

NATIONAL WATER ACADEMY, PUNE
Distance Learning Program (Moderated Course) in Advanced Hydrology,
Modeling & Forecasting
23 March – 05 June 2026
REGISTRATION FORM

Name (in capitals): _____

Designation: _____

Date of Birth: _____

Organization: _____

Responsibilities (in brief): _____

Full Postal Address: _____

Telephone Nos (with STD Code): _____

Fax No(with STD ode): _____

Mobile: _____

E-mail: _____

Date (Signature of the participant)

SPONSORING AUTHORITY

Full Postal Address: _____

Telephone Nos: _____

(With STD Code)

Fax No. (with STD ode): _____

Mobile: _____

Email: _____

Date (Signature and Seal)

Completed Registration Form may be sent by
email to nwa.mah@nic.in, directorm-nwa@gov.in



GOVERNMENT OF INDIA
MINISTRY OF JAL SHAKTI,
DEPARTMENT OF WATER RESOURCES,
RIVER DEVELOPMENT & GANGA REJUVENATION
CENTRAL WATER COMMISSION

DISTANCE LEARNING PROGRAM (MODERATED
COURSE) IN ADVANCED HYDROLOGY,
MODELING & FORECASTING

23 March – 05 June 2026

Organized by

NATIONAL WATER ACADEMY

in association with

WORLD METEOROLOGICAL ORGANIZATION

INTRODUCTION

While Planet Earth is endowed with abundant water, the needs for water at specific times and places often exceed the available supplies. Efforts to utilize this precious resource often result in adverse social and environmental impacts, causing disruption of water supplies to downstream users, and the loss of aquatic habitats. In addition to conflicts over water availability, the quality of water is often compromised.

The branch of Geophysics, which deals with the occurrence and movement of water in terms of quantity and quality on and below the surface of the earth except the oceans, in vapour, liquid or solid state, is termed as Hydrology. Hydrology plays an important role in Effective management of surface-water & ground-water resources for domestic, agricultural, commercial, industrial, recreational and ecological uses.

NWA conducted Distance learning programs in Basic Hydrological sciences in the past which were designed to meet the needs of officials, who work with hydrologic data, particularly in the areas of flood forecasting and design flood analysis etc. This advanced course is designed to meet the needs of hydrological forecasting who require more advanced training in selected hydraulic and hydrological modeling topics.

PROGRAM OBJECTIVE

Upon completion of this course, participants will be able to:

- Understand distributed hydrological models for flow forecasting
- Have a basic understanding of methods and techniques used in ensemble stream flow prediction
- Describe basic features of the dam failure Modelling process
- Define key motivations and purposes of performing forecast verification
- Risk Analysis and Forecast communications

PROGRAM FORMAT

The program will be in 2(two) parts. One is for Autonomous course (self study), which will start on 23.03.2026 and end on 08.05.2026. The other part will be for Moderated course, which will start on 11.05.2026 and end on 05.06.2026. The part-1 will have 7 online modules about basic knowledge and online quizzes after each module on the topics of **Dams and Dam Failure, Distributed Hydrologic Modeling for Flow Forecasts, Hydrologic Ensemble Forecast System, Verification of Hydrologic Forecasts**. The participants have to successfully complete part-1 on their own. On successful completion of each module of Autonomous course, participants will be awarded a badge automatically.

The part-2 will have the live sessions and online communications with the expert faculties on the same topics (of part-1) with assignments and quizzes. The Interaction with faculties will allow participants to ask questions, share their issues and experiences, and learn more deeply by discussing the course content. In addition to covering the course content, each participant will be required to complete the week wise assignments on each topic.

All the activities viz. modules, quizzes, assignments etc. will be online at the program website at <http://etrp.wmo.int>. On successfully completing the course assignment and the online quizzes for each module of moderated course, the participants will be awarded certificate of completion.

	Duration	Course	Remarks
Part-1	7 weeks (23.03.2026 to 08.05.2026)	Autonomous Course (Self Study)	Online Orientation Webinar, 7 online modules, online Quizzes with each module, Badge generation after passing all the quizzes.
Part-2	4 weeks (11.05.2026 to 05.06.2026)	Moderated Course (Faculty Assisted)	Online Orientation Webinar, 5-6 Live sessions with demonstration on modelling, online Quizzes & assignments in each week, Digital Certificate

The Moderated course (Part-2) will be available to the participants who have successfully completed the Autonomous course (Part-1).

A digital Certificate signed by National Water Academy (WMO) and World Meteorological Organisation (WMO) will be given to the participants who will successfully complete the Moderated Course.

It is estimated that the dedication needed to successfully complete Autonomous Course is of about 15-20 hours, or an average of about 2-3 hours/module and about 25-30 hours, or an average of about 6-7 hours/week for Moderated Course. As this is an online course, the officials can participate in the program without taking any leave from the office. The sponsoring authority will have the responsibility of sparing the nominated officers from their routine work for those many hours during the program period and give them access to a computer with broadband.

FACULTY

The faculty will be drawn from the core faculty of NWA and experts of relevant topics from Central Water Commission, National institute of Hydrology and World Meteorological Organization (WMO). The faculty will be available online for interaction during the program duration through live webinar and course forum.

TARGET GROUP

The DL program is intended to benefit the officers (hydrologists/meteorologists) in the rank of AE/AEE/EE or equivalent, working in State and Central Govt. agencies involved in the Water Resources Development and Management. Computer skills and aptitude for this subject is a pre-requisite. Participants must have access to a broadband connection at home or at office. There will be about 60 participants for this course.

PROGRAM FEE

There is no program fee.

PROGRAM DURATION

23 March – 05 June 2026 (11 weeks). First 7 weeks is prerequisite course for all and the 4 weeks is the Main course.

PARTICIPATION

The nomination of the officers fitting the target profile may be sent to the Program Coordinator by 18 March 2026 at the latest. Confirmation on acceptance of nominations will be sent by email by 20 March 2026. Nominated/Sponsoring officers may please indicate

their Fax No./Mobile No. and E-mail address for timely information on this account. The nominated officers also fill the Google form provided here. The accepted participants will be provided with an enrollment key to enable them to login on to the program website. The nominated officers have to attend this program from their existing place of duty and they are not supposed to come to NWA for the same.

Link for Google Form: <https://forms.gle/8jop2X9f8rKbNoqE6>

CONTACT

For sending nominations or for any information of this Program, Please contact:

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Website: <http://www.nwapune.gov.in/>