



IIT Hyderabad

# Three Day Short Course On Water Resources, Climate Change Impacts and Adaptation Strategies

July 19-21, 2016

## TOPICS TO BE COVERED

- Recent Advancements and Challenges in Water Resources Management
- Remote sensing and GIS Advancements in Water Resources
- Introduction to Science of Climate Change and Variability
- Recent Advancements in Statistical Downscaling Models
- Impact of Climate Change on Rainfall Variability
- Climate Change Impacts on Water Resources and Hydrological Modeling
- Climate Change Impacts on Urban Drainage Systems
- Impact Assessment of River Water Quality and Irrigation Management
- Climate Change Mitigation and Adaptation Strategies

## ABOUT THE COURSE

The tremendous importance of climate change necessitates the understanding of how any change in global climate could affect a regional water resources system. Climate change 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. Therefore, water resources management studies should consider climate change impacts as driving force. The short course focuses mainly on the recent advancements in the field of **Water Resources, Climate Change Impacts and Adaptation Strategies**. The short course will comprise of lectures and tutorials by experts, covering topics of climate change, impacts on various domains of water resources such as river water quality, irrigation demands, and reservoir operation with the sophisticated downscaling methodologies. This short course is designed specifically for design and project managers, government and private organizations involved in water resources management, faculty members and students to get acquainted with the various advanced aspects of **water resources management and impact assessment of climate change**.

## 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 IIT-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 Government of Andhra Pradesh lent support to the institute by grant of land and buildings. 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)

For more details about short course, visit <http://lsi.iiit.ac.in/>

## Registration Fee:

**Students and Research Scholars - Rs. 2,500**  
**Practicing Engineers and Employees - Rs. 5,000**

Registration fee includes course material, Refreshments & working lunches. The fee is payable in advance by a crossed draft in favor of **IIIT Hyderabad**, payable at Hyderabad. Accommodation can be arranged on first come first serve basis in the campus for students and research scholars at IIIT Hyderabad and nearby hotels.

The Last date for Registration is 10th July, 2016, after that Rs. 500/- extra will be charged.

**Accommodation charges are not included in the registration fee.**

## COURSE FACULTY

Faculty from IISc, IIT, NIT, BITS and IIITH are invited.

### Address for Communication:

Dr. Shaik Rehana (Course Coordinator)

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