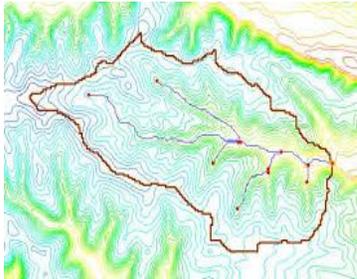




GOVERNMENT OF INDIA
MINISTRY OF JAL SHAKTI
DEPARTMENT OF WATER RESOURCES,
RIVER DEVELOPMENT & GANGA REJUVENATION
CENTRAL WATER COMMISSION



PURPOSE ORIENTED TRAINING PROGRAM
THROUGH DISTANCE LEARNING ON
“DRAINAGE & WATERSHED
DELINEATION USING GIS”
19–30 APRIL 2021



Organized by
NATIONAL WATER ACADEMY, PUNE

INTRODUCTION

The aim of this Distance Learning training program is to give awareness regarding GIS technology and learn its use to create a basic GIS MAP using Open-Source GIS (QGIS 3.12). This training would enable the water professionals to delineate watersheds/catchments and other parameters based on location of hydrological data collection sites and in the presentation of data in a GIS MAP format which will provide an efficient and effective method to view and analyze the spatial data. The program has been designed in such a way that the participants will have to devote only about their two hours daily, as per his/her choice, during the training period and will not affect much in their day-to-day official work. A WhatsApp group of the participants would also be created for clarifications and hand holding by the experts for some period.

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based on location of hydrological data collection sites and also in the presentation of data in a GIS MAP format which will provide an efficient and effective method to view and analyze the spatial data.

PROGRAM CONTENTS

The program will comprise of online sessions and will cover the following topics:

1. Installing QGIS 3.12 and sample data
2. Working with Vector data and Raster Data
3. Clipping and merging the data
4. Map composer, Designing the user defined symbols using QGIS.
5. Downloading and processing sample data (later participant may be asked to download DEM of their jurisdiction)
6. Symbology and viewing the DEM using QGIS.
7. Watershed modeling
 - Create a depression less DEM.
 - Create flow direction.
 - Create flow accumulation.
 - Create watershed Pour Points.
 - Delineate watersheds.
 - Delineate Drainage
 - calculates area, relief etc. of the watershed.
8. Download national, state and district boundaries (village, if available) and Download road/rail network
9. Generation of final GIS MAP and exporting into printable format.

PROGRAM FORMAT

Program contains online lecture modules (series of voice PPTs, Videos of practical hands-on using QGIS 3.12 and Quizzes) and Discussions using “Google Classroom”. For facilitating to join the training, the participants have to register themselves in the “Google Classroom” using their “Gmail Account “. The Registered participants will be given the Class Code by this Institute, on entering which they will be accessed to the training modules. Participants will be required to complete an online Assessment/assignment through Multiple Choice Questions (MCQ) and specific GIS task based on the topics covered in the program.

PROGRAM FEE

There is **no program fee**.

TARGET GROUP

The DL program is intended to benefit the Irrigation and Water Resources Engineers 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.**

PARTICIPATION

The nomination of the officers fitting the target profile may be sent to the Programme Coordinator latest by **15.04.2021** only through Google Registration form link <https://forms.gle/PP9QznLrMdv5zZ68>. The accepted nominations would be posted on our web site (<http://nwa.mah.nic.in>) under the link “Upcoming Events, by **16.04.2021** through Google form. Without confirmed acceptance from NWA website, the participants should not join the course. The accepted participants will be provided with the login ID 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 regarding this Program, please contact:

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Registration

Please click the link or scan QR code and fill the online Google Registration form.

<https://forms.gle/PP9QznLrMdv5zZ68>

