

WHO CAN PARTICIPATE

This workshop is specifically designed for UG/PG/PhD students, researchers, industry professionals, faculties and technical staffs from the branches of engineering/science who are interested in the IOT driven Smart grid, smart power converter, control and protection.

REGISTRATION

Name: _____

Designation: _____

Institute: _____

Address: _____

Email ID: _____

Contact No: _____

Undertaking:

I shall abide by rules and regulations and shall attend course. Failing which certificate may not be issued.

Signature of Participant

CONTACTS

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(Coordinator)

Associate Professor

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ABOUT NM-ICPS

The National Mission on Cyber-Physical Systems (NM-ICPS) is identified as one emerging field to have a significant impact on health care, urban transportation, water distribution, energy, urban air quality, manufacturing and governance. The activities envisioned under this Mission will give an impetus to Indian manufacturing via the invention of new products, services and the creation of skilled young human resource from technicians to researchers and entrepreneurs. It has an impact on modernisation and digitalisation of socio-technical systems and services.

ABOUT IDAPT

The Interdisciplinary Data Analytics and Predictive Technologies (IDAPT) under the mission has been regarded as one of the most prominent fields whose progress will add significant impact on various socio-economic issues. At IIT (BHU), five verticals 1) Telecommunications, 2) Power, 3) Road Transport and Highways, 4) Defence Research and Development, and 5) Health and Family Welfare have been identified under IDAPT. The endeavour shall catalyse the creation of skilled young engineers, researchers, technicians, and entrepreneurs, together with human resource at all levels, besides becoming a key contributor to realizing the vision of “Digital India”, “Innovate in India”, and “Make in India”.

Power in IDAPT

Power in IDAPT will undertake the technology development using for environment friendly, smart grid with the system of Internet of Things (IoT)-activated smart devices that can be controlled remotely. The activities under this will support India's Smart Cities Mission in terms of environmentally friendly, reliable, efficient, and IoT activated optimum power generation/flow and thus, setting up a IDAPT based smart grid for smart homes. and cities.

Short Term Course on

**Data Analytics and
Predictive Technology driven
IoT based Smart Grid
Infrastructure**

A TECHNOLOGY INNOVATION HUB

ON

**INTERDISCIPLINARY DATA ANALYTICS
AND PREDICTIVE TECHNOLOGY**

(IDAPT)

Under

**NATIONAL MISSION ON INTERDISCIPLINARY
CYBER PHYSICAL SYSTEM (NM-ICPS)**



1st-6th March 2021

Coordinator:- Dr. R. K. Singh
Co-Coordinator:- Dr. V. N. Lal

ABOUT INSTITUTE



The Indian Institute of Technology (Banaras Hindu University) owes its existence to Mahamana Pandit Madan Mohan Malviya, Bharat Ratna-the founder of

the first residential university of modern India, the Banaras Hindu University. The three of the erstwhile engineering colleges of BHU, namely BENCO, MINMET and TECHNO, were merged to form the Institute of Technology (IT-BHU) in 1968 to provide an integrated educational base. The IT-BHU has been admitting students through the JEE conducted by the IIT's since 1972, and has been consistently ranked amongst the top few engineering institutions of the country. IT-BHU became IIT (BHU) in June 29, 2012 by an Act of Parliament. The Institute has maintained high academic standard since its inception. It has turned out luminary engineers and administrators who served the nation with great distinction.

ABOUT ELECTRICAL DEPARTMENT

Department of Electrical Engineering runs five post graduate (M. Tech.) programmes in Electrical Machines and Drives (started in 1956), Power Systems (started in 1964), Control Systems (started in 1964), Power Electronics (started in 1982) and Interdisciplinary Systems Engineering (started in, 1982) and Ph. D. programme in all disciplines of Electrical Engineering. The department has also a five year Integrated Dual Degree Program (started in 2006) leading to Masters degree with specialization in Power Electronics. The department has been sanctioned Special Assistance Programme (SAP) of UGC since 1988 and COSIST program of UGC from 1995 to 2000. Apart from these, the department has been conducting research projects funded by DST, AICTE, CPRI and other R&D organizations of Govt. of India.

EMINENT SPEAKERS (Tentative)

Prof. Santanu Mishra (IIT Kanpur, India)
Prof. Suryanarayana Doolla (IIT Bombay, India)
Prof. Chetan Arora (IIT Delhi, India)
Prof. Akshay Kumar Rathore (Concordia University, Canada)
Prof. Bhim Singh (IIT Delhi, India)
Prof. Ravindra Nath Adda (IIT Guwahati, India)
Prof. Olive Ray (IIT Bhubaneswar, India)
Prof. Soumya Shubhra Nag (IIT Delhi, India)
Prof. Sandeep Anand (IIT Bombay, India)
Prof. Amit Kumar Jain (IIT Delhi, India)
Prof. Sunita Sarawagi (IIT Bombay, India)
Prof. Sachin Kumar Jain (IIITDM Jabalpur India)
Prof. Ankush Sharma (IIT Kanpur, India)

COURSE CONTENTS (Tentative):

- Present scenario and future aspects of smart grid infrastructure
- Role of DAPT and IoT for smart grid infrastructure
- Smart reconfigurable house
- IoT enabled demand response management in the distribution system
- Environmental prediction model for IoT based smart agriculture
- Smart microgrid infrastructure with power optimization
- Data analytics fundamental concepts
- Predictive and Descriptive Data Analytics
- IoT integrated power processor for electrical smart grid
- Hands-on training on design and demonstration of digital controller with DSP, FPGA and OPAL-RT

REGISTRATION DETAILS

Registration link :

<https://tinyurl.com/y5vyonjr>

Last Date of Registration: **26th February, 2021**

Registration Fees:

For faculties, scientists and post doctoral fellow: Rs. 1000/- (non-refundable)

Industry: 4000/- (non-refundable)

For UG and PG students : Rs. 500 (refundable)

Payment may be made by one of the following methods:

(i) Demand draft In favour of I-DAPT-HUB-FOUNDATION

Payable at SBI, IIT(BHU) Varanasi.

(ii) For online payment

Branch: SBI, IIT(BHU) Varanasi

IFSC Code: SBIN0011445

Name: I-DAPT-HUB-FOUNDATION

Account No: 39818711510

Course Mode: **Online**

In case of any difficulty you can contact us at rksingh.eee@iitbhu.ac.in