

# DIPLOMA IN PLUMBING TECHNICIAN

## Unit 1.1 - Overview of The Program

1. **Installation of basic sanitary fixtures (PSC/ N 0101)** - This unit is about installation of pipes and sanitary fixtures in housing, commercial and institutional setups.
2. **Repair of basic plumbing systems (PSC/ N 0102)** - This unit is about repair of pipes and sanitary fixtures in housing, commercial and institutional setups.
3. **Maintenance and servicing of plumbing systems (PSC/ N 0112)** - This units about maintenance and servicing of plumbing systems in housing, commercial and institutional setups.
4. **Coordinating with the senior and other working team (PSC/N0108)** - This unit is about communicating with colleagues and seniors in order to achieve smooth and hazard free work flow.
5. **Maintaining a healthy, safe and secure working environment (PSC/N0109)** – This unit is about monitoring your working environment and making sure it meets requirements for health and safety.

## Unit 1.2 - Opportunity in Plumbing

Plumber (General) is an important job role in installation and repair of plumbing fittings and fixtures in 'contractors' segment. A Plumber (General) is responsible for installation, minor repair maintenance and servicing of pipes and sanitary fixtures in housing, commercial and institutional setups. The person should be able to work independently on the assignment. The person should be comfortable in performing laborious work, should be a good listener, good at taking and following instructions, a good team player and result oriented with positive attitude.

## Unit 1.3 - Safety Maintenance And Housekeeping

1. Demonstrate how maintenance and housekeeping can be performed
2. Workers responsibility

## Installation Of Basic Sanitary Fixtures (PSC/ N 0101)

### Unit 2.1 - Tools, Equipment And Materials (Pre-Installation Activity)

1. Understand and demonstrate the use of holding devices
2. Understand and demonstrate the use of fitting tools
3. Understand and demonstrate cutting tools
4. Understand and demonstrate pipe threading and bending tools
5. Understand and demonstrate miscellaneous tools – screw drivers, file, chisels and hammers  
Sealing materials, drill machines etc.

### Unit 2.2 - Measurement (Pre-Installation Activity)

1. Understand the different measurement systems used for plumbing purpose.
2. Demonstrate and explain calculation methods
3. Understand the different symbols for plumbing purpose in drawings

### Unit 2.3 - Pipes Fitting, Cutting, Bending, Joining And Testing Of Pipelines

1. Identify and understand different types of pipes
2. Identify and understand allied fitting of pipes
3. Understand and demonstrate bending, threading and joining of pipe
4. Testing of pipe lines

(Pre-Installation And Installation Activities)

### Unit 2.4 - Plumbing And Sanitary Fixtures And Their Installation

1. Understand and demonstrate various types of Tap/Faucets and showers
2. Understand and demonstrate various types of Washbasins and their installation
3. Understand and demonstrate various types of water closets, urinals and their working
4. Understand and demonstrate bidets, bath shower trays and geysers
5. Identify and understand standard height of sanitary fixtures
6. Identify and understand basic building construction, cutting / opening in structures, mason tools, preparing mortar and filling etc.

## **Unit 2.5 - Pumps And Their Installation**

1. Identify and understand the types of pumps
2. Its advantages and dis-advantages

## **Unit 2.6 Water Meters**

Repair Of Basic Plumbing Systems (PSC/ N 0102)

## **Unit 3.1 - Repairing Of Various Types Of Fitting And Fixtures**

Diagnosis and Repair activities which includes the understanding of the installed system, basic inspection and identification of the fault therein. Repair and replacement with minimal damage to other systems

Diagnosis of problems and/or failures in plumbing system and undertaking activities necessary to maintain the system

Maintenance and servicing of pipes and sanitary fixtures in housing, commercial and institutional setups

Maintenance And Servicing Of Plumbing Systems (PSC/ N 0112)

## **Unit 4.1 - Source of Water**

Rainwater

- Rooftop rainwater harvesting
- Catchment and storage dams

Groundwater

- spring water collection
- dug well
- drilled wells
- subsurface harvesting systems

Surface water

## **Unit 4.2 - Water Treatment System**

Unit 4.3 - Water Supply System

Unit 4.4 - Drainage System

Unit 4.5 - Common Terms In Plumbing

Maintaining A Healthy, Safe & Secure Work Environment (PSC/N0109)

### **Unit 5.1 - Type Of Hazards**

1. Avoid accidents related to use of sharp tools and equipment 2. Attend and actively participate in the health and safety campaigns organized by the company or any other authority State importance of taking precautions while working 3. Use or wear safety gear (helmet, gloves, goggles, safety shoes, ear plugs, etc.) as per the rules of the company 4. Attend fire drills or any other safety drills organized by the company or any other authority 5. Learn first-aid procedure 6. Use insect repellents and safe drinking water 7. Use site toilets and follow other hygienic practices 8. Understand the evacuation and emergency procedures

Unit 5.2 - Hazard Analysis

Unit 5.3 - Hazard Communication And Responsibilities

Unit 5.4 - Safety Gears And First Aid

Unit 5.5 - Safety Guidelines