

**WMO OMM**

World Meteorological Organization  
Organisation météorologique mondiale  
Organización Meteorológica Mundial  
Всемирная метеорологическая организация  
المنظمة العالمية للأرصاد الجوية  
世界气象组织

**Secrétariat**

7 bis, avenue de la Paix – Case postale 2300  
CH 1211 Genève 2 – Suisse  
Tél.: +41 (0) 22 730 81 11  
Fax: +41 (0) 22 730 81 81  
wmo@wmo.int – public.wmo.int

Ref.: 17830/2023-14 S/HWR

Our ref.: 17830/2023/S/HWR

18 August 2023

Annex: 1 (available in English only)

Subject: Seventh International Distance Learning Course in Hydrology:  
Basic Hydrological Sciences for Asian Countries

Dear Sir/Madam,

I am pleased to inform you that, in view of the success of previous editions of the course, the World Meteorological Organization (WMO) and the National Water Academy (NWA) of India are organizing the seventh International Distance Learning Course in Hydrology: **Basic Hydrological Sciences for professionals working in hydrological analysis and forecasting** in countries of RA II, from 3 October to 17 November 2023. The distance learning programme in basic hydrological sciences is designed to meet the needs of professionals 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 modelling, etc., and will prepare the participants for further study in hydrologic analysis and forecasting.

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 and 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

The course contains 8 online modules including a flood forecasting case study. In addition, participants will need to complete 2 elective modules, based on regional interest. Participants will be required to take an online quiz at the completion of each module. The course will also include two live events (webinars) to be attended via the 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 students to ask questions, share their regional issues and experiences, and learn more deeply by discussing the course content with their peers and the instructors.

In addition to mastering the course content, each student will be required to complete a short final assignment, such as a short case study or report on local/regional climatology and hydrologic forecast systems. Successfully completing the final assignment and the online quizzes for each module will earn students a certificate of successful completion.

To: Permanent Representatives of Members with WMO of Asian countries in Regional Association II  
(limited distribution)

cc: Dr Mrutyunjay Mohapatra, Permanent Representative of India with WMO  
Hydrological Advisers

It is estimated that the dedication needed to successfully complete this course is a total of 36 to 48 hours, or an average of about 6 to 8 hours/week. Supervisors of participants should be encouraged to release them of work responsibilities during those hours.

I would appreciate if you could nominate up to two candidates to participate in this course. Please take into account that the number of available places is limited. However, should you wish to nominate more than two candidates, you are welcome to do so and we will take them into consideration should some additional places become available.

I should be grateful if you could kindly send your nominations at your earliest convenience, but not later than **22 September 2023**. Please send one Nomination Form (see Annex) duly filled in for each candidate to: Ms Silvana Alcoz, Scientific Officer ([salcoz@wmo.int](mailto:salcoz@wmo.int)), with a copy to Mr Nirina Ravalitera, Scientific Officer ([nravalitera@wmo.int](mailto:nravalitera@wmo.int)).

Accepted candidates will be contacted directly with additional instructions related to the course. Please be extremely careful in filling in the email address information on the Nomination Form, as it will be used to communicate all information and instructions related to the course to the participants.

I am confident that you will find this activity extremely interesting in improving the hydrological forecasting skills of your country.

Yours faithfully,



Dr Elena Manaenkova  
for the Secretary-General



**DISTANCE LEARNING COURSE IN HYDROLOGY:  
Basic Hydrological Sciences for Asian Countries  
03 October to 17 November 2023**

**PARTICIPANT NOMINATION FORM**

Please note that this form needs to be saved before you fill it in.

The Permanent Representative/ Hydrological Adviser of  
with WMO nominates the following candidate to participate in the above course:

**CANDIDATE PERSONAL DETAILS**

---

**FAMILY NAME:**

**FIRST NAME:**

**GENDER:**                      **MALE**                      **FEMALE**

**POSTAL ADDRESS:**

**ORGANIZATION:**

**E-MAIL:**

**TELEPHONE NUMBER:**

**SIGNATURE:**

-----

Please send this filled pdf form unsigned as attachment, as well as a signed scanned version or signed using an electronic signature.