

WATER AND WASTEWATER FUNDAMENTALS

“Building foundational knowledge for effective water and wastewater management”

Schedule

Date	Venue	Fees (Online)
04 - 05 May 2026	Online	USD 700 per delegate

► **Available delivery methods:** Face-to-Face & Online Training

Introduction

Proper management of water and wastewater systems is critical for public health, environmental protection, and sustainable development. Understanding the fundamentals of water and wastewater processes enables professionals to operate, monitor, and optimize water treatment and distribution effectively.

This 2-day intensive training provides participants with essential knowledge of water and wastewater treatment processes, system components, and operational practices. Participants will learn key concepts, practical applications, and compliance requirements to support safe and efficient water management.

Objectives

By the end of this course, participants will be able to:

- Understand the fundamentals of water and wastewater treatment processes
- Identify key components of water supply and wastewater systems
- Apply operational and monitoring practices for water quality
- Recognize environmental and regulatory requirements
- Analyze treatment performance and optimize processes
- Implement preventive measures to ensure system reliability
- Enhance overall knowledge in water and wastewater management

Why Attend

- Gain practical understanding of water and wastewater systems
- Learn operational best practices for treatment and distribution
- Ensure compliance with environmental and regulatory standards
- Improve monitoring, troubleshooting, and operational efficiency
- Strengthen professional competence in water management
- Applicable to engineers, technicians, and operational staff

Target Audience

This program is designed for:

- Water and wastewater treatment operators
- Environmental and water quality officers
- HSE and compliance professionals
- Engineers and technical staff in water utilities
- Laboratory analysts involved in water testing
- Managers and supervisors responsible for water operations

Individual Benefits

Key competencies that will be developed include:

- Understanding of water and wastewater processes
- Ability to monitor and troubleshoot operational systems
- Knowledge of regulatory and environmental compliance
- Skills to improve efficiency and reliability of water operations
- Enhanced professional confidence in water and wastewater management

Organizational Benefits

Upon completing the training course, participants will demonstrate:

- Improved operational efficiency and reliability of water systems
- Enhanced compliance with environmental regulations
- Reduced operational risks and system failures
- Better-informed decision-making in water management
- Strengthened organizational capacity in water and wastewater operations

Instructional Methodology

The course follows a blended learning approach combining theory with practice:

- Strategy Briefings – Fundamentals of water and wastewater processes
- Case Studies – Real-world water and wastewater management challenges
- Workshops – Practical exercises on operational and monitoring techniques
- Peer Exchange – Discussions on best practices and lessons learned
- Tools – Checklists, process flow diagrams, and monitoring templates

Course Outline

Detailed 2-Day Course Outline

Training Hours: 9:00 AM – 3:30 PM Daily Format: 3–4 Learning Modules | Coffee breaks included

Day 1: Fundamentals of Water Management

Module 1: Introduction to Water Systems (09:00 – 10:30)

- Overview of water supply and distribution
- Key parameters affecting water quality

Module 2: Water Treatment Processes (10:45 – 12:15)

- Coagulation, flocculation, filtration, and disinfection
- Common operational challenges

Module 3: Water Quality Monitoring (01:00 – 02:15)

- Sampling, analysis, and reporting
- Ensuring regulatory compliance

Module 4: Workshop – Water Treatment Exercise (02:30 – 03:30)

- Hands-on process review and problem-solving

Day 2: Fundamentals of Wastewater Management

Module 1: Introduction to Wastewater Systems (09:00 – 10:30)

- Wastewater collection, treatment, and disposal
- Key operational considerations

Module 2: Wastewater Treatment Processes (10:45 – 12:15)

- Physical, chemical, and biological treatment methods
- Process optimization techniques

Module 3: Environmental Compliance and Monitoring (01:00 – 02:15)

- Regulatory requirements and reporting
- Preventive and corrective actions

Module 4: Workshop – Wastewater Management Plan (02:30 – 03:30)

- Developing action plans for operational improvement
- Group discussion and review

Certification

Participants will receive a Certificate of Completion in Water and Wastewater Fundamentals, validating their knowledge and practical competence in managing water and wastewater systems effectively.

Why Choose MAWA Events

- **Global Expertise:** More than 17 years of experience in professional training and consulting.
- **Industry-Leading Faculty:** Courses delivered by seasoned professionals with hands-on experience.
- **Practical Insights:** Learn to turn theory into actionable strategies for real-world business impact.
- **Client-Focused Solutions:** Customized programs designed to achieve your organisation's unique goals.

In-House / Customized Training

Interested in running this course for your team?

Please contact us:

TEL:

+601116373203

EMAIL:

info@mawaevents.net

© Material published by MAWA Events shown here is copyrighted. All rights reserved. Any unauthorized copying, distribution, use, dissemination, downloading, storing (in any medium), transmission, reproduction or reliance in whole or any part of this course outline is prohibited and will constitute an infringement of copyright.