

K-water & UNESCO i-WSSM Summer Program on Water Management

Program Information

■ Program Theme

No.	Program Theme	Date	No. of Participants
1	Smart Water Management in Smart City	June 28 th – July 2 nd	15
2	Water-Energy Nexus for Climate Change Mitigation	July 12 th – 16 th	15
3	Green-Digital Transition in Water Management	July 26 th – 30 th	15

■ Program Details

1. Smart Water Management in Smart City

This course helps participants to grasp basic concepts of smart water management(SWM) and its technologies applied in smart cities. Participants will also be able to acquire knowledge on laws and policies for smart city development and some major cases from Korea through various lectures and study visits.


Date	Program
27 June (Sun)	Guest Hotel Check-in & Registration (5PM-6PM)
28 June (Mon)	Orientation/ Opening Ceremony / Lecture / Study Visit
	<ul style="list-style-type: none"> ● Orientation ● Opening Ceremony ● (Lec) Establishment of Master Plan for Smart City ● (Lec) Law & Policy for Urban Water Management ● (Lec) Establishment and Operation of Integrated Water Supply Operating System ● (SV) Water Treatment Pilot Plant
29 June (Tue)	Lecture/ Study Visit
	<ul style="list-style-type: none"> ● (Lec) Smart Water Management ● (SV) Water Hazard Platform Center ● (Lec) Realtime Remote Control System of Water Supply Process using ICT ● (Lec) Water Management Technology in Smart City Using Drones ● (SV) Flowmeter Calibration Center

30 June (Wed)	Lecture/ Study Visit
	<ul style="list-style-type: none"> • (Lec) Water Management Technology in Smart City Using Satellite • (Lec) Wastewater and Reuse • (SV) Asan Wastewater & Reuse Center
1 July (Thu)	Lecture/ Study Visit
	<ul style="list-style-type: none"> • (Lec) Smart Energy System • (Lec) Case Study on Busan EDC(Eco Delta City) • (Lec) Introduction of Start-up Technology in Water Industry • (SV) Start-up Companies in Water Industry
2 July (Fri)	Lecture / Closing Ceremony
	<ul style="list-style-type: none"> • (Lec) Distributed Water Supply System • (Lec) Eco-filtering System • (Lec) Smart City Operation Platform • Program Survey & Feedback • Closing Ceremony

2. **Water-Energy Nexus for Climate Change Mitigation**

This course helps participants to grasp basic concepts of various kinds of renewable energy including hydropower, photovoltaic power, tidal power, wind power and so on. It has been developed to enable participants to acquire hands-on experience and knowledge on renewable energies through various lectures, study visits and special practice sessions.

Date	Program
11 July (Sun)	Guest Hotel Check-in & Registration (5PM-6PM)
12 July (Mon)	Orientation/ Opening Ceremony / Lecture
	<ul style="list-style-type: none"> • Orientation • Opening Ceremony • (Lec) Climate Change and Carbon Neutral Policy in the Water Sector • (Lec) [Energy Source I] Development & Operation of Hydropower • (Lec) [Energy SourceII] Development & Operation of Photovoltaic Power
13 July (Tue)	Study Visit
	<ul style="list-style-type: none"> • (SV) Chungju Dam (Hydroelectric Power Plant) • (SV) Chungju Dam (Floating Photovoltaic System)

14 July (Wed)	Lecture/ Practice	
	<ul style="list-style-type: none"> • (Lec) Stand-alone Photovoltaic System • (Prac) Building Small Photovoltaic Modules • (Prac) Building Stand-alone Photovoltaic System 	 <p>[Practice Equipment]</p>
15 July (Thu)	Study Visit	
	<ul style="list-style-type: none"> • (SV) Sihwa Tidal Power Plant Bangameori Wind Power Generator On-Land PV System ESS (Electric Power Storage System) 	
16 July (Fri)	Lecture / Closing Ceremony	
	<ul style="list-style-type: none"> • (Lec) [Energy Source III] Development & Operation of Hydrothermal Energy • (Lec) [Energy Source IV] Development & Operation of Wind Power • (Lec) Electric Power & REC(Renewable Energy Certificate) Market • Program Survey & Feedback • Closing Ceremony 	

3. **Green-Digital Transition in Water Management**

This course helps learners to grasp basic concepts of integrated water resources management(IWRM) focused on green-digital transition including water supply process, dam operation and water loss management. It has been developed to enable learners to acquire hands-on experience on IWRM from Korea's case and apply those knowledge to their own works or studies.

Date	Program
25 July (Sun)	Guest Hotel Check-in & Registration (5PM-6PM)
26 July (Mon)	Orientation/ Opening Ceremony / Lecture / On-site Lecture
	<ul style="list-style-type: none"> • Orientation • Opening Ceremony • (Lec) Digital-Green Transition in Water Management Policy • (Lec) Case Study on Korea's IWRM • (Lec) Current Status of Water Supply and Water Demand Management Policy in Korea • (On-site Lec) Water Hazard Information Platform Center: Water Hazard Monitoring while Adapting to Climate Change

27 July (Tue)	Lecture / On-site Lecture / Study Visit
	<ul style="list-style-type: none"> ● (Lec) Water Resources Development and Management of Korea ● (On-site Lec) IWRM Center: Understanding IWRM of Korea ● (SV) National Groundwater Information Center
28 July (Wed)	Study Visit
	<ul style="list-style-type: none"> ● (SV) Cheonan Water Treatment Plant ● (SV) Dacheong Multi-Purpose Dam
29 July (Thu)	Lecture / Study Visit / Practice
	<ul style="list-style-type: none"> ● (Lec) Water Distribution Network System and Overview of Water Loss Reduction Policy of Korea ● (Lec) Leakage Management for Water Loss Reduction ● (Lec) Integrated Water Resources Management Technology of Smart Water City ● (SV/Practice) Water Distribution Network Education Center: Leakage Detection
30 July (Fri)	Lecture / Study Visit/ Closing Ceremony
	<ul style="list-style-type: none"> ● (Lec) Water Quality Management of Dam & River ● (SV) Water Treatment Pilot Plant ● (Lec) Smart Dam Safety Management and Digitalization of Dam Maintenance ● Program Survey & Feedback ● Closing Ceremony