



# Pipefitting and Plumbing Technology

This course is designed to introduce the student to various techniques used in the pipefitting plumbing trade: pipe fabrication and installation, blueprint reading and isometric drawings, measurement techniques, hand and power tools, cutting and prepping pipe, using a cutting torch, threading pipe, grooving, soldering, brazing, solvent joining pipes and installing valves.

Program/Location	Length	Days	Time
Day Program/ Knoxville Campus	12 Months	Monday-Friday	8:00am—2:30 pm

## Course Outline

Orientation and Safety  
 Technology Foundations  
 OSHA 10 Certification  
 Trade Tools  
 Applied Math - Pipefitting  
 Blueprint Reading, Drawings and Symbols  
 Oxy-fuel Cutting, Welding and Torch Safety  
 Rigging and Pipe Hangers  
 Pipe Valves, Flanges and Fasteners  
 Types and Schedules of Pipe  
 Fabrication, Make-Up and Take-Off  
 Butt Weld Fabrication  
 Socket Weld Fabrication  
 Threaded Pipe Fabrication  
 Copper Pipe Fabrication  
 Career Skills  
 Plumbing Codes and Standards  
 Rough In Specifications  
 Testing and Inspection  
 Final Installation

## Typical Job Opportunities

Entry Level Pipefitter  
 Entry Level Plumber  
 Entry Level Sprinkler Fitter

## Diplomas & Required Clock Hours

Pipefitting/Plumbing Diploma—1,296

## Certificates & Required Clock Hours

Pipefitter Entry Level Helper—48

Pipefitter Middle Class Helper—432

Pipefitter Top Helper —630

**Completion Rate for 2015 = 83%**

**Placement Rate for 2015 = 100%**

### HOW TO APPLY

*All Documents Must be Presented Together to Apply*

- 1. FAFSA—Provide Proof of Completed FAFSA  
School Code = 004025**
- 2. Immunizations—Provide Proof of Required  
Immunizations (Form is Attached)**
- 3. Complete TCAT Application for Enrollment  
(Form is Attached)**
- 4. Provide proof of official transcripts of  
education from high school, high-school  
equivalency or other colleges and universities.**





## Pipefitting and Plumbing Technology

### Book, Tool, and Supply List

1st Trimester			
Tuition	Cost		Total
Tuition*	\$ 1,139.00		
Technology Access Fee*	\$ 67.00		
Student Activity Fee*	\$ 10.00		
<b>TOTAL</b>			<b>\$1,216.00</b>

Book	ISBN	Cost	Required	
Pipefitting Level 1, 3rd edition	9780132273107	\$ 90.00	x	
Pipe Fitter's & Pipe Welder's Handbook	9780028025001	\$ 24.00	x	
Pipefitters Blue Book	9780970832122	\$ 23.00	x	
Core Curriculum: Intro Craft Skills, Ed 4th	9780136086376	\$ 76.00	x	
Pipe Fabricators Blue Book	9780970832139	\$ 23.00	x	
TI-30xa Scientific Calculator	no isbn	\$ 13.00	x	
<b>TOTAL</b>				<b>\$249.00</b>

Supplies and Tools	Needed By	Cost	Required	
Tape Measure, 1 in x 25 ft, carbon steel	First day of class	\$ 15.00	x	
Magnetic Glo-View Torpedo Level 9 inch	First day of class	\$ 22.00	x	
Angle Gringer, 4 1/2 in, no load RPM 12000	First day of class	\$ 82.00	x	
Channel locks 12 in	First day of class	\$ 20.00	x	
Adjustable Wrench, 12 in	First day of class	\$ 31.00	x	
Wrap-a-Round Tape, Blade 6 ft x 3 7/8	First day of class	\$ 21.00	x	
2 Straight Pipe Wrench, Ductile Iron, 18 inch	First day of class	\$ 26.00	x	
32 oz Ball pein Hammer	First day of class	\$ 20.00	x	
2 Straight Pipe Wrench, Steel, 14 inch	First day of class	\$ 44.00	x	
Triple Flint Lighter, with/1 Flint Renewal	First day of class	\$ 8.00	x	
Combination Set, 12 in, 3 pc, Trisquare	First day of class	\$ 122.00	x	
Plumb Bob 8 oz	First day of class	\$ 12.00	x	
Soapstone Marker Set, 5 pc	First day of class	\$ 7.00	x	
<b>TOTAL</b>				<b>\$430.00</b>

Supplies		Cost	Required	
Leather Drivers Gloves, Cowhide	First day of class	\$ 15.00	x	
Ear Plugs, 30db, Corded, Reg, 5 PR	First day of class	\$ 3.00	x	
Clear Uncoated Safety Glasses	First day of class	\$ 2.00	x	
Green Fire Retardent Jacket	First day of class	\$ 28.00	x	
<b>TOTAL</b>				<b>\$48.00</b>

Miscellaneous Cost		Cost	Required	
OSHA 10 Training		\$ 25.00	x	
<b>TOTAL</b>				<b>\$25.00</b>

All Costs are Estimated and Subject to Change Without Notice Revised: 12/15/2016

\*Denotes costs that can be covered by TN Promise and TN Reconnect

2nd Trimester				
Tuition		Cost		Total
Tuition*		\$ 1,139.00		
Technology Access Fee*		\$ 67.00		
Student Activity Fee*		\$ 10.00		
<b>TOTAL</b>				<b>\$1,216.00</b>
3rd Trimester				
Tuition		Cost		Total
Tuition*		\$ 1,139.00		
Technology Access Fee*		\$ 67.00		
Student Activity Fee*		\$ 10.00		
<b>TOTAL</b>				<b>\$1,216.00</b>
Book	ISBN	Cost	Required	
Pipefitting Level 2, 3rd edition	9780132273145	\$ 130.00	x	
Pipefitting Level 3, 3rd edition	9780132272841	\$ 130.00	x	
<b>TOTAL</b>				<b>\$260.00</b>
Tuition		Cost		Total
Tuition*		\$ 1,139.00		
Technology Access Fee*		\$ 67.00		
Student Activity Fee*		\$ 10.00		
<b>TOTAL</b>				<b>\$1,216.00</b>
Book	ISBN	Cost	Required	
Pipefitting level 4, 3rd edition	9780136144298	\$ 130.00	x	
<b>TOTAL</b>				<b>\$130.00</b>
Miscellaneous Cost		Cost	Required	
Graduation Supplies		\$ 40.00	x	
<b>TOTAL</b>				<b>\$ 40.00</b>
<b>TOTAL PROGRAM COST</b>				<b>\$4,830.00</b>

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\*Denotes costs that can be covered by TN Promise and TN Reconnect

# TCAT - Knoxville Certification of Immunization Measles, Mumps, and Rubella (MMR)

Student's name: \_\_\_\_\_ Program of Enrollment: \_\_\_\_\_

## **PART I (TO BE COMPLETED BY STUDENT)**

Proof of MMR immunization is not required for the following reason:

- I graduated from a Tennessee public or private high school in 1999 or after. (transcript attached)
- I attended a Tennessee public or private high school in 2001 or after. (transcript attached)
- I was born prior to January 1, 1957. (copy of photo ID or birth certificate attached)
- I am active duty or former military personnel. (copy of DD214 or active military ID attached)

*IF THE ABOVE IS CHECKED, PLEASE SIGN BELOW.*

## **PART II (TO BE COMPLETED BY STUDENT)**

Proof of MMR immunization is not required for the following reason:

- I refuse immunization because of religious doctrine. (Reason affirmed under the penalties of perjury. Please attach statement.)

*IF THE ABOVE IS CHECKED, PLEASE SIGN BELOW.*

## **PART III—MMR (TO BE COMPLETED BY PHYSICIAN)**

Please circle the number that applies to this patient:

1. Patient has received two doses of measles vaccination since the age of 12 months:

Month/year \_\_\_\_\_ Month/year \_\_\_\_\_

2. Vaccination is medically contraindicated because of pregnancy, allergy to vaccine, etc. (Please list reasons.)

3. Patient had disease, as confirmed by medical record:

Month/year \_\_\_\_\_

4. Patient is immune to disease, as confirmed by laboratory.

Comment \_\_\_\_\_

**ATTEST**

**(Must be signed by an M.D. or D.O.)**

Name of physician (Please print) \_\_\_\_\_

Office telephone \_\_\_\_\_

Physician's signature \_\_\_\_\_ Date \_\_\_\_\_

Student's signature \_\_\_\_\_ Date \_\_\_\_\_

# TCAT - Knoxville Certification of Immunization Varicella (Chicken Pox)

Student's name: \_\_\_\_\_ Program of Enrollment: \_\_\_\_\_

## **PART I (TO BE COMPLETED BY STUDENT)**

Proof of varicella (chicken pox) immunization is not required for the following reason:

- I attended a Tennessee public high school between 1999 and May 2016. **(Must provide proof of second varicella vaccine dose from your physician office.)** (transcript attached)
- I was born prior to January 1, 1980. (copy of photo ID or birth certificate attached)
- I am active duty or former military personnel. (copy of DD214 attached)

*IF THE ABOVE IS CHECKED, PLEASE SIGN BELOW.*

## **PART II (TO BE COMPLETED BY STUDENT)**

Proof of varicella (chicken pox) immunization is not required for the following reason:

- I refuse immunization because of religious doctrine. (Reason affirmed under the penalties of perjury. Please attach statement.)

*IF THE ABOVE IS CHECKED, PLEASE SIGN BELOW.*

## **PART III—VARICELLA (TO BE COMPLETED BY PHYSICIAN)**

Please circle the number that applies to this patient:

1. Patient has received two doses of varicella (chicken pox) vaccination since the age of 12 months:  
Month/year \_\_\_\_\_ Month/year \_\_\_\_\_
2. Vaccination is medically contraindicated because of pregnancy, allergy to vaccine, etc. (Please list reasons.)  
\_\_\_\_\_
3. Patient had disease, as confirmed by medical record:  
Month/year \_\_\_\_\_
4. Patient is immune to disease, as confirmed by laboratory.  
Comment \_\_\_\_\_

**ATTEST**

**(Must be signed by an M.D. or D.O.)**

Name of physician (Please print) \_\_\_\_\_

Office telephone \_\_\_\_\_

Physician's signature \_\_\_\_\_ Date \_\_\_\_\_

Student's signature \_\_\_\_\_ Date \_\_\_\_\_





## Application for Enrollment

*The information is for Office use only:*

### ADMISSIONS REQUIREMENTS

- FAFSA                       I will not be filing financial aid. I will be paying for my education. Students Initials: \_\_\_\_\_
- Immunizations             Education Transcripts

### SPECIAL ADMISSIONS REQUIREMENTS

**Cosmetology:**

- Photo     Proof of Age     Copy of SS Card     RT/LT Handed     Manicuring Only

**Dental Assisting, Medical Assisting, and Surgical Technology**

Compass required scores: Math 30 and Reading 70

- COMPASS or ACT – Scores: \_\_\_\_\_ Math \_\_\_\_\_ Reading (Date: \_\_\_\_\_)
- CPR Documentation (BLS for Healthcare Providers)

**Practical Nursing:**

Compass required scores: Math 50 and Reading 80

- Notarized Declaration of Citizenship     Copy of ID Used to Declare Citizenship
- CPR Documentation (BLS for Healthcare Providers)
- COMPASS or ACT – Scores: \_\_\_\_\_ Math \_\_\_\_\_ Reading (Date: \_\_\_\_\_)

**Truck Driving:**

- MVR             DOT Physical             Valid Driver's License
- U.S. Citizenship / Residency

Staff Signature: \_\_\_\_\_

Date: \_\_\_\_\_