

Activity Report

Name of the conference/workshop:Capacity Building Training Program as Key Resource Centre (KRC) "Application of Remote Sensing and GIS in Water Resource Engineering"

Objective of the programme:

Participants will learn about the fundamentals of RS and GIS, concept of GPS and Differential Global Positioning System (DGPS), creation of digital elevation models, various applications of RS and GIS such as urban water supply, watershed management, groundwater recharge monitoring, drought mapping etc and also generation of various thematic maps related to hydrology, reservoir sedimentation etc.

Faculty Coordinator:

1. Dr. Dillip Kumar Bera (9438012765), Associate Dean (T&P), School of Civil Engineering, KIIT Bhubaneswar
2. Dr. Jyotiprakash Padhi, Associate Professor, School of Civil Engineering, KIIT Bhubaneswar

Resource Person:

1. Dr. Bitanjaya Das, Senior Professor, School of Civil Engineering, KIIT Bhubaneswar
2. Dr. Ashoke Kumar Rath, Professor, School of Civil Engineering, KIIT Bhubaneswar
3. Dr. Dilip Kumar Bera, School of Civil Engineering, KIIT Bhubaneswar
4. Dr. JyotiprakashPadhi, School of Civil Engineering, KIIT Bhubaneswar
5. Dr. Ajay Pradhan, President and CEO, C2S2
6. Dr. Debajit Mishra, Scientist SD, Odisha Space Applications Centre (ORSAC) Department of Science and Technology, Govt. of Odisha
7. Dr. Krishna Chandra Rath, Reader, Department of Geography, Utkal University, Bhubaneswar, Odisha

Duration: 3 days (30/01/2017 to 01/02/2017)

Schedule / Programme:

Timing	Name of the Session	Topics covered
Day 1 (30th January 2017, Monday)		
9:30 – 10:15 AM		Registration
10:15 - 10:45 AM		Inauguration
10:45–11:00 AM		Tea Break
11:00–11:15 AM		Overview of the training program by Dr. Bitanjaya Das, Senior Prof. School of Civil Engineering, KIIT
11:15 – 12:15 PM	Technical Session – 1	Indian Space program and its application to Remote sensing and GIS Resource Person: Dr. Ashoke Kumar Rath, Professor, School of Civil Engineering, KIIT
12:15-1:15 PM	Technical Session – 2	Remote sensing and GIS tool for water resource planning and management Resource Person: Dr. Bitanjaya Das, Senior Prof. School of Civil Engineering, KIIT
1:15 – 2:30 PM		Lunch Break
2:30 – 4:30 PM	Technical Session – 3	Geo-informatics for Watershed Management & Monitoring Resource Person: Dr. Pradipta Mishra, Scientist SC, ORSAC, Bhubaneswar, Odisha
4:30 – 4:45 PM		Tea Break
4:45 – 5:45 PM	Technical Session – 4	Application of Remote sensing and GIS Resource Person: Prof. Ashoke Kumar Rath, School of Civil Engineering, KIIT
Day 2 (31st January 2017, Tuesday)		
9:00 – 10:00 AM		KIIT and KISS Visit by Participants
10:00 – 11:00 AM	Technical Session – 5	Application of GPS and Differential Global Positioning System (DGPS) Resource Person: Dr. Dillip Kumar Bera, Associate Dean (T&P), School of Civil Engineering, KIIT
11:00 – 11:15 AM		Tea Break
11:15 – 1:15 PM	Hands on exercise	Use of GPS and Total station Resource Person: Dr. Dillip Kumar Bera, Associate Dean (T&P), School of Civil Engineering, KIIT
1:15 – 2:45 PM		Lunch Break

2:45 - 5:45 PM	Hands on exercise	Demonstration and operation of DGPS in the field, Resource Person: Dr. Dillip Kumar Bera
Training Program on APPLICATION OF REMOTE SENSING AND GIS IN WATER RESOURCE ENGINEERING		
Day 3 (1st February 2017, Wednesday)		
10:00 – 11:30 AM	Technical Session – 6	Use of EDM in Civil Engineering Applications. Resource Person: Dr.Pramod Kumar Parida, Scientist SB, ORSAC, Bhubaneswar, Odisha
11:30 – 11:45 AM	Tea Break	
11:45 – 1:15 PM	Technical Session – 7	GIS and Remote Sensing application in Water Resources Management Resource Person: Mr. SaikatBaneerji Zymax Technology, Kolkata
1:15 – 2:30 PM	Lunch Break	
2:30 – 3:30 PM	Technical Session - 8	GIS and Remote Sensing application in Water Resources Management- Case Study Resource Person: Mr. SaikatBaneerji Zymax Technology, Kolkata
3:30 – 4:30 PM	Presentation by the trainees	
4:30 – 4:45 PM	Tea Break	
4:45 – 5:45 PM	Training Assessment, Feedback and Valedictory function	

Summary:

This programme focused on the techniques of remote sensing and GIS, types of remotely sensed images as well as their various applications in the water resource engineering. The programme coverage included introduction/overview of RS and GIS, description of GPS and DGPS system, concept of Digital Elevation Model (DEM). The various application of RS and GIS like Urban water supply, Monitoring Groundwater recharge, Drought mapping, Groundwater pollution, Delineation of watershed, Crop planning in water stressed areas, Identification of waste land and Identification of stream network were demonstrated during the training programme.

**Full Name of Faculty Coordinator:****Date: 4.2.2017**

Photographs

