

OPERATIONS OF BOILER & WATER TREATMENT PLANTS

"Master the Operation, Maintenance, and Troubleshooting of Boilers and Water Treatment Systems"

Schedule

Date	Venue	Fees (Face-to-Face)
10 - 12 Jun 2026	Dubai, UAE	USD 2495 per delegate
05 - 07 Jul 2026	Doha, Qatar	USD 2495 per delegate
16 - 18 Sep 2026	Dubai, UAE	USD 2495 per delegate

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

Introduction

The Operations of Boiler & Water Treatment Plants course is designed to provide essential knowledge for operating and maintaining boilers and water treatment plants in industrial environments. It covers the principles behind these systems, how to troubleshoot common issues, and how to ensure optimal performance. The course will also address water treatment chemicals, regulations, and the best practices to minimize energy consumption while maintaining system integrity. By the end of the course, participants will be prepared to handle the complexities of maintaining these critical industrial systems.

The training includes theoretical learning, practical applications, and case studies to give participants the tools they need to successfully manage and troubleshoot boiler operations and water treatment systems. The hands-on approach ensures participants gain practical experience in maintaining both systems effectively and safely.

Objectives

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

- Understand the operation and components of boilers and water treatment plants.
- Implement best practices for maintaining boilers and water treatment systems.
- Troubleshoot and resolve common issues encountered with boilers and water treatment systems.
- Improve water treatment processes to ensure water quality and compliance.
- Follow safety protocols and environmental regulations related to boiler and water treatment plant operations.

Why Attend

- Gain a comprehensive understanding of boiler and water treatment plant operations.
- Learn to optimize the efficiency and safety of your plant's systems.
- Understand the environmental regulations related to water treatment and boiler emissions.
- Equip yourself with the skills needed to troubleshoot issues efficiently and minimize downtime.
- Boost your career prospects by mastering the operation and maintenance of critical industrial systems.

Target Audience

This program is designed for:

- Boiler operators, engineers, and maintenance personnel.
- Water treatment plant operators and technicians.
- Engineers and plant managers responsible for industrial boiler and water systems.
- Environmental and safety officers in industrial settings.
- Professionals aiming to deepen their understanding of industrial water treatment and boiler operations.

Individual Benefits

Key competencies that will be developed include:

- Advanced knowledge of boiler and water treatment system operations.
- Troubleshooting and maintenance techniques for boilers and water treatment plants.
- Proficiency in handling water treatment chemicals and processes.
- Enhanced understanding of safety measures and environmental compliance.
- Practical skills to optimize system performance and prevent costly downtime.

Organizational Benefits

Upon completing the training course, participants will demonstrate:

- Improved efficiency in the operation of boilers and water treatment systems.
- Enhanced ability to identify and solve issues quickly, reducing operational disruptions.
- A stronger commitment to safety protocols and environmental regulations.
- Cost savings through optimized operations and reduced downtime.
- Improved plant performance and longevity of systems due to better maintenance practices.

Instructional Methodology

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

- Strategy Briefings - Introduction to boiler operations, water treatment systems, and environmental compliance.
- Case Studies - Real-world examples of operational issues and solutions in boiler and water treatment plants.
- Workshops - Practical sessions on maintaining and troubleshooting boilers and water treatment systems.
- Peer Exchange - Group discussions and knowledge sharing on best practices in plant operations.
- Tools - Practical templates for maintenance checklists, water treatment processes, and operational protocols.

Course Outline

Detailed 3-Day Course Outline

Training Hours: 7:30 AM – 3:30 PM **Daily Format:** 3–4 Learning Modules | Coffee breaks: 09:30 & 11:15 | Lunch Buffet: 01:00 – 02:00

Day 1: Introduction to Boilers and Water Treatment Fundamentals

- Module 1: Overview of Boiler Systems (07:30 – 09:30)
 - Types of boilers and their applications.
 - Key components and functions of a boiler system.
 - Boiler efficiency, fuel types, and heat transfer processes.
- Module 2: Introduction to Water Treatment Processes (09:30 – 11:30)
 - Importance of water quality in industrial systems.
 - Water treatment chemicals and their applications.
 - Basic principles of water filtration and softening.

Day 2: Boiler Operations and Water Treatment Techniques

- Module 3: Boiler Operations and Maintenance (07:30 – 09:30)
 - Boiler operation and safety protocols.
 - Preventive maintenance for boilers.
 - Troubleshooting common boiler issues.
- Module 4: Water Treatment System Design and Operation (09:30 – 11:30)
 - Water treatment plant components and functions.
 - Methods for maintaining water quality.
 - Monitoring and adjusting chemical treatments in water systems.

Day 3: Troubleshooting, Safety, and Environmental Compliance

- Module 5: Troubleshooting Boiler and Water Treatment Issues (07:30 – 09:30)
 - Common issues in boilers (e.g., scale buildup, overheating, efficiency loss).
 - Troubleshooting water treatment system problems (e.g., chemical imbalances, clogging).
 - Practical tips for minimizing system downtime.
- Module 6: Safety and Environmental Compliance (09:30 – 11:30)
 - Safety measures for boiler and water treatment plant operations.
 - Environmental regulations for boiler emissions and water discharge.
 - Steps to comply with local and international environmental standards.

Certification

Participants will receive a Certificate of Completion in Boiler and Water Treatment Plant Operations, acknowledging their expertise in managing, operating, and maintaining boilers and water treatment systems in industrial settings.

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.