

Chief Patrons

Prof. (Dr.) Vinay Kumar Pathak
Vice Chancellor
Dr. APJ Abdul Kalam Technical University
U.P., Lucknow

Patrons

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Advisor, ABESIT

Convener

Prof. (Dr.) Sudhir K. Goyal
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Keynote Speaker

Prof. (Dr.) R. D. Singh
Director, National Institute of
Hydrology, Roorkee

Program Co-ordinators

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Organizing Committee

Jyoti Agarwal
Salonee Srivastava

Mansi Agarwal
Saurabh Dubey

Paritosh Kumar Singh



Our Centers of Excellence in the Campus

Analog & Embedded Systems
with **TEXAS INSTRUMENTS**

Power Electronics & Drives
a seat of Dr. APJAKTU
with **ENTUPLE**

Big Data & IoT
with **dalreon**


e.SI in Embedded Systems
& Robotics
with **yantra of IIT Bombay**

Computer Aided Design
& Engineering Analysis
with **CADPLUS**

Advanced Robotic Control
for Industrial Automation
with **Indo Euro Synchronization**

ABES Institute of Technology College Code 290
Approved by AICTE, Ministry of HRD, New Delhi & Affiliated to Dr. APJ Abdul Kalam Technical University (formerly Uttar Pradesh Technical University), Lucknow
Campus-2, 19th km. Stone, NH-24, Vijay Nagar, Ghaziabad - 201009, (U.P.), India. Phone: 91-120-6017674, Fax: +91-120-2045008, Mobile No. 993522000
website: www.abesit.in, email: info@abesit.in

Faculty Development Program
Using Remote Sensing and
Geographic Information System Techniques
for Water Resource Engineering & Management
January 9 - 13, 2017



Supported & Sponsored by
Dr. APJ Abdul Kalam Technical University
Lucknow, Uttar Pradesh

in Coordination with
National Institute of Hydrology, Roorkee

Organized by
Department of Civil Engineering
ABESIT

About the Institute

The ABES Institute of Technology is a reputed Engineering Institute in NCR which embarked on its mission in the field of Technical education from the Academic Session 2007-08. The Institute has lushgreen and sprawling campus situated next to Crossing Republik, NH-24, Ghaziabad. Our philosophy has been to invest all the resources towards student's cause and development. Our teaching staff is qualified, painstaking and competently meeting out students curriculum requirements which is reflected in the Institute result. We also have people with corporate background as a part of faculty which ensure the right blend of theory and practical applicability of the course concept. 'ABESIT-Bureau of Training and Development' has been enhancing the capabilities and competencies of the students so that they become employable and professionally strong. 'ABESIT- Centres for Excellence & Innovations (CEI)' has been setup to take the curriculum few steps ahead through mechanism that introduces a 'hands on practice and innovation for development of products amongst students. 'ABESIT- Corporate Resource Centre (CRC)' Placement Cell is playing a vital role in placement activities. Various co-curricular and extra-curricular activities are regularly conducted which ensures the overall development of the students.

About the Civil Engineering Department

Civil Department is headed by Prof. Dr. Sudhir Goyal, B.Tech., AMU, M.Tech., IIT Roorkee, & Ph.D. USA and has also worked with NASA & USDA, USA. He has more than 30 years of experience in India and USA.

The department has well-qualified and dedicated teaching faculty with various specialization and good exposure. The department has been maintaining an active interaction with different industries so as to bridge the gap between industry and academics.

The department has a dedicated center for Structural Design and Analysis Lab having 30 computers with configuration of Intel® core i3 processor, 8GB RAM, SSD 120GB each. All computer systems have full Bentley suite of 24 Civil Engineering Software such as STAAD Pro, MX Road, WaterGEM & SewerGEM etc. and AutoDesk software such as AutoCAD & Map 3D etc.

Several regular training programs for students besides the curriculum are being conducted in the Lab on AutoCAD, STAAD Pro, Primavera, and MX Road etc. by the department faculty, who is qualified and trained to teach all above software in regular classes in CAD Lab.

Objectives of FDP

This course is being conducted in coordination with the National Institute of Hydrology, Roorkee, which is a premier research institute of India in the field of hydrology. It is autonomous society under the Ministry of Water Resources, Govt. of India. The Course will consist a Keynote Address by the Chief Guest Prof. Dr. R. D. Singh, Director, National Institute of Hydrology (NIH), Roorkee and several lectures by Scientists & Professors from NIH, Ministry of Earth Sciences, and Indian Institute of Technology (IIT) Roorkee, & other institutions in India. The lectures will be supported by tutorials and laboratory sessions. This course will be conducted as an interactive session focusing on the issue faced by the industry.

Topics to be deliberated

Following topics shall be covered in this Course:

- Fundamentals and principles of Geographic Information System (GIS) & Remote Sensing
- Basics of Hydrology
- Creation of data base using Remote Sensing and Geographic Information System (GIS)

- Role of Global Positioning System (GPS)
- Interpretation of Satellite Data & Ground Truth Verification
- Hands on Training Remote Sensing (RS) & Geographic Information System (GIS)
- Hyper spectral remote sensing
- Remote sensing and Geographic Information System (GIS) applications in soil erosion and reservoir sedimentation, Watershed Management, Irrigation water requirements, Rainfall runoff modeling including calibration/validation, flood studies, ground water hydrology & Hydrologic Modeling

Who can participate

The program is open to faculty members, M.Tech students, Research Scholars and Professionals working in Industries.

Registration

Registration fee : Rs. 2000/- for each participants

Registration fee may be paid through Demand Draft/pay-order in the favour of "ABES Institute of Technology Ghaziabad" payable at Ghaziabad. NEFT to ABES Institute of Technology, Ghaziabad with Account Number 0674009300226366, IFSC CODE PUNB0067400, Punjab National Bank, Navyug Market, Ghaziabad

Registration fee includes participant registration, registration kit, lunch and refreshments on all working days. Participants have to arrange for their travel expenses and accommodation.

Registration form in the prescribed format should reach via mail before 4th January, 2017

Certificate

Participation certificates shall be awarded to all the participants on the concluding day.

Resource Persons

1. Dr. Sanjay K. Jain, Scientist G FDP Coordinator from National Institute of Hydrology Roorkee	5. Dr. Vijay Kumar, Scientist F Ministry of Earth Sciences New Delhi
2. Dr. R D Garg, Professor Indian Institute of Technology Roorkee	6. Mr. P K Mishra, Scientist B National Institute of Hydrology Roorkee
3. Dr. L N Thakural, Scientist C National Institute of Hydrology Roorkee	7. Mr. D.S. Rathore, Scientist F National Institute of Hydrology Roorkee
4. Dr. A K Lohani, Scientist G National Institute of Hydrology Roorkee	8. Ms. Neha Jain National Institute of Hydrology Roorkee

For more Information please contact

Mr. Chaitanya Gandhi Mob. : 9711577549 Email: chaitanyagandhi@abesit.in	Mr. Vivek Kumar Thahiya Mob. : 7836951021 Email: vivek.thahiya@abesit.in	Ms. Manjul Chandravanshi Mob. : 9990015814 Email : manjul.chandravanshi@abesit.in
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**Registration Form
Faculty Development Program**

on

**Using Remote Sensing and Geographic Information System
Techniques for Water Resource Engineering and Management**

January 9 - 13, 2017

Organized by

**Department of Civil Engineering
ABES Institute of Technology, Ghaziabad**

Name: _____

Designation: _____

Department: _____

Qualification: _____

Institution/ Organization: _____

Mobile No.: _____ E-mail _____

Draft/Pay Order/Cheque details in favour of "ABES Institute of Technology,
Ghaziabad" payable at Ghaziabad

DD/PO/Cheque No./ NEFT: _____ Date: _____

Bank & Branch: _____

Registration Fee : Rs 2000/- each participant

For Information/Enquiry contact

Mr. Chaitanya Gandhi

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Mr. Vivek Kumar Thahiya

Mob. : 7836951021

Email: vivek.thahiya@abesit.in

Ms. Manjul Chandravanshi

Mob. : 9990015814

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website: www.abesit.in, email: info@abesit.in

TIME TABLE (09 January to 13 January, 2017)
on Training course on “Using Remote Sensing & GIS Techniques for Water Resource Engineering & Management”

Date & Day	Time	Topic	Faculty
09/01/ 2017	9:30 hrs-10:00 hrs	Registration	
	10:00hrs -10:30 hrs	TEA	
	10:30hrs –11:15 hrs	Keynote Address by Chief Guest Dr. R D Singh, Director, National Institute of Hydrology (NIH), Roorkee	
	11:15 hrs-12:00 hrs	Water resources management	Dr. Sanjay K. Jain, Scientist G, NIH Roorkee
	12:00 hrs-13:00 hrs	Principles of Remote Sensing (RS)	Dr. Sanjay K. Jain, Scientist G, NIH Roorkee
	13:00 hrs-14:00 hrs	LUNCH	
	14:00 hrs- 15:00 hrs	Fundamentals and principles of Geographic Information System (GIS)	Mr. D.S.Rathore Scientist F, NIH Roorkee
	15:00 hrs-16:00 hrs	Projection and coordinate systems in Geographic Information System (GIS)	Mr. D.S.Rathore Scientist F, NIH Roorkee
	16:00 hrs- 16:30 hrs	TEA	
	16:30 hrs- 17:30 hrs	Creation of data base using Remote sensing and Geographic Information System (GIS)	Dr. Sanjay K. Jain Scientist G, NIH Roorkee
10/01/ 2017	9:30 hrs-10:30 hrs	Remote sensing and Geographic Information System (GIS) applications in soil erosion and reservoir sedimentation	Dr. Sanjay K. Jain Scientist G, NIH Roorkee
	10:30hrs -11:00 hrs	TEA	
	11:00 hrs-12:00 hrs	Ground truth verification	Dr. R D Garg, Indian Institute of Technology (IIT), Roorkee
	12:00 hrs-13:00 hrs	Role of Global Positioning System (GPS)	Dr. R D Garg, Indian Institute of Technology (IIT), Roorkee
	13:00 hrs-14:00 hrs	LUNCH	
	14:00 hrs-15:00 hrs	RS and GIS software	Dr. L N Thakural, NIH Roorkee
	15:00 hrs-16:00 hrs	Hands on Training Remote Sensing (RS) & Geographic Information System (GIS) Software (ERDAS)	Dr. Sanjay K Jain, Dr. L N Thakural and Ms. Neha Jain, NIH Roorkee
	16:00 hrs- 16:30 hrs	TEA	
	16:30 hrs- 17:30 hrs	Hands on Training Remote Sensing (RS) & Geographic Information System (GIS) Software (ERDAS)	Dr. Sanjay K Jain, Dr. L N Thakural and Ms. Neha Jain, NIH Roorkee
11/01/ 2017	9:30 hrs-10:30 hrs	Rainfall runoff modeling including calibration/validation	Dr. A K Lohani Scientist G, NIH Roorkee
	10:30hrs -11:00 hrs	TEA	
	11:00 hrs-12:00 hrs	Rainfall runoff modeling using Geographic Information System (GIS)	Dr. A K Lohani Scientist G, NIH Roorkee
	12:00 hrs-13:00 hrs	Ground water hydrology	Dr. Vijay Kumar, Scientist F, Ministry of Earth Sciences, Delhi

	13:00 hrs-14:00 hrs	LUNCH	
	14:00 hrs-15:00 hrs	Role of GIS in ground water studies	Dr. Vijay Kumar, Scientist F, MOES, New Delhi
	15:00 hrs-16:00 hrs	Hands on Training Remote Sensing (RS) & Geographic Information System (GIS) Software (Arc GIS)	Dr. Sanjay K Jain, Dr. L N Thakural and Ms. Neha Jain, NIH Roorkee
	16:00 hrs- 16:30 hrs	TEA	
	16:30 hrs- 17:30 hrs	Hands on Training Remote Sensing (RS) & Geographic Information System (GIS) Software (Arc GIS)	Dr. Sanjay K Jain, Dr. L N Thakural and Ms. Neha Jain, NIH Roorkee
12/01/2017	9:30 hrs-10:30 hrs	Geographic Information System (GIS) in Irrigation water requirements	Dr. L N Thakural, Scientist C, NIH Roorkee
	10:30hrs -11:00 hrs	TEA	
	11:00 hrs-12:00 hrs	Geographic Information System (GIS) & Remote Sensing – NASA Case Studies	Dr. Sudhir K Goyal, Prof. & HOD CE Dept. ABESIT
	12:00 hrs-13:00 hrs	Geographic Information System (GIS) in Watershed management	Mr. P K Mishra, Scientist B, NIH Roorkee
	13:00 hrs-14:00 hrs	LUNCH	
	14:00 hrs-15:00 hrs	Hands on Training Remote Sensing (RS) & Geographic Information System (GIS) Software (Arc GIS)	Dr. L N Thakural, Mr. P K Mishra, Ms. Rajni Saini, NIH Roorkee
	15:00 hrs-16:00 hrs	Hands on Training Remote Sensing (RS) & Geographic Information System (GIS) Software (Arc GIS)	Dr. L N Thakural, Mr. P K Mishra, Ms. Rajni Saini, NIH Roorkee
	16:00 hrs- 16:30 hrs	TEA	
	16:30 hrs- 17:30 hrs	Hands on Training Remote Sensing (RS) & Geographic Information System (GIS) Software (Arc GIS)	Dr. L N Thakural, Mr. P K Mishra, Ms. Rajni Saini, NIH Roorkee
13/01/2017	9:30 hrs-10:30 hrs	Climate change and water resources management	Dr. Sanjay K Jain, Scientist G, NIH Roorkee
	10:30hrs -11:00 hrs	TEA	
	11:00 hrs-12:00 hrs	Hands on Training Remote Sensing (RS) & Geographic Information System (GIS) Software (Arc GIS)	Dr. L N Thakural, Dr. Sanjay K Jain, Ms. Rajni Saini, NIH Roorkee
	12:00 hrs-13:00 hrs	Hands on Training Remote Sensing (RS) & Geographic Information System (GIS) Software (Arc GIS)	Dr. L N Thakural, Dr. Sanjay K Jain, Ms. Rajni Saini, NIH Roorkee
	13:00 hrs-14:00 hrs	LUNCH	
	14:00 hrs-15:00 hrs	Future of remote sensing and Geographic Information System (GIS)	Dr. Sanjay K Jain, Scientist G, NIH Roorkee
	15:00 hrs-16:00 hrs	Valedictory function followed by High Tea	