COURSE OVERVIEW TE0301
Global Water Policy, Regulations and Environment

Course Title
Global Water Policy, Regulations and Environment

Course Date/Venue
Session 1: July 07-11, 2025/Glasshouse Meeting Room, Grand Millennium Al Wahda Hotel, Abu Dhabi, UAE
Session 2: October 27-31, 2025/Glasshouse Meeting Room, Grand Millennium Al Wahda Hotel, Abu Dhabi, UAE

Course Reference
TE0301

Course Duration/Credits
Five days/3.0 CEUs/30 PDHs

Course Description

This practical and highly-interactive course includes various practical sessions and exercises. Theory learnt will be applied using our state-of-the-art simulators.

This course is designed to provide participants with a detailed and up-to-date overview of Global Water Policy, Regulations and Environment. It covers the global water challenges, evolution of water policies, water governance models and water and human rights; the world bank and water policy, United Nations water (UN-Water), international commission on irrigation and drainage (ICID) and global water partnership (GWP); the water security, factors affecting water security, regional disparities in water availability and cross-border water issues; global water treaties and conventions and transboundary water management; water pollution regulations and wastewater management regulations.

Further, the course will also discuss the water use and conservation regulations covering sustainable water use policies, agriculture and irrigation regulations, efficiency standards in water use and incentives for water conservation; the environmental compliance for water utilities including environmental standards for water quality, legal frameworks for water utility operations, reporting and monitoring water quality and regulatory compliance audits for water utilities.

During this interactive course, participants will learn the global water quality standards covering WHO drinking water guidelines, EU and US water quality standards, drinking water quality versus wastewater quality and parameters for assessing water quality; the water pollution control technologies, integrated water resources management (IWRM), climate change and water quality; the environmental impact assessment (EIA) for water projects, ecological flow regulations, water scarcity in the MENA region and regulatory frameworks in MENA; the climate change impacts on MENA's water resources and desalination as a climate adaptation strategy, reuse of treated wastewater and agricultural water management innovations; water laws and governance in the Arab world, role of regional organizations like the Arab water council, cooperation on shared water resources in the Arab world and national versus regional water policy challenges; the water desalination technologies in the MENA Region, regional water conflicts and diplomacy and sustainable water management practices; innovative water technologies, smart water systems and IoT in water management, water policy in the context of sustainable development goals (SDGs) and water pricing and economic instruments; increasing regulatory focus on water efficiency and international trends in water quality regulations, water security and human rights as emerging policy issues and the role of NGOs and international organizations in shaping regulations; and the role of digital technology in water governance, collaborate between private, public, and international actors and discuss prospects for the future of global water policy.

Course Objectives

Upon the successful completion of this course, each participant will be able to:-

- Apply and gain an in-depth knowledge on global water policy, regulations and environment
- Discuss global water challenges, evolution of water policies, water governance models and water and human rights
- Recognize world bank and water policy, United Nations water (UN-Water), international commission on irrigation and drainage (ICID) and global water partnership (GWP)
- Discuss water security, factors affecting water security, regional disparities in water availability and cross-border water issues
- Review global water treaties and conventions and apply transboundary water management, water pollution regulations and wastewater management regulations
- Carryout water use and conservation regulations covering sustainable water use policies, agriculture and irrigation regulations, efficiency standards in water use and incentives for water conservation
- Apply environmental compliance for water utilities including environmental standards for water quality, legal frameworks for water utility operations, reporting and monitoring water quality and regulatory compliance audits for water utilities
- Discuss global water quality standards covering WHO drinking water guidelines, EU and US water quality standards, drinking water quality versus wastewater quality and parameters for assessing water quality

- Determine water pollution control technologies, integrated water resources management (IWRM), climate change and water quality
- Discuss environmental impact assessment (EIA) for water projects, ecological flow regulations, water scarcity in the MENA region and regulatory frameworks in MENA
- Describe climate change impacts on MENA's water resources and apply desalination as a climate adaptation strategy, reuse of treated wastewater and agricultural water management innovations
- Explain water laws and governance in the Arab world, role of regional organizations like the Arab water council, cooperation on shared water resources in the Arab world and national versus regional water policy challenges
- Recognize water desalination technologies in the MENA region, regional water conflicts and diplomacy and sustainable water management practices
- Discuss innovative water technologies, water policy in the context of sustainable development goals (SDGs) and water pricing and economic instruments
- Increase regulatory focus on water efficiency and discuss international trends in water quality regulations, water security and human rights as emerging policy issues and the role of NGOs and international organizations in shaping regulations
- Identify the role of digital technology in water governance, collaborate between private, public, and international actors and discuss prospects for the future of global water policy

Exclusive Smart Training Kit - H-STK®

*Participants of this course will receive the exclusive "Haward Smart Training Kit" (**H-STK®**). The **H-STK®** consists of a comprehensive set of technical content which includes **electronic version** of the course materials conveniently saved in a **Tablet PC**.*

Who Should Attend

This course provides an overview of all significant aspects and considerations of global water policy, regulations and environment for environmental and water resource professionals, urban and regional planners, hydrologists, water engineers, environmental consultants and risk assessors, ecologists and conservationists, environmental, policy reporters and other technical staff.

Course Fee

US$ 5,500 per Delegate + **VAT**. This rate includes H-STK® (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

Accommodation

Accommodation is not included in the course fees. However, any accommodation required can be arranged at the time of booking.

Course Certificate(s)

Internationally recognized certificates will be issued to all participants of the course who completed a minimum of 80% of the total tuition hours

Certificate Accreditations

Certificates are accredited by the following international accreditation organizations: -

- British Accreditation Council (BAC)

  Haward Technology is accredited by the **British Accreditation Council** for **Independent Further and Higher Education** as an **International Centre**. BAC is the British accrediting body responsible for setting standards within independent further and higher education sector in the UK and overseas. As a BAC-accredited international centre, Haward Technology meets all of the international higher education criteria and standards set by BAC.

- The International Accreditors for Continuing Education and Training (IACET - USA)

  Haward Technology is an Authorized Training Provider by the International Accreditors for Continuing Education and Training (IACET), 2201 Cooperative Way, Suite 600, Herndon, VA 20171, USA. In obtaining this authority, Haward Technology has demonstrated that it complies with the **ANSI/IACET 2018-1 Standard** which is widely recognized as the standard of good practice internationally. As a result of our Authorized Provider membership status, Haward Technology is authorized to offer IACET CEUs for its programs that qualify under the **ANSI/IACET 2018-1 Standard**.

  Haward Technology's courses meet the professional certification and continuing education requirements for participants seeking **Continuing Education Units** (CEUs) in accordance with the rules & regulations of the International Accreditors for Continuing Education & Training (IACET). IACET is an international authority that evaluates programs according to strict, research-based criteria and guidelines. The CEU is an internationally accepted uniform unit of measurement in qualified courses of continuing education.

  Haward Technology Middle East will award **3.0 CEUs** (Continuing Education Units) or **30 PDHs** (Professional Development Hours) for participants who completed the total tuition hours of this program. One CEU is equivalent to ten Professional Development Hours (PDHs) or ten contact hours of the participation in and completion of Haward Technology programs. A permanent record of a participant's involvement and awarding of CEU will be maintained by Haward Technology. Haward Technology will provide a copy of the participant's CEU and PDH Transcript of Records upon request.

Course Instructor(s)

This course will be conducted by the following instructor(s). However, we have the right to change the course instructor(s) prior to the course date and inform participants accordingly:

Mr. Laith Ahmad, MSc, BSc, is a **Senior Civil & Water Engineer** with extensive years of practical experience within the **Power & Water Utilities** and other **Energy** sectors. His expertise includes **Initiation** to **Water Networks Components**, Qualitative Analysis of Soil & **Ground Water**, **Wastewater** Treatment, **Rural Pipe** System, **Pipe** Materials & Fittings, **Pipes & Fittings**, **Water Network System** Design & Operation, **Supply Water Network** Rehabilitation, **Water Loss** Reduction, **Main Water** System Construction, **Main Water Line** Construction, **Water Distribution** Design & Modeling, Groundwater, **Well Inventory**, **Monitoring** & **Conservation**, **Water Supply** System, **Water Instrumentations Basics,** Oilfield **Water Treatment**, Best Practice in **Sewage** & Industrial **Wastewater Treatment** & Environmental Protection, **Water Distribution** Design & Modelling, Treating & Handling Oily **Water**, **Water GEMS** Fundamental & Advanced, **Water Chemistry** for **Power Plant**, Industrial **Water** Treatment in Refineries & Petrochemical Plants, **Water Pollution** Control, Permitting & Enforcing Drilling for **Groundwater**, **Groundwater** Desalination, **Water** Sector Orientation, Environmental Impact Assessment (**EIA**), **Reverse Osmosis** Treatment Technology and **Chlorination** System, **Well** Inventory, Monitoring & Conservation, **Qualitative Analysis** of Soil & Ground Water, **Water** Networking, **Hydraulic Modelling** Systems, **Pumping** Stations, **Centrifugal Pumps**, **Pipelines & Pumping**, **Water Reservoirs**, **Water Storage Tanks**, Extended Activated **Sludge** Treatment, **Qualitative Analysis** of Soil and Ground Water, **Sewage & Industrial Wastewater** Treatment & Environmental Protection, Supervising & Monitoring **Sewage Works**, **Water Desalination** Technologies, **Water Distribution & Pump** Station, Best **Water Equipment** Selection & Inspection, **Hydraulic Modelling** for Water Network Design, **Water Utility** Industry, **Water Desalination** Technologies & New Development, **Water Hydrology**, **Water Conveyors**, **Well inventory , Monitoring & Conservation**, **Water Networks** Rehabilitation, Initiation to **Water Networks** Components, **Water Fittings**, **Fittings & Valves**, **Water Valves**, **Control Valves**, **Float Valves**, **Couplings & Pressure** Testing, **Water Distribution** Systems, **SCADA** System, **Data** Management, Risk Management & Project Management, **Civil Engineering**, **Concrete Mix** Design, **Engineering Contracts**, **Claims** Management & Dispute Resolution, **Civil Engineering**, Drawings & Construction Specifications, AutoCAD, CIVIL 3D, Bridge Design, ETABS, PROKON, **Flows Water GEMS**, SewerCAD, Hydraulic Modelling (GIS & Surge Analysis) and OSHA General. Further, he is also well-versed in **Quality Control & Site Inspection**, **Construction Site Inspection**, **Structure Design**, Inspection, Maintenance & Durability, **Structural Renovation of Buildings**, Durability of **Reinforced Concrete Structures**: Assessment, Repair & Risk-Based Inspection and **Construction Safety.**

During his career life, Mr. Laith has gained his practical and field experience through his various significant positions and dedication as the **Civil Engineer**, **Water Engineer**, **Technical Trainer**, **Project Manager**, **Head of Contract & Document Section**, **Site Engineer**, **Sales Engineer** and **Instructor/Trainer** for various international companies and projects such as the Al-Qusor Academy, SORAQIA, Water Authority of Jordan, CONMIX for Chemicals Construction & Decorative Plaster, Al-Jafer Main Water Line Construction, Faquo'h District of Karak Governorate, ZARA Main Water System Construction, Ground Water Desalination Project-Consulting Services and Marka Water Training Centre, just to name a few.

Mr. Laith has a **Master's** degree in **Public Administration** and a **Bachelor's** degree in **Civil Engineering**. Further, he is a **Certified Instructor/Trainer** and has delivered numerous courses, trainings, conferences, seminars and workshops internationally.

Training Methodology

All our Courses are including **Hands-on Practical Sessions** using equipment, State-of-the-Art Simulators, Drawings, Case Studies, Videos and Exercises. The courses include the following training methodologies as a percentage of the total tuition hours:-

30% Lectures
20% Practical Workshops & Work Presentations
30% Hands-on Practical Exercises & Case Studies
20% Simulators (Hardware & Software) & Videos

In an unlikely event, the course instructor may modify the above training methodology before or during the course for technical reasons.

Course Program

The following program is planned for this course. However, the course instructor(s) may modify this program before or during the workshop for technical reasons with no prior notice to participants. Nevertheless, the course objectives will always be met:

Day 1

0730 – 0800	*Registration & Coffee*
0800 – 0815	*Welcome & Introduction*
0815 – 0830	***PRE-TEST***
0830 – 0930	***Overview of Global Water Challenges*** *Scarcity and Access to Water • Global Demand versus Supply • Climate Change Impacts • Water Governance Challenges*
0930 – 0945	*Break*
0945 – 1030	***History & Evolution of Water Policies*** *Early Water Management Strategies • International Water Law Development • Key Historical Events in Water Policy • Evolution of Global Water Agreements*
1030 – 1130	***Water Governance Models*** *Centralized versus Decentralized Models • Stakeholder Involvement • Role of Governments and Private Sectors • Community-Based Water Management*
1130 – 1215	***Water & Human Rights*** *UN General Assembly Resolution on the Human Right to Water • Access to Clean Drinking Water • Water as a Public versus Private Good • Gender Considerations in Water Rights*
1215 – 1230	*Break*
1230 – 1330	***Global Water Institutions*** *World Bank and Water Policy • United Nations Water (UN-Water) • International Commission on Irrigation and Drainage (ICID) • Global Water Partnership (GWP)*
1330 – 1420	***Water Security & Global Challenges*** *Water Security Definitions • Factors Affecting Water Security • Regional Disparities in Water Availability • Cross-Border Water Issues*
1420 – 1430	***Recap*** *Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow*
1430	*Lunch & End of Day One*

Day 2

0730 – 0830	***Global Water Treaties & Conventions*** *United Nations Watercourses Convention • Helsinki Rules • International Joint Commission (IJC) • Regional Water Agreements (e.g., Nile Basin Initiative)*
0830 – 0930	***Transboundary Water Management*** *Shared Rivers and Groundwater Systems • Cooperative Frameworks for Transboundary Water • Case Studies of Transboundary Disputes (e.g., Indus Water Treaty) • Best Practices in Conflict Resolution*
0930 – 0945	*Break*
0945 – 1100	***Water Pollution Regulations*** *International Water Pollution Control (e.g., MARPOL) • EU Water Framework Directive • US Clean Water Act • Global Protocols on Hazardous Chemicals in Water*
1100 – 1215	***Wastewater Management Regulations*** *WHO Guidelines for Wastewater Treatment and Reuse • Global Best Practices in Wastewater Standards • Regulations for Wastewater Discharge • Industrial and Agricultural Wastewater Regulations*
1215 – 1230	*Break*
1230 – 1330	***Water Use & Conservation Regulations*** *Sustainable Water Use Policies • Agriculture and Irrigation Regulations • Efficiency Standards in Water Use • Incentives for Water Conservation*
1330 – 1420	***Environmental Compliance for Water Utilities*** *Environmental Standards for Water Quality • Legal Frameworks for Water Utility Operations • Reporting and Monitoring Water Quality • Regulatory Compliance Audits for Water Utilities*
1420 – 1430	***Recap*** *Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow*
1430	*Lunch & End of Day Two*

Day 3

0730 – 0830	***Global Water Quality Standards*** *WHO Drinking Water Guidelines • EU and US Water Quality Standards • Drinking Water Quality versus Wastewater Quality • Parameters for Assessing Water Quality*
0830 – 0930	***Water Pollution Control Technologies*** *Water Treatment and Filtration Methods • Biological Treatment of Wastewater • Chemical Treatment Methods • Innovations in Wastewater Treatment*
0930 – 0945	*Break*
0945 – 1100	***Integrated Water Resources Management (IWRM)*** *IWRM Framework Principles • Sustainable Water Resources Management • Stakeholder Integration in IWRM • IWRM Case Studies in Developing Countries*
1100 – 1215	***Climate Change & Water Quality*** *Impact of Climate Change on Water Quality • Strategies to Adapt Water Quality Management to Climate Change • Climate-Induced Shifts in Water Availability • Water Risk Management in a Changing Climate*
1215 – 1230	*Break*

1230 – 1330	***Environmental Impact Assessment (EIA) for Water Projects*** *Key Components of EIA in Water Projects • Procedures for Water-Related EIA • Mitigation Strategies in Water Project EIAs • EIA Case Study for Water Infrastructure Projects*
1330 – 1420	***Ecological Flow Regulations*** *Definition of Ecological Flow • Legal Standards for Environmental Flows • Impacts of Altered Flows on Ecosystems • Case Studies of Ecological Flow Management*
1420 – 1430	***Recap*** *Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow*
1430	*Lunch & End of Day Three*

Day 4

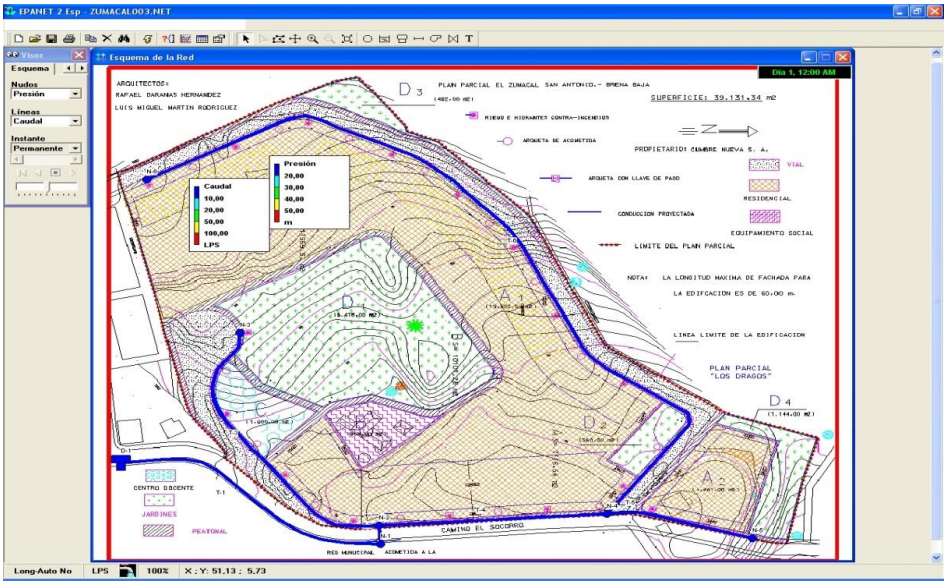
0730 – 0830	***Water Scarcity in the MENA Region*** *Key Causes of Water Scarcity in MENA • Desalination and Groundwater Dependence • Role of Water Policy in Managing Scarcity • MENA Countries' Strategies for Water Security*
0830 – 0930	***Regulatory Frameworks in MENA*** *Water Policies in Gulf Cooperation Council (GCC) Countries • Water Management in Non-GCC MENA Countries • Public-Private Partnerships in MENA Water Sector • Case Studies of MENA Water Governance*
0930 – 0945	*Break*
0945 – 1100	***Water Management & Climate Adaptation in MENA*** *Climate Change Impacts on MENA's Water Resources • Desalination as a Climate Adaptation Strategy • Reuse of Treated Wastewater • Agricultural Water Management Innovations*
1100 – 1215	***Water in the Arab World: Legal & Institutional Approaches*** *Water Laws and Governance in the Arab World • Role of Regional Organizations like the Arab Water Council • Cooperation on Shared Water Resources in the Arab World • National versus Regional Water Policy Challenges*
1215 – 1230	*Break*
1230 – 1330	***Water Desalination Technologies in the MENA Region*** *Overview of Desalination Technology • Legal and Regulatory Considerations for Desalination Plants • Environmental Impacts of Desalination • Case Studies of Desalination Plants in the Region*
1330 – 1420	***Regional Water Conflicts & Diplomacy*** *Transboundary Water Issues in MENA • Role of International Diplomacy in Resolving Water Disputes • Case Studies of Regional Cooperation (e.g., Nile River) • Future Prospects for Water Conflict Resolution*
1420 – 1430	***Recap*** *Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow*
1430	*Lunch & End of Day Four*

Day 5

0730 – 0830	***Sustainable Water Management Practices*** *Water Efficiency Measures in Urban Areas • Sustainable Agriculture and Irrigation Techniques • Water Demand Management Strategies • Wastewater Reuse and Recycling*
0830 – 0930	***Innovative Water Technologies*** *Smart Water Systems and IoT in Water Management • Advanced Filtration and Desalination Technologies • Water-Energy Nexus and Sustainability • Emerging Technologies for Water Conservation*
0930 – 0945	*Break*
0945 – 1100	***Water Policy in the Context of Sustainable Development Goals (SDGs)*** *Linking Water Policy to SDG 6 (Clean Water and Sanitation) • Water Governance and SDG Implementation • Policy Tools for Achieving Water-Related SDGs • Case Studies of SDG-Driven Water Initiatives*
1100 – 1215	***Water Pricing & Economic Instruments*** *Water Tariffs and Pricing Models • Economic Tools for Improving Water Efficiency • The Role of Subsidies and Incentives • Pricing Water for Sustainability*
1215 – 1230	*Break*
1230 – 1300	***Global Trends in Water Regulations*** *Increasing Regulatory Focus on Water Efficiency • International Trends in Water Quality Regulations • Water Security and Human Rights as Emerging Policy Issues • The Role of NGOs and International Organizations in Shaping Regulations*
1300-1330	***The Future of Global Water Governance*** *Shifts in Global Governance Models • Role of Digital Technology in Water Governance • Collaboration Between Private, Public, and International Actors • Prospects for the Future of Global Water Policy*
1330 – 1345	***Course Conclusion*** *Using this Course Overview, the Instructor(s) will Brief Participants about t Topics that were Covered During the Course*
1345 – 1415	***POST-TEST***
1415 – 1430	*Presentation of Course Certificates*
1430	*Lunch & End of Course*

Simulator (Hands-on Practical Sessions)

Practical sessions will be organized during the course for delegates to practice the theory learnt. Delegates will be provided with an opportunity to carryout various exercises using the latest revision of “EPANET” simulators.



EPANET Simulator

Course Coordinator

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