NATIONAL WATER ACADEMY, PUNE
Distance Learning Course in Basic Hydrologic Sciences (2025)
24 March 2025 - 09 May 2025
REGISTRATION FORM

Name (in Capital):_____

Designation_____

Date of Birth_____

Organization:_____

Responsibilities (in brief):_____

_____

Full Postal Address:_____

_____

Telephone No (with STD Code):_____

Fax No(with STD ode):_____

Mobile:_____

Email:_____

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 directorrm-nwa@gov.in

WORLD METEOROLOGICAL ORGANIZATION

COMET @UCAR

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

DISTANCE LEARNING COURSE IN BASIC HYDROLOGIC SCIENCES (2025)

24 MARCH 2025 09 MAY 2025

Organized by

NATIONAL WATER ACADEMY

in association with

WORLD METEOROLOGICAL ORGANIZATION

and

UCAR, THE COMET PROGRAM

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.
- Protecting and enhancing water resources for human health, aquatic health and environmental quality.
- Minimizing loss of life and property as a result of water-related natural hazards, such as floods, droughts and land slides.
- Contributing to physical and economic development of the Nation's resources for the benefit of present and future generations.

The Distance learning program in Basic Hydrological sciences is designed to meet the needs of officials, who work with hydrologic data, particularly in the areas of flood forecasting and design flood analysis etc. The course (in English only) is intended to provide an understanding of the hydrological cycle, runoff processes, unit Hydrograph, flood forecasting, elements of hydrologic modeling etc., and will prepare the participants for further study in hydrologic methods and forecasting.

PROGRAM OBJECTIVE

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

- Understand the elements of the hydrologic cycle
- Explain the rainfall runoff process
- Grasp Hydro-Meteorological Data collection & validation techniques
- Describe the process of stream flow routing
- Derive and Use a unit hydrograph for forecasting flows
- Apply various hydrological modelling methods for streamflow routing
- Apply statistical methods to assess flood risk

PROGRAM FORMAT

The program contains 8 online modules including a flood forecasting case study. In addition, participants will need to complete 2 elective modules as per their interest. Participants will be required to complete an online quiz at the completion of each module. The course will also include minimum two live events (webinars) to be attended via internet at the start and close of the course, as well as weekly online communications with faculty and fellow participants.

The live sessions and online communications will allow participants to ask questions, share their issues and experiences, and learn more deeply by discussing the course content with their peers and the faculty. In addition to covering the course content, each participant will be required to complete a short final assignment. All the activities viz. modules, quizzes, assignments etc. will be online at the program website at https://etrp.wmo.int/. On successfully completing the course assignment and the online quizzes for each module, the participants will be awarded certificate of completion.

It is estimated that the dedication needed to successfully complete this course is a total of about 35-40 hours, or an average of about 6-8 hours/week. 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 the relevant topics. The faculty will be available for online and offline interaction during the program duration.

TARGET GROUP

The DL program is intended to benefit the officers (hydrologists/meteorologists) 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.

PROGRAM FEE

There is no program fee.

PROGRAM DURATION

24 March 2025 – 09 May 2025 (7 Weeks)

PARTICIPATION

The nomination of the officers fitting the target profile may be sent to the Program Coordinator latest by 18th March 2025. Confirmation on acceptance of nominations will be sent by email by 20th March 2025. Nominated/Sponsoring officers may please indicate their Fax No./Mobile No. and E-mail address for timely information on this account. 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.

CONTACT

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

Shri Asheesh Kumar Singhal
Director National Water Academy, CWC
& Program Coordinator
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Pune – 411 024
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E-mail: nwa.mah@nic.in/ directorrm-nwa@gov.in
Website: https://www.nwapune.gov.in/