



### Course Outline

Course Title	CWQA In-Class Core Installation
Course Number	WXM2-1
Course Hours	14-16

#### Staff Approval List

Jason Jackson, Ric Harry	Faculty
Aysha Muzaffar	Coordinator/ Administrator
Kevin Wong	Executive Director

#### Prerequisites

Course Title	WXM0 CWQA Water Basics
Course Title	WXM1 CWQA Water Fundamentals
Course Title	WXM1-1 CWQA Water Fundamentals In- Class Session
Exam	WXM0 and WXM1 (Water basics exam and the CWT exam)
Course Title	WXM2- MEP Core Installation

#### Course Description

The following document is a draft outline of a suggested proficiency check intended for personnel installing water treatment systems.

The students will learn and practice the principles of:

- The CWQA Code of Ethics
- The CWQA Marketing and Promotional Guidelines
- Preparing for the site for Installation- knowing the lay of the land (common local water issues, bylaws etc)
- Preparing Equipment for Installation- the In Shop requirements and the in-field requirements
- Validation testing of the field conditions (field testing of the water)
- Installing the Equipment
- Scope of work restrictions (when to call a plumber)
- Backflow, cross connection prevention, venting and drain requirements and considerations
- Starting up the equipment
- Flushing and Sanitizing the systems
- Final testing and performance of the equipment
- Scheduling the validation call with the customer.

#### Course Learning Outlines

1	Common Plumbing Materials- Pipes, Fittings and Materials, Tools and Practices
2	Water Treatment Equipment Specifications and Plumbing Requirements
3	Effective Site Preparation for the Installation of Equipment
4	Safety in the home & regulations including requirements for confined spaces, working at heights introductions and legal requirements
5	Backflow and Cross Connection Requirements in the Code
6	Code and regulatory requirements for water treatment equipment

7	Drains and Venting requirements
8	The restrictions on the scope of the installer- when to consult a plumber for help and assistance
9	Water Supply considerations – rural (wells, cisterns, pumps, rainwater and greywater system considerations)
10	Septic considerations (regulations, code and other requirements)

### Additional Learning Outcome Comments

Upon successful completion of the course the learner will be able to demonstrate that:  
 Demonstrate the ability to understand the practical requirements for installing water treatment solutions to the consumer, and what is out of scope of practice.

### Learning Resources

All additional resources within course lectures, modules and/or assignments must adhere to the Canadian Copyright Act.

The student may be required to have an approved test kit, and safety equipment for the handling of chemicals and contaminated water. WHMIS, care and safety protocols should be adhered to with handling tools, equipment, water samples and water treatment chemicals.

### Assessment Requirements

Note: does not need to be all

Assessment Task	% or P/F
Applied Learning	16 hours Practical and in class
Assignments	In Class Practice Assignments
In-Class activities	16 hours after the MEP content is completed for Core Installation
Labs	In the MEP
Presentations	N/A
Quizzes	In the MEP
Tests	Must complete the prerequisites before the CWQA Installer Exam

### Prior Learning and Assessment and Recognition (PLAR)

PLAR uses tools to help learners reflect on, identify, articulate, and demonstrate past learning which has been acquired through previous training, study, work and other life experiences and which is not recognized through formal transfer of credit mechanisms.

PLAR options include authentic assessment activities designed by faculty that may include challenge exams, portfolio presentations, interviews, and written assignments. Learners may also be encouraged and supported to design an individual documentation package that would meet the learning requirements of the course. Any student who wishes to have any prior learning acquired through life and work experience assessed, so as to translate it into course credit, may initiate the process by applying through the CWQA.

A copy of CWQA's PLAR policy is attached.

### Student Success: Policies and Procedures

Mutually, faculty and learners will support and adhere to CWQA Academic Regulations, and Student Rights and Responsibilities. The following policies and guidelines have been developed to support the learning process.

Please click on the link for information about:

- Student Rights and Responsibilities
- Academic Regulations
- Guidelines for Professional Practice: Students and Instructors

Alternate accessible formats of learning resources and materials will be provided, on request. (AODA statement)

**Program Standards:**

The Authority Having Jurisdiction such as the Ontario Ministry of Training, Colleges and Universities oversees the development and the review of standards for regulated programs of instruction. CWQA adheres to these guidelines until such time as this program is mandated and recognized by O.MTCU. Each training delivery organization is required to ensure that its programs and program delivery are consistent with these standards, and must assist students to achieve these essential outcomes.

This course contributes to Program Standards as defined by the Alberta Safety Council and the Ontario Ministry of Training, Colleges and Universities (MTCU). Program standards apply to all similar programs of instruction offered by colleges across the province. Each program standard for a postsecondary program includes the following elements:

- Vocational standards (the vocationally specific learning outcomes which apply to the program of instruction in question);
- Essential employability skills (the essential employability skills learning outcomes which apply to all programs of instruction); and
- General education requirement (the requirement for general education in postsecondary programs of instruction that contribute to the development of citizens who are conscious of the diversity, complexity and richness of the human experience; and, the society in which they live and work).
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Collectively, these elements outline the essential skills and knowledge that a student must reliably demonstrate in order to complete the CWQA MEP program. For further information on the standards for your program, follow the MTCU link ([www.tcu.gov.on.ca/pepg/audiences/colleges/progstan/](http://www.tcu.gov.on.ca/pepg/audiences/colleges/progstan/))

**Essential Employability Skills**

#	Description	Use (Y/N)
1	Communicate clearly	Y
2	Respond to communication	Y
3	Use mathematical operations	Y
4	Solve problems systematically	Y
5	Anticipate and solve problems	Y
6	Document information	Y
7	Analyze information	Y
8	Respect diverse opinions	Y
9	Interact with groups or teams	Y
10	Manage time and resources	Y
11	Take responsibility for self	Y