National Water Academy, Pune

Training Program on

Dam Instrumentation

(14 – 18 July 2025)

REGISTRATION FORM

Designation:	
Organization:	
Responsibilities (in —	
brief):	
Full Postal Address:	
Tel Nos (with STD Code):	
Email: ———	_
Mobile	
Whether require accommodation?	YES / NO
Date:	(Signature of the Participant)
Date: SPONSORING	
SPONSORING	
SPONSORING	
SPONSORING	AUTHORITY
Full Postal Address:	AUTHORITY
Full Postal Address: Tel Nos (with STD Code):	AUTHORITY
Full Postal Address: Tel Nos (with STD Code): Email:	AUTHORITY



Government of India
Ministry of Jal Shakthi
Department of Water Resources,
River Development & Ganga Rejuvenation
Central Water Commission



Training Program on

Dam Instrumentation
(14 – 18 July 2025)



Organized by National Water Academy, CWC, Pune

Completed Registration Form may be sent by email

nwa.pune@gmail.com dd2-nwa@gov.in

INTRODUCTION AND OBJECTIVE

India is home to over 5,200 large dams, with nearly 80% of these structures exceeding 25 years of age. As these dams continue to age, their health and safety become increasingly critical for the sustainable management of these invaluable national assets. The Central Water Commission (CWC) plays a pivotal role in promoting and facilitating dam safety practices across the country, aiming to mitigate risks to life and property that could arise from potential dam failures. An effective dam instrumentation program is fundamental to this effort, providing essential insights into the structural and foundational behavior of dams both during construction and throughout their operational lifespan.

Dam instrumentation is essential not only for ensuring the structural integrity of these vital infrastructures but also for reassuring dam owners, stakeholders, and the general public about the safety of these structures. Properly selected and strategically placed instruments help in monitoring key parameters, detecting any deviations from expected performance, and enabling timely interventions to prevent failures. The ability to accurately assess a dam's performance is crucial for owners who bear the ultimate responsibility for any consequences of dam failure. The CWC's commitment to enhancing dam safety practices underscores the importance of ongoing monitoring and maintenance, supported by comprehensive training programs that equip personnel with the knowledge and skills needed to manage and operate dams safely.

With the enactment of Dam Safety Act'2021, it has become mandatory for every dam owner to have a minimum number of such instrumentations at each specified dam, and installed in such a manner as may be specified by the regulations in this regard. Also, dam owners shall maintain a record of recordings of such instrumentations and forward the analysis of the readings to the SDSO, as specified by the regulations. (clause 32, The Dam Safety Act, 2021)

PROGRAM CONTENTS

- Overview of Instrumentation
- Need and Planning of Instrumentation
- Sensors and Instruments
- Water Level & Flow Control
- Monitoring Parameters and Technologies
- Measurement of Pore Water Pressures
- Instrumentation of Underground Excavations
- Inclinometers and Magnetic Gauges
- Instrumentation Program Case Study
- Data Acquisition and Transmission Systems
- Emerging Technologies
- Analysis and Interpretation of Data
- Finite & Distinct Element Technologies
- Retrofitting of Dams
- Case Studies

This training program is designed to empower participants with the necessary expertise to effectively manage dam instrumentation and contribute to the safe operation of these critical infrastructures.

TARGET GROUP

This training course is intended for the officers of Central/ State Govts/ PSUs/ Dam owners in the rank of AE/AEE/EE/SE or equivalent working in the dam design activities in CDOs and other design units of the organizations and also the officers who are involved in installation and monitoring of the instruments.

RESOURCE PERSONS

The resource persons for the program would be subject experts from CSMRS, CWPRS, State WRD, Subject experts, etc.

PROGRAM FEE

There is no program **fee for participants from Central and State Govt. Departments**. Charges for participants from various categories are as below:

Category	Description	Fee in Rs.(per participant)
A.	Central/State/Local Government Depts. including their autonomous bodies:	Nil
B.	'Not for Profit' Central and State PSUs	Nil
C.	Recognized academic institutions, NGOs	1500/-
D.	Central and State Public Sector Undertakings	10,000/-
E.	Private Companies, individuals	15,000/-

Discounts applicable: (a) 50% for PSUs of MoJS i.e. WAPCOS & NPCC (no group discount); (b) For others – 20% discount for 3-4 participants; 30% discount for 5 or more participants from the same organization.

Payment for the programme fee, if applicable, is to be deposited with NWA before the commencement of the program. Payment is accepted through Online / Demand Draft <u>without deducting any TDS</u>. DD drawn in favour of PAO-Ministry of Water Resources payable at Pune or through electronic transfer in the Account details given below:

Account holder name: PAO - Ministry of Water Resources, Account No: 11382328092; IFSC Code: SBIN0001904

DURATION

The program is of 5 days duration scheduled during 14th-18th July 2025.

VENUE

National Water Academy, CWC, Pune-Sinhagad Road, Khadakwasla, Pune - 411024

PARTICIPATION

The nomination of the officers fitting the target profile may be sent to the Program Coordinator latest by 07th July 2025 by email (nwa.pune@gmail.com; dd2-nwa@gov.in). The nominated officers are requested to proceed for the program only after confirmation of their accepted nomination. The accepted nominations will be displayed on NWA's website on 08th July 2025.

ACCOMODATION

NWA has a self-contained residential campus where all out-station participants would be provided with lodging and boarding. Charges for lodging and boarding are to be borne by participants themselves. Local pickup/drop will have to be arranged by the participants.

WEATHER

In July, Pune experiences a lot of rain and pleasant weather. The average temperature during the month of July is 21.6 °C to 25.6 °C

CONTACT

For sending nominations or for any information about this program, please contact:

Saurabh

Deputy Director & Course Coordinator

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Website: http://nwapune.gov.in