



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



**Training Program on
Introduction to Google Earth Engine
& its Application in Water Resources
Management
(23-27 June 2025)**



**Organized by
NATIONAL WATER ACADEMY, PUNE**

INTRODUCTION & BACKGROUND

Google Earth Engine (GEE) is a platform for planetary scale analysis which is useful for translating geospatial datasets into meaningful analytics. GEE leverages Google's extensive cloud infrastructure to present several varied applications. GEE is free for non-commercial use and there is no additional software license that is required. This training program is designed for water resources professionals who have basic knowledge of Remote Sensing, GIS and Computer Programming but are new to GEE platform

PROGRAM FORMAT

The program will be held in person at the NWA campus in Pune. The program includes classroom lectures, Hands-on and self-practice sessions

PROGRAM CONTENTS

- Overview of Google Earth Engine (GEE)
- Getting started with GEE Code Editor (JavaScript API)
- Working with Raster data using GEE
- Working with Vector data using GEE
- Application of GEE for Waterbodies Extraction and Mapping, Reservoir Sedimentation Monitoring, Semi-Supervised Landcover classification, Crop Mapping, River Morphological changes, Snow and glacier mapping, Soil loss analysis, Time Series Analysis and Change Detection; Flood Mapping & Monitoring; Drought Monitoring etc.,
- Introduction to GEE Apps

LOCATION

National Water Academy is located on the south-western side of the Pune city on Pune-Sinhghad Road between Nanded Phata and Kirkatwadi villages. It is 12 Kms from Swargate Bus Stand, 18 Kms from Pune Station and 29 Kms from Pune Airport.

[Click here for directions from Pune Airport to NWA](#)

[Click here for directions from Pune Railway Station to NWA](#)

LOCAL HOSPITALITY AND WEATHER

NWA has a self-contained residential campus, and all out-station participants would be provided with accommodation in the NWA hostels, which are comfortable and fully furnished (viz. television with cable connection, refrigerator, micro-oven, tea maker, intercom etc.). Meals are available (self-service dining) in Canteen/Mess which is on the same residential campus. Participants (except for CWC officers) are required to pay for lodging and boarding charges, which are nominal. During the month of June, normally the weather is rainy and warm, with temperatures ranging between 22°C to 29° C

TARGET GROUP

Water Resource Professionals from Central and State Government departments, and other interested stakeholders

Note: All participants should mandatorily bring laptop (of any specification) for completing the hands-on sessions

PROGRAM FEE

There is no program fee for participants from Central and State Govt. departments. Charges for participants from other agencies are as follows:

Category	Description	Fee per participant
A	Central/State Government/Departments including their autonomous bodies	Nil
B	'Not for Profit' Organizations/authorities/bodies of Central and State governments (if they certify that they are not for profit)	Nil
C	Recognized academic institutions, NGOs	1,500/-
D	Central and State PSUs	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.

For modalities in respect of payment of fees, please contact the Course Director.

PARTICIPATION

The nomination of the officers fitting the target profile may be sent to the Course Director by 19.06.2025. Nominated officer may also fill in the online registration form: <https://forms.gle/uBkqLB55jaFmGiRe9>

The list of accepted nominations will be displayed on the NWA website on 20.06.2025

CONTACT

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

Chaitanya K S
Deputy Director & Course Director
National Water Academy
Central Water Commission
Khadakwasla, Sinhghad Road
Pune – 411 024; Tel: 020 – 24380392 Extn 114
Mob:9910771794 E-mail: nwa.mah@nic.in / deputydirector1-nwa@gov.in