
Certificate Programme in Healthcare Facility Design and Layout (United Kingdom)

Water Supply And Waste Management

Aerobic Treatment Unit refers to a type of wastewater treatment system that uses oxygen to break down organic matter, commonly used in small-scale wastewater treatment applications, such as individual homes or small communities, and is often considered a suitable option for areas where sewer connections are not available.

Anaerobic Digestion is a process that involves the breakdown of organic matter in the absence of oxygen, resulting in the production of biogas, which can be used as a renewable energy source, and is often used to treat wastewater and organic waste in various industries, including agriculture and food processing.

Aquifer is an underground layer of permeable rock or soil that can store and transmit water, serving as a vital source of drinking water for many communities, and requires careful management to prevent contamination and depletion.

Backflow Prevention refers to the use of devices or mechanisms to prevent the reverse flow of contaminated water into a potable water supply system, which is crucial for protecting public health and preventing the spread of diseases.

Biosolids are the byproducts of wastewater treatment, typically consisting of organic matter that has been treated and stabilized, and can be used as fertilizers or soil conditioners in agriculture and horticulture.

Catchment Area refers to the area of land that drains water into a particular watercourse or watershed, and is often used to identify potential sources of pollution and to develop strategies for water management.

Chemical Treatment involves the use of chemicals to remove contaminants or impurities from water or wastewater, and is often used in conjunction with other treatment processes to achieve optimal results.

Clarifier is a type of equipment used in wastewater treatment to remove suspended solids and other impurities from water, and is typically used in conjunction with other treatment processes such as filtration and disinfection.

Combined Sewer Overflow refers to the overflow of wastewater and stormwater from a combined sewer system during periods of heavy rainfall or high water flows, which can result in the release of untreated wastewater into the environment.

Community-Based Water Management involves the participation of local communities in the management of their own water resources, which can help to ensure that water services are responsive to local needs and priorities.

Cross-Connection Control refers to the use of measures to prevent the connection of non-potable water sources to a potable water supply system, which is crucial for protecting public health and preventing the spread of diseases.

Decentralized Wastewater Treatment involves the use of small-scale wastewater treatment systems that are located near the source of the wastewater, which can be a cost-effective and environmentally friendly alternative to centralized treatment systems.

Demand Management refers to the use of strategies to manage water demand and reduce wastewater generation, which can help to conserve water resources and reduce the environmental impacts of water and wastewater treatment.

Dewatering involves the removal of water from a sludge or solid waste material, which can help to reduce the volume of the material and make it easier to handle and dispose of.

Disinfection is a process used to inactivate or kill microorganisms in water or wastewater, which is crucial for protecting public health and preventing the spread of diseases.

Distribution System refers to the network of pipes and infrastructure used to distribute treated water to consumers, and requires regular maintenance and inspection to ensure that it is safe and reliable.

Domestic Wastewater refers to wastewater generated from household activities such as showering, laundry, and toilet flushing, which can contain a range of pollutants and contaminants that require treatment before disposal.

Drainage Basin refers to the area of land that drains water into a particular watercourse or watershed, and is often used to identify potential sources of pollution and to develop strategies for water management.

Effluent is the wastewater that is discharged from a wastewater treatment plant or industry, and can contain a range of pollutants and contaminants that require treatment before disposal.

Environmental Impact Assessment involves the evaluation of the potential environmental impacts of a proposed project or activity, which can help to identify potential risk and develop strategies for mitigation.

Filtration is a process used to remove particulate matter and other impurities from water or wastewater, and is often used in conjunction with other treatment processes such as coagulation and disinfection.

Flow Rate refers to the volume of water or wastewater that flows through a particular point or system over a given period of time, and is often used to design and operate water and wastewater treatment systems.

Fluidized Bed Reactor is a type of reactor used in wastewater treatment to remove pollutants and contaminants from water, and is often used in conjunction with other treatment processes such as filtration and disinfection.

Geographic Information System is a type of software used to analyze and visualize spatial data, which can be used to identify potential sources of pollution and to develop strategies for water management.

Grey Water refers to wastewater generated from household activities such as showering and laundry, which can be treated and reused for irrigation and other non-potable purposes.

Groundwater is the water that is stored in the ground, and is often used as a source of drinking water, but requires careful management to prevent contamination and depletion.

Hydraulic Loading refers to the volume of water or wastewater that is applied to a particular treatment system or process over a given period of time, and is often used to design and operate water and wastewater treatment systems.

Industrial Wastewater refers to wastewater generated from industrial activities such as manufacturing and processing, which can contain a range of pollutants and contaminants that require treatment before disposal.

Infiltration refers to the process by which water or wastewater enters the soil or groundwater, and can be used to recharge groundwater aquifers and reduce stormwater runoff.

Inflow refers to the volume of water or wastewater that enters a particular treatment system or process over a given period of time, and is often used to design and operate water and wastewater treatment systems.

Ion Exchange is a process used to remove dissolved solids and other impurities from water or wastewater, and is often used in conjunction with other treatment processes such as filtration and disinfection.

Leachate is the liquid that is generated from the decomposition of waste in a landfill, and can contain a range of pollutants and contaminants that require treatment before disposal.

Membrane Bioreactor is a type of reactor used in wastewater treatment to remove pollutants and contaminants from water, and is often used in conjunction with other treatment processes such as filtration and disinfection.

Microfiltration is a process used to remove particulate matter and other impurities from water or wastewater, and is often used in conjunction with other treatment processes such as coagulation and disinfection.

Nanofiltration is a process used to remove dissolved solids and other impurities from water or wastewater, and is often used in conjunction with other treatment processes such as filtration and disinfection.

Organic Loading refers to the amount of organic matter that is present in a particular wastewater or treatment system, and is often used to design and operate water and wastewater treatment systems.

Pathogen refers to a type of microorganism that can cause disease in humans, and is often used to evaluate the effectiveness of water and wastewater treatment systems.

pH refers to the measure of the acidity or alkalinity of a particular water or wastewater, and is often used to design and operate water and wastewater treatment systems.

Potable Water refers to water that is safe for drinking and human consumption, and requires careful treatment and management to prevent contamination and disease.

Public-Private Partnership refers to a type of partnership between government and private sector entities to deliver water and wastewater services, and can be used to finance and deliver water and wastewater infrastructure.

Reclaimed Water refers to water that has been treated and reused for non-potable purposes such as irrigation and industrial processes, and can help to conserve water resources and reduce the environmental impacts of water and wastewater treatment.

Reverse Osmosis is a process used to remove dissolved solids and other impurities from water or wastewater, and is often used in conjunction with other treatment processes such as filtration and disinfection.

Sanitary Sewer refers to a type of sewer system that is designed to collect and transport wastewater from households and industries to a treatment plant, and requires regular maintenance and inspection to ensure that it is safe and reliable.

Sedimentation refers to the process of allowing particulate matter to settle to the bottom of a tank or basin, and is often used in conjunction with other treatment processes such as coagulation and filtration.

Sludge refers to the solid waste material that is generated from wastewater treatment, and can be treated and disposed of in a landfill or incinerator.

Stormwater refers to the water that is generated from precipitation and runoff from impervious surfaces

such as roads and buildings, and can contain a range of pollutants and contaminants that require treatment before disposal.

Suspended Solids refer to the particulate matter that is suspended in water or wastewater, and can be removed through treatment processes such as sedimentation and filtration.

Tertiary Treatment refers to the advanced treatment of wastewater to remove nutrients and other pollutants, and is often used to produce high-quality effluent that can be reused for non-potable purposes.

Total Dissolved Solids refers to the measure of the amount of dissolved solids in a particular water or wastewater, and is often used to evaluate the quality of water and wastewater.

Trickling Filter is a type of treatment system that uses a porous medium to remove pollutants and contaminants from wastewater, and is often used in conjunction with other treatment processes such as sedimentation and disinfection.

Ultrafiltration is a process used to remove particulate matter and other impurities from water or wastewater, and is often used in conjunction with other treatment processes such as coagulation and disinfection.

Urban Drainage refers to the system of drains and sewers that is used to collect and transport stormwater and wastewater in urban areas, and requires regular maintenance and inspection to ensure that it is safe and reliable.

Wastewater Collection System refers to the network of pipes and infrastructure used to collect and transport wastewater from households and industries to a treatment plant, and requires regular maintenance and inspection to ensure that it is safe and reliable.

Wastewater Treatment Plant is a facility that is used to treat and remove pollutants and contaminants from wastewater, and can include a range of treatment processes such as primary, secondary, and tertiary treatment.

Water Conservation refers to the practices and strategies used to reduce water consumption and wastewater generation, and can include measures such as low-flow fixtures and water-efficient appliances.

Water Distribution System refers to the network of pipes and infrastructure used to distribute treated water to consumers, and requires regular maintenance and inspection to ensure that it is safe and reliable.

Water Quality refers to the physical, chemical, and biological characteristics of a particular water or wastewater, and is often used to evaluate the suitability of water for drinking or other uses.

Water Reuse refers to the practice of treating and reusing wastewater for non-potable purposes such as irrigation and industrial processes, and can help to conserve water resources and reduce the environmental impacts of water and wastewater treatment.

Water Shed refers to the area of land that drains water into a particular watercourse or watershed, and is often used to identify potential sources of pollution and to develop strategies for water management.

Water Supply System refers to the network of pipes and infrastructure used to collect, treat, and distribute water to consumers, and requires regular maintenance and inspection to ensure that it is safe and reliable.

Water Treatment Plant is a facility that is used to treat and remove pollutants and contaminants from water, and can include a range of treatment processes such as coagulation, sedimentation, and filtration.