weeks	51 hours	Tue/Thu	5p-8p	April 6 - May 25 + 1 Saturday	Tuition: \$1,160

### Western Washington Region

SHEET METAL LEVEL 1								
Marysville	101	Fall	16 weeks	87 hours	Mon/Wed	5p-8p	September 2 - December 16 + 1 Saturday	Tuition: \$1,545
Marysville	102	Wtr	10 weeks	63 hours	Mon/Wed	5p-8p	January 4 - March 10 + 1 Saturday	Tuition: \$1,545
Marysville	103	Spr	7 weeks	51 hours	Mon/Wed	5p-8p	April 12 - May 24 + 2 Saturdays	Tuition: \$1,545
SHEET METAL LEVEL 2								
Marysville	201	Fall	15 weeks	87 hours	Mon/Wed	5p-8p	September 2 - December 9 + 2 Saturdays	Tuition: \$1,545
Marysville	202	Wtr	9 weeks	63 hours	Mon/Wed	5p-8p	January 4 - March 3 + 2 Saturdays	Tuition: \$1,545
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SHEET METAL LEVEL 4								
Marysville	401	Fall	15 weeks	87 hours	Tue/Thu	5p-8p	September 3 - December 10 + 1 Saturday	Tuition: \$1,545
Marysville	402	Wtr	9 weeks	63 hours	Tue/Thu	5p-8p	January 5 - March 2 + 2 Saturdays	Tuition: \$1,545
Marysville	403	Spr	8 weeks	51 hours	Tue/Thu	5p-8p	April 6 - May 25 + 1 Saturday	Tuition: \$1,545