

**Five Days Online
Workshop
On
Smart Cities and Intelligent
Systems**

03rd to 07th January, 2022
National Institute of Technology, Hamirpur



Coordinators

Dr. Ram Niwash Mahia
Dr. Supriya Jaiswal

Organized by



Department of Electrical Engineering
National Institute of Technology
Hamirpur, Himachal Pradesh

About the Institute

National Institute of Technology Hamirpur is one of the thirty-one NITs of the country, which came into existence on 7th August 1986 as Regional Engineering College, a joint and cooperative enterprise of the Govt. of India and Govt. of Himachal Pradesh. On 26th June 2002, REC Hamirpur was awarded the status of Deemed University and upgraded to National Institute of Technology. The Institute offers Bachelor, Master and Doctoral programmes in Engineering, Sciences, Architecture, Management and Humanities. Various programmes serve the purpose of building a comprehensive foundation of knowledge and of enhancing confidence, creativity and innovation in its students.

About the Department

Electrical Engineering Department, established in the year 1986, is one of the oldest departments of National Institute of Technology Hamirpur. The Department has been imparting quality education at undergraduate and post-graduate level. The faculty members have been active in teaching and research activities. The course curriculum is being revised from time to time so as to keep students abreast with latest emerging technologies. Various departmental laboratories have been strengthened and modernized by procuring state of art equipment's. Department is also equipped with latest experimental and computational facilities for taking up R&D and consultancy activities in different areas of Electrical Engineering.

COMMITTEE

Patron

Prof. (Dr.) Lalit Kumar Awasthi,
Director, NIT Hamirpur (H.P.)

Chairman

Dr. Raj Kumar Jarial
HOD, DoEE, NIT Hamirpur (H.P.)

Convener

Prof. (Dr.) Ram Naresh Sharma
Professor, DoEE, NIT Hamirpur

Treasurer

Dr. Rajan Kumar
Assistant Professor, DoEE, NIT Hamirpur

Organizing Committee(s)

Prof. (Dr.) Y. R. Sood
Prof. (Dr.) Sushil Chauhan
Prof. (Dr.) Ashwani Chandel
Dr. Zakir Hussain
Dr. Ravinder Nath Sharma
Dr. (Mrs.) Veena Sharma
Dr. B. B. Sharma
Dr. O. P. Rahi
Dr. Amit Kaul
Dr. Himesh Handa
Er. Rajesh kumar
Ms. Bharti Bakshi Kaul
Dr. Anil Kumar Yadav

About the e-Workshop

Intelligent systems and multi agent networks are emerging as the most vital part of research and development around the globe. Machine learning algorithms have facilitated several roles in automating and aiding development in smart cities. With the advent in Wireless Sensor Network (WSN) and Internet of Things (IoT) technologies to enable smooth functioning in smart cities, the data driven modeling, intelligent decision making and data mining tools are required. Also, cyber security and cyber physical system advancement becomes an important area to be explored. Intelligent systems provides fast, tractable, fair, secure and resilient smart city functioning in terms of modeling, decision making and retains privacy.

The objective of the programme is to embark the interest and knowledge in the area of emerging challenges of smart cities and intelligent systems due to large scale renewable energy penetration, increased electricity demand in deregulated market and to improve controllability, reliability and security in the smart grid network.

Topics to be covered

- ❖ Challenges faced and lessons learned in deploying intelligent systems in smart cities
- ❖ Framework and Machine Learning (ML) algorithms for solving challenges in smart cities
- ❖ Sensors and actuators for smart city
- ❖ Smart transportation
- ❖ Energy efficient smart grid network
- ❖ Demand Response Management (DRM)
- ❖ Smart health and emergency systems
- ❖ Cyber security and big data analytics
- ❖ Smart metering and advanced metering infrastructure
- ❖ Multi agent systems for deregulated energy market scenario
- ❖ Smart logistics
- ❖ Smart water system

Eminent Speakers

- ❖ Prof. Praveen Kumar, IIT Guwahati
- ❖ Prof. M. K. Verma, IIT BHU
- ❖ Prof. M. A. Chaudhari, VNIT Nagpur
- ❖ Prof. Rajesh Kumar, MNIT Jaipur
- ❖ Dr. Ujjwal Kumar Kalla, MANIT Bhopal
- ❖ Dr. Neeraj Gupta, Global Electronics Ltd., USA
- ❖ Dr. Manoj Tripathy, IIT Roorkee
- ❖ Prof. A. R. Garg, JNVU Jodhpur
- ❖ Dr. Kamlesh Dutta, NIT Hamirpur
- ❖ Dr. Naveen Chauhan, NIT Hamirpur

Important Dates

Last date (Online Registration): 01-01-2022
(Limited seats are available)
Confirmation by E-mail: 02-01-2022
Duration: 03-01-2022 to 07-01-2022

Eligibility

This program is open to faculty members, research scholars, PG & UG Students, and industrial personnel.

e-Registration and Payment Guidelines

Registration Fee (Through SBI Collect):

- (a) **Rs. 500 for Academia/R&D Labs**
- (b) **Rs. 200 for Students**
- (c) **Rs. 1000 for participants from Industry**

1. Go to **www.onlinesbi.com** and select option **State Bank Collect**
2. Accept terms & conditions and Proceed further
3. Select State of Corporate/Institute: **Himachal Pradesh** and Type of Corporate/Institute: **Educational Institute**
4. Select Educational Institute Name: **NIT Hamirpur** and click on **Submit**
5. Select Payment category **Workshop STC FDP Conference** and fill the details to proceed further

Link for e-registration through google form:
<https://forms.gle/i9tTf2QNptsXWByG6>

e-Certification

E-certificates will be provided to the participants, with at least 75% attendance.

Contact Details

Dr. Ram Niwash Mahia and Dr. Supriya Jaiswal
Email: ram@nith.ac.in and Email: supriya@nith.ac.in
Mob.: +91-7976332739 and Mob.: +91-9665912742