Wastewater Treatment Master Class by AOWS

Training on Design & Operation of Wastewater Treatment Processes (ETP)

@ ONLINE on 1 & 2 November 2025

Saturday & Sunday



Academy of Water Science – AOWS is inviting you to avail of this value-added opportunity to enhance your knowledge of wastewater treatment design & operation by participating in the Wastewater Master Class on Design & Operation of Various Wastewater Treatment Processes for Sewage Treatment Plants (ETP). This Training Program will benefit professionals in all aspects of wastewater treatment, design,

operation, planning and management. Please review the details below and nominate delegates from your organization.

BENEFITS OF ATTENDING: -

This 2-day program on **Process Design, planning for execution and Commissioning of WWTPs** will bring together the design of wastewater treatment processes, sludge treatment selection and design of physical, chemical and biological treatment processes, and design methodologies for water recycling. Our Guest Trainer, **Dr Shashibhushan Biliangadi** has 15 years of experience and is among the top wastewater instructors in India. **Dr Shashibhushan Biliangadi** is a consultant, designer and training instructor for wastewater treatment plants for many industries.

This program will show you how to carry out the key steps in the process design of all kinds of wastewater treatment and recycling plants. It will provide an essential refresher on the relevant underlying principles of engineering science, water chemistry and biology, together with rules of thumb commonly used by experienced practitioners. This master class is especially beneficial to those who have experience of 3 years and more in the same field.

About the Trainer:

Dr Shashibhushan Biliangadi

Civil and Environmental Engineer

Dr Shashibhushan Biliangadi has been working on various Research and Consulting projects since 2015. He holds a PhD degree from IIT Bombay and an MTech from IIT Guwahati in Civil and Environmental Engineering. His areas of expertise are Wastewater Treatment, Environmental Risk Assessments, Baseline and Morphological studies, and Water Management for Industries. He has experience working in research

Schedule & Topics to be covered: -

Day -1: 1 Nov. 2025

Morning Session: 9:30 AM to 1:00 PM

1. Introduction to Effluent Treatment Plants (ETP).

- 1.1. Importance of Effluent Treatment in Industries.
- 1.2. Regulatory Compliance & Environmental Norms (CPCB, EPA, Local Guidelines)
- 1.3. Types of Effluents & Their Characteristics (Physical, Chemical, Biological)
- 1.4. Overview of ETP Components & Working Principles.

2. Process Flow & Unit Operations of ETP.

- 2.1. **Primary Treatment:** Screening, Oil & Grease Removal, Flocculation, Coagulation, Sedimentation & Equalization.
- 2.2. **Secondary Treatment:** Biological Treatment (Aerobic & Anaerobic Processes).
- 2.3. **Tertiary Treatment:** Filtration, Activated Carbon, RO, UV, Ozonation.
- 2.4. Sludge Management & Disposal Techniques.

3. ETP Design Parameters & Calculations.

- 3.1. Design Considerations for Different Industries (Textile, Pharma, Food, Chemical).
- 3.2. Flow Rate Calculation, Retention Time, Organic Load
- 3.3. Hydraulic & Organic Loading Calculations for Biological Treatment
- 3.4. Reactor Sizing & Sludge Management Design

Lunch: 1:30 PM to 2:00 PM

Post Lunch Session: 2:00 PM to 5:30 PM

- 4. Detailed ETP Design Process & Layout
 - 4.1. Layout Planning & Piping Design.
 - 4.2. Selection of Treatment Technologies Based on Effluent Type.
 - 4.3. Energy Efficiency & Cost Optimization in ETP Design.
 - 4.4. Safety & Automation in ETP.
- 5. Case Studies & Troubleshooting in ETP Operations Moving Bed Biological Treatment (MBBR).
 - 5.1. Common Operational Problems in ETP & Solutions.
 - 5.2. Real-world Case Studies & Lessons Learned.

Question / Answer

LIMITED SEATS ONLY

Early Bird offer: if booked by 25th October 2025

Early Bird Discount of Rs.. 3000

Regular Fee: - Rs. 9900 (Tax 18% inclusive)

Discounted Fee: Rs.. 6900 (Tax 18% inclusive)

Group Booking: Additional Discount of Rs. 1000 per participant

Online Booking Link: https://rzp.io/l/nLMviNT7

Google Pay No: 9825024371, UPI: 9825024371@kotak

NEFT/Bank Transfer:

Account Name: JEM INDIA, **A/C No.** 0788611000000252

IFSC: DBSS0IN0788

Bank Name: DBS Bank Limited,

LIMITED SEATS ONLY