

# Training on Satellite Based Survey and Mapping Using GPS for the Water Sector



## WHAT IS THE COURSE ABOUT

The aim of this training program is to provide a theoretical understanding and a practical introduction about Geographical Positioning Systems (GPS) surveying equipment, related field procedures, and analysis of GPS data. Emphasis is on GPS applications related to mapping, engineering and construction projects.

## FOR WHOM?

This training program introduces both surveyors & engineers to the Global Positioning System (GPS) and how it can be used in surveying for water sector. The training program is also helpful those are directly/indirectly involved in the water/environmental sector, especially those involved in the mapping, planning and project management. Pre-requisites are a basic knowledge of computing and water related topics.

## LEARNING OBJECTIVES

Upon completion, the participant should be able to:

- ▶ Clear understanding about Global Positioning

- ▶ Well known to GPS equipment and their proper application to surveying, mapping and engineering
- ▶ Collect and analyze GPS data and compare the results of GPS derived positions with classical survey methods over small areas
- ▶ Recognize how to evaluate GPS derived coordinates and data
- ▶ Identify the advantages and disadvantages of surveying with GPS vs. other (traditional surveying) methods

## COURSE CONTENTS

Introduces principles of satellite-based surveying and presents the Global Positioning System (GPS) as it is utilized in land surveying. The topics covered in the course include the following:

- Introduction and overview of Global Positioning System (GPS)
- GPS equipment
- Map projections and coordinate systems used by GPS
- Mapping of water and environmental features,
- GPS for land navigation and survey reconnaissance
- Static / Differential Positioning
- Dynamic / Kinematic Positioning
- Dissemination of new information and knowledge

## FILED TRIPS AND EQUIPMENT'S DEMONSTRATIONS

Introduction to Real Time Local Networks may also include field trip(s), equipment demonstrations, and guest lecturers from professionals working in the surveying, mapping and construction fields.

## CERTIFICATION

Participants will receive certificates upon successful completion of the course.

## COURSE DURATION

5 days from 9:00 AM to 4:00 PM

## DATE & VENUE

**Regular:** 26-30 September 2021

**Bespoke:** To be scheduled as per Clients' requirement

IWM Training Room, House # 06, Road # 3/C,  
Block# H, Sector # 15, Uttara, Dhaka 1230

## COURSE FEE

BDT 20,000/- only per participant

## ABOUT THE ORGANIZER

Institute of Water Modelling (IWM) provides world-class services in the field of Water Modelling, Computational Hydraulics & Allied Sciences for improved integrated Water Resources Management. The applications of IWM modelling tools cover a wide range of water related areas such as: water resources planning, flood control, flood forecasting, irrigation and drainage, river morphology, salinity and sediment transport, coastal hydraulics, port, coast and estuary management, environmental impact assessment, bridge hydraulics and related infrastructure.

For more information

visit: <http://www.iwmbd.org>

## CONTACT US



Human Resources Development

**Institute of Water Modelling (IWM)**

House # 06, Road # 3/C, Block# H

Sector # 15, Uttara, Dhaka 1230

Bangladesh.

**E-mail:** [aak@iwmbd.org](mailto:aak@iwmbd.org)

Telephone: +88 0255087611-4

Ext. 104

Mobile: +88 01841930040

Fax: +88 02 55087615

