



*Training Course:  
Advanced Wastewater Treatment Plant Operation*

*20 - 24 April 2025*

*Cairo (Egypt)*

*Holiday Inn & Suites Cairo Maadi, an IHG Hotel*

## Training Course: Advanced Wastewater Treatment Plant Operation

Training Course code: EN235100 From: 20 - 24 April 2025 Venue: Cairo (Egypt) - Holiday Inn & Suites Cairo Maadi, an IHG Hotel Training Course Fees: 3900 € Euro

### Introduction

Welcome to the Advanced Wastewater Treatment Plant Operation Training Program! This comprehensive course is designed to equip participants with the knowledge and skills required to efficiently operate and manage advanced wastewater treatment plants. As environmental concerns and regulatory standards continue to evolve, the need for skilled and knowledgeable wastewater treatment plant operators has become increasingly crucial. This training program aims to empower participants with the expertise needed to meet the challenges of modern wastewater treatment and contribute to a cleaner and sustainable environment.

### Objectives

By the end of this training program, participants will:

- Gain a thorough understanding of the wastewater treatment process, from initial influent to final effluent discharge.
- Learn to identify the various types of wastewater and their unique characteristics, enabling accurate and efficient treatment.
- Familiarize themselves with the advanced technologies and processes used in wastewater treatment plants for optimal results.
- Develop the ability to analyze and interpret laboratory data, crucial for effective process control and optimization.
- Acquire essential safety practices to ensure a secure working environment for themselves and their colleagues.
- Master the art of troubleshooting common operational issues and implementing appropriate corrective actions.
- Learn preventive maintenance strategies to extend the life of equipment and minimize downtime.
- Understand the principles of sludge management, including handling, disposal, and resource recovery options.
- Explore energy-efficient and sustainable practices to reduce the environmental impact of wastewater treatment operations.
- Be prepared for wastewater treatment operator certification exams and continued professional development in the field.

### Target Audience

This advanced training program is tailored for:

- Experienced wastewater treatment plant operators seeking to enhance their knowledge and keep up to date with industry best practices.

- Supervisors and managers responsible for overseeing wastewater treatment plant operations and seeking to optimize their plant's performance.
- Environmental engineers and professionals are interested in deepening their understanding of wastewater treatment processes and technologies.
- Individuals aspiring to become certified wastewater treatment operators and seeking comprehensive preparation for certification exams.
- Decision-makers and stakeholders in the wastewater industry aim to develop a proficient and competent workforce.

## Training program outline

### Day 1: Introduction to Wastewater Treatment and Safety

- Introduction to the training program and objectives
- Importance of wastewater treatment and its impact on the environment and public health
- Overview of different types of wastewater treatment plants and their functions
- Safety protocols and best practices in a wastewater treatment plant
- Hazardous materials handling and emergency response procedures

### Day 2: Wastewater Characteristics and Sampling

- Sources and types of wastewater in different industries and communities
- Physical, chemical, and biological characteristics of wastewater
- Sampling techniques and frequency for accurate analysis
- Laboratory analysis of wastewater samples and interpreting results

### Day 3: Wastewater Treatment Processes

- Primary treatment processes: Screening, grit removal, and sedimentation
- Secondary treatment processes: Activated sludge process, trickling filters, and sequencing batch reactors
- Tertiary treatment processes: Filtration, chemical treatment, and disinfection
- Comparing different treatment technologies and selecting the appropriate process for specific scenarios

### Day 4: Process Control, Troubleshooting, and Maintenance

- Key parameters to monitor for effective process control.
- Strategies for optimizing treatment efficiency and minimizing operational costs.
- Troubleshooting common operational issues and implementing corrective actions
- Preventive maintenance strategies for equipment and instrumentation

#### Day 5: Sludge Management and Sustainability

- Sludge handling and dewatering techniques
- Sludge disposal options and regulations
- Resource recovery and reuse opportunities in wastewater treatment
- Energy efficiency measures and sustainable practices in plant operations
- Final review, assessment, and feedback on the training program

## Registration form on the Training Course: Advanced Wastewater Treatment Plant Operation

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Complete & Mail or fax to Global Horizon Training Center (GHTC) at the address given below

### Delegate Information

Full Name (Mr / Ms / Dr / Eng): .....  
 Position: .....  
 Telephone / Mobile: .....  
 Personal E-Mail: .....  
 Official E-Mail: .....

### Company Information

Company Name: .....  
 Address: .....  
 City / Country: .....

### Person Responsible for Training and Development

Full Name (Mr / Ms / Dr / Eng): .....  
 Position: .....  
 Telephone / Mobile: .....  
 Personal E-Mail: .....  
 Official E-Mail: .....

### Payment Method

- Please find enclosed a cheque made payable to Global Horizon
- Please invoice me
- Please invoice my company

### Easy Ways To Register

Telephone:  
+201095004484 to  
provisionally reserve your  
place.

Fax your completed  
registration  
form to: +20233379764

E-mail to us :  
info@gh4t.com  
or training@gh4t.com

Complete & return the  
booking form with cheque  
to: Global Horizon  
3 Oudai street, Aldouki,  
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