

WASTE WATER SYSTEMS

Technology, Challenges and Drivers

Course Overview

Wastewater utilities globally are evolving rapidly, driven by the need for water reuse, environmental protection, digital optimization, and resilient infrastructure. Utilities are no longer simply treating wastewater; they are transforming treatment plants into resource recovery facilities providing energy, biosolids, reclaimed water, and data-driven optimization.

Participants will gain insights into technology adoption, sustainability mandates, and operational modernization. Investors and regulators are increasingly prioritizing circular-economy concepts, sludge-to-energy solutions, decentralized treatment, and AI-enabled networks. The instructors will demonstrate how utilities can adapt operating models, implement asset management strategies, and leverage digital twins, automation, and ISO-aligned frameworks to deliver reliable, efficient, sustainable wastewater services.

Key Topics

- Wastewater Treatment & Water Reuse Technologies
- Decentralized vs Centralized Wastewater Systems
- Sludge-to-Energy, Biogas and Resource Recovery
- Digital Twins, AI and Smart Water Networks
- Regulatory Drivers & Environmental Compliance
- Circular-Economy Financing Models
- Asset Management for Wastewater Utilities

Who Should Attend

- Asset & facility managers
- Wastewater treatment engineers
- Finance, planners & environmental specialists
- Operations, maintenance & biosolids managers
- Executives seeking ISO-based modernization

Methodology

- Delivered by sector experts from GCC utilities
- Interactive workshops and real case studies
- Bilingual English + Arabic delivery

Course Duration

- Standard: 3 Days
- The Course is conducted in-person at an agreed venue

Certification

- Certificate of Completion issued by Kensington Institute of Training demonstrating understanding of the Wastewater landscape and the important role it plays in the Integrated Water Resource Management

