24 X 7 Water Supply Systems with Advance Transport and Distribution Modeling in Urban Water System

Overview

The Government of India recognizes the importance of 24x7 water supply. Accordingly, the Ministry of Urban Development has made 24x7 water supply a Service Level Benchmark for water providers. The ministry has also issued a Guidance Note on Continuous Water Supply (24x7). In line with these requirements this course is designed to impart knowledge about designing of water supply schemes. The course covers the advance water transport and distribution system in urban water network, the selection of suitable pipe material, pumping machinery and elevation of storage reservoir to achieve the better efficiency while supplying for 24 x 7 water supply. Understand the operational scenario and selection of suitable system for the requirement Develop a reliability-based and cost effective design using computer model for improving the hydraulic performance of particular Water Transport & Distribution system.

Tentative Dates	**4th Feb – 9th Feb 2019**
Objective	• To understand the distribution aspect of 24 x 7 water supply, • To understand the advance techniques for hydraulic modelling, explaining transient flow in water distribution system. • To understand the complexity of distribution system and will help them to adopt the flexible approach for 24 x 7 water supply scheme.
Host Institute / Venue	**College of Engineering , Pune**
Who should Attend	• The course is designed for Government officials and working professionals who are active in the design, operation and maintenance of the water utility. The professional involved in water and environment infrastructure sector. • Engineering Student at all levels or Faculty from reputed academic institutions and technical institutions from civil and environmental field.
Course Registration Fees	The participation fees for taking the course is as follows: Research **Scholars/Students Rs.2000/-** **Faculty: Rs.5000/-** **Working Professionals: Rs.10000/-** **Participants from Abroad: US $ 500** The above fees (inclusive of GST) and includes the use of all instructional materials assigned for the course and laboratory equipment usage charges.
Accommodation	• The participants (students) may be provided with hostel accommodation, depending on the availability, on payment basis. • The faculty & working professional may be provided with faculty guest house accommodation, depending on the availability, on payment basis.

Foreign Guest Faculty	 **Dr. Nemanja Trifunovic** Associate Professor of Water Supply Engineering at UNESCO-IHE Institute for Water Education in Delft, the Netherlands. He is a specialist in the field of water distribution, in general, and in application of computer models in urban distribution networks, in particular. Lecturing and advisory missions conducted mostly in Africa and Asia included participation in educational and training programmes, and capacity building projects. Currently, he is the coordinator of the programme in water distribution at UNESCO-IHE, and the director of two large capacity building projects in South Africa and Mozambique, implemented with consortia combined of eight Dutch and international organisations.
Course Co- ordinator	 **Dr. Pratap Raval** Professor,Collegeof Engineering. He has been working for last 26 years at COEP. His research interest is in the field of sustainable development. He is currently teaching at graduate and post graduate level. He was part of Network for Indian-Swedish Cooperation on Technical research and Education (INSTEC) in the event at Pune and Cochin on “The Sustainable City - Technologies and Systems for Sustainable Development”. He had received fellowships and awards such as; Award of Visiting Research fellowship for research at Newcastle University, UK under UKIERI programme from British Council May 2007. National Overseas Scholarship from Ministry of Welfare, Govt. of India for doing PhD at abroad university

COURSE MODULES	
Module 1	-Introduction of Indian Water Scenario - Need of continuous water supply -Government of India Initiative for 24 x 7 Water supply scheme -Data collection for water supply scheme - Various formats for data collection - Data analysis and its utilization in proposed design system
Module 2	-Introduction of Hydraulic model for 24 x 7 water supply - Details of various data and input for model Identification of project area and data analysis - Data analysis for water demand and water district zones - Demarcation of DMA (District Metered Area) and allocation of water zones
Module 3	-Recognition of GIS technology - Introduction of GIS data collection and analysis for sustainable planning and management -Use of GIS data and it's interpretation for the model - Details of Transient flow
Module 4	-Impact of demand variation on the hydraulic analysis - Transport and distribution system and - Selection of pipe material -Details of various elements in 24 x 7 water supply system such as storage reservoirs, appurtenances and pumping or gravity system and its impact on the analysis - Hydraulic analysis of the system and the interpretation of various design techniques such as Water GEM, EPANET and other software's available.
Module 5	Site Visit Pune/ PCMC water supply scheme and presentation of 24 X 7 water supply initiatives and understanding SCADA system at PCMC.
Module 6	- Actual simulation of the selected area by data inputs - Understanding the output results and it's interpretation for the 24 x 7 water supply system - Making variations in input data and assessment of output impact such as altering the staging height of ESR and assessment of impact - Altering the pipe diameters and introduction/ deletion of certain valves within the distribution network and assessment of impact on the distribution - Altering the demand and assessment of impact on the demand and supply management.

Step 1:
GIAN web Portal Registration: Register in the GIAN portal i.e. http://www.gian.iitkgp.ac.in/GREGN/indexbypayingRs.500/-online. Registration to this portal is the one-time affair and will be valid for the lifetime of GIAN. Please note that course fee is separate.

Step 2:
Login to the GIAN portal with the registered User ID and Password. Choose for the Course registration option. Select the course titled "**24 X 7 Water Supply Systems with Advance Transport and Distribution Modeling in Urban Water System**" from the list and click the "Save" option. Confirm your registration by clicking the suitable option.

Step 3:
Course Shortlisting: Candidates will be intimated through email regarding their selection.

Step 4:
Course Fee Remittance: Once you receive the intimation from the Course Coordinator, the fee (as applicable) need to be paid. The participants will be provided with accommodation (if available) on payment basis.

Mode of payment: The details of fee payment by NEFT / RTGS/ Demand Draft in the name of "Director, College of Engineering, Pune''

1 Bank Account No.	**30465455638**
2 MICR Code	**411002060**
3 Beneficiary Bank	**State bank of India, COEP, Pune-411005**
4 IFSC Code	**SBIN0010431**

The participants are required to send the Demand Draft for the registration fee to the Coordinator:
Dr. P.M. Raval ,
Town Planning Section, Civil Engineering Department,
College of Enginering, Pune,
Wellesly road, Pune -411005

Step 5: Fill up the registration form (Given in Page no. 5 of this brochure), by providing details of the bank transaction. Send the scanned copy of registration form to the Course coordinator at pmr.civil@coep.ac.in before 20 th January 2019

GIAN COURSE REGISTRATION FORM
(4th Feb to 9th Feb 2019)

24 X 7 Water Supply Systems with Advance Transport and Distribution Modeling in Urban Water System

NAME		
DESIGNATION		
ORGANISATION		
ADDRESS		
EMAIL IDs		
CONTACT NUMBERs		
	REGISTRATION FEES DETAIL	
TRANSACTION NO. (NEFT/RTGS)		
DEMAND DRAFT (if paid by DD)		

PLACE :	DATE :
APPLICANT SIGNATURE	