



IIIT Hyderabad

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# One Day Short Course On Modelling and Management of Water Resources Systems

## December 16, 2019

### Program Details

- **9:00-9:30 AM: Registration and High Tea**
- **9:30-10:00 AM: Welcome Speech by Prof.K.S.Rajan, IIIT Hyderabad**
- **10:00-11:00 AM: Keynote Lecture by Prof.K.B.V.N.Phanindra, IIT Hyderabad**
- **11:00-11:15 AM: Tea**
- **11:15-12:00 AM: Invited Talk by Prof. K. Srinivasa Raju, BITS Hyderabad**
- **12:00-12.30 PM: Invited Talk by Dr. Paromita Chakraborty, SRM University, Chennai**
- **12:30-1:00 PM: Talk by Dr. S. Rehana, IIIT Hyderabad**
- **1:00-2:00 PM: Lunch**
- **2:00-3:15 PM: Hands on Session on Watershed Modelling using QGIS**
- **3:15-3.30 PM: Tea**
- **3:30-5:00 PM: Hands on Session on River Water Quality Modelling: US EPA QUAL2K**
- **5:00-5:30 PM: Vote of Thanks**

### COURSE FEE:

**Rs. 1,500/-** for Students

**Rs. 2,500/-** for Faculties and Industry

Registration fee includes course material, tea & working lunch. The fee is payable in advance by a crossed draft in favor of *International Institute of Information Technology Hyderabad*, payable at Hyderabad. Total number of participants is restricted to 40. For Email Confirmation and Registration:

<https://payments.iiit.ac.in/mmwrs/>

**Last date for Registration: 10 December 2019**

### ABOUT THE COURSE

This short course focuses on the recent advancements in the field of water resources engineering in accordance with water quantity and quality modelling and management. Water resources modelling and management tools were developed for the better understanding of complex mechanisms and interactions involved during the movement of water between atmosphere and land surfaces, quantification of water quantity-quality, availability-demands for the development of sustainable water management. Changes in hydroclimatic extremes under climate signals leads to changes in the hydrological cycle, resulting in serious implications on runoff, frequency and intensity of floods and droughts, soil moisture, water quality, water supplies and water demands for irrigation and hydropower generation. Modelling complex water resources systems is crucial for development of sustainable optimal water management policies under climate signals. The short course focuses mainly on the recent advancements in the field of **Water Resources Management, Quantity and Quality Modelling, Geospatial Applications in Water Resources, Climate Change Impacts and Adaptation Strategies**. The short course will comprise of lectures by experts covering various domains of water resources and tutorials related to water quantity and quality modelling. This short course is designed specifically for students, faculty members, design and project managers, government and private organizations involved in water resources management to get acquainted with the various advanced aspects of **Water Resources Engineering**.

### ABOUT LAB FOR SPATIAL INFORMATICS (LSI)

LSI deals with a wide range of disciplines ranging from geography to business intelligence, natural resource management such as water to global environmental and climate change. The sub-areas include GPS and related survey technologies, Geo-Database, Spatial data mining, Satellite image processing, Mapping & Visualization, Modelling & Simulation of Land Use and Environmental changes, Climate Change Impact Assessment and Water Resources Management.

### ABOUT IIIT-H

The International Institute of Information Technology, Hyderabad (IIIT-H) is an autonomous university founded in 1998. It was set up as a not-for-profit public private partnership (N-PPP) and is the first IIIT to be set up (under this model) in India. The institute evolved strong research programmes in a host of areas, with computation or IT providing the connecting thread, and with an emphasis on the development of technology and applications, which can be transferred for use to industry and society. This is achieved through an integrated curriculum that consists of a highly diverse set of IT courses, interdisciplinary IT research projects, day-to-day interaction with industry, and preparation in entrepreneurship and personality development courses. For more details, visit [www.iiit.ac.in](http://www.iiit.ac.in)

**Address for Communication:** Dr. Shaik Rehana (Course Coordinator), Assistant Professor, International Institute of Information Technology, Hyderabad, Gachibowli, Hyderabad-500032, Email: [rehana.s@iiit.ac.in](mailto:rehana.s@iiit.ac.in), Phone: 040-6653-1410; Mobile No: 9989031981