AICTE sponsored Faculty Development Programme (FDP)

on

Recent Advances and Application of IOT in

Renewable Energy Technologies

(August 23rd 2021 to August 27th 2021)

How to Register? Application number 1614411892

- 1. There are no registration charges to attend the program. i.e. it is FREE for selected participants.
- 2. Interested participants can register using the following link:

https://www.aicte-india.org/atal

Step 1: Register yourself with email id (sign up). If you have already registered, then first login yourself.

Step 2: Click on Workshops.

Step 3: Select Short Term Course on "Energy Engineering"

(searching by state "Delhi" and Month "August" from above dropdown box).

Step 4: Click the plus sign button to register.

Step 5: You got a short notification "successfully course registered".

Step 6: You can also check your registration by clicking on Applied Workshops (after done successfully registration).

The certificates shall be issued to those participants who are registered on ATAL portal www.aicteindia.org/atal and attend the program with minimum 80% attendance and score minimum 60% marks in the test.

REGISTRATION

Registration Fee: Nil

Patron	
Prof. Nageshwar Rao	Hon'ble Vice- Chancellor
Chairman	
Prof. Satya Kam	Hon'ble Pro-Vice Chancellor
Convenor	
Dr. Ashish Agarwal	Director, SOET
Coordinator	
Dr. Sanjay Agrawal, (Associate Professor in Electrical Engineering)	
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Dr. Munish Kumar Bhardwaj	CE Department
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Dr. N Venkateshwarlu	ME Department
Dr. Shweta Tripathi	ME Department

Faculty Development Programme (FDP)
on

Recent Advances and Application of IOT in Renewable Energy Technologies



Convenor

Dr. Ashish Agarwal (Director, SOET)

Coordinator

Dr. Sanjay Agrawal

Organised by

School of Engineering & Technology
Indira Gandhi National Open University
Maidan Garhi, New Delhi-110068

www.ignou.ac.in

About the University

The Indira Gandhi National Open University (IGNOU), established by an Act of Parliament in 1985, has continuously striven to build an inclusive knowledge society through inclusive education. It has tried to increase the Gross Enrollment Ratio (GER) by offering high-quality teaching through the Open and Distance Learning (ODL) mode.

The University began by offering two academic programmes in 1987, i.e., Diploma in Management and Diploma in Distance Education, with a strength of 4,528 students.

Today, it serves the educational aspirations of over 3 million students in India and other countries through 21 Schools of Studies and a network of 67 Regional Centres around 2,000 Learner Support Centres and 20 overseas institutions. The University offers about 200 certificate, diploma, degree and doctoral programmes, with a strength of nearly 250 faculty members and 230 academic staff at the headquarters and regional centres and over 35,000 academic counsellors from conventional institutions of higher learning, professional organizations, and industry among others.

About School of Engineering & Technology

The primary emphasis of IGNOU is on innovation, flexibility, relevance, and cost effectiveness in all its programmes. The University started identifying the disciplines and subject areas for which the distance learning programmes were to be initiated in the first instance.

The area of Engineering and Technology was identified in the early years, keeping in view the emerging need of continuing education and re-training requirements of those at work.

Thus, the School of Engineering and Technology came into existence in 1987, with a clear mandate to address the issues pertaining to continuing and extension education requirements in the country.

Objectives of the Course

This one-week Faculty Development Program (FDP) is aimed for college and University teachers in various disciplines of science and engineering. The approach of teaching has changed to a new paradigm, and at presents it essentially laying emphasis on stimulating inquisitiveness in the process of acquiring and assimilating new scientific knowledge and concepts. The teachers need to be updated with the pedagogy for better teaching-learning experience. Moreover, the exposure to tools like open source courseware, simulation tools, and scientific approaches of planning and execution of experiments will enhance the student's inquisitiveness and understanding of the subjects. Furthermore, interdisciplinary subjects like 'renewable energy' are getting due attention in the science and engineering course curriculum. So teachers need to refresh the knowledge on these subjects for better pedagogical approach.

The course intended to discuss the recent advances on the renewable energy technologies and systems including the basic working principle. The major topic covers in this programme are:

- (i) Technology-enhanced learning environments
- (ii) Application of IOT in Renewable energy
- (iii) Application of Soft Computing Technique in Solar Photovoltaic and Thermal Energy
- (iv) Biomass Energy
- (v) Wind Energy
- (vi) Grid connected renewable energy system
- (vii) Simulation tools
- (viii) Application of Artificial Intelligence in Hybrid Photovoltaic thermal
- (ix) Life cycle analysis
- (x) Carbon credits

The course will also cover the laboratory components of these energy systems and field visit. Experts from the different reputed academic institutes, research laboratories and industries will be invited to deliver the various aspects

of the programme. Apart from the invited experts, faculties of School of Engineering & Technology having expertise in the different areas related to the programme will also deliver lectures.

This course will offer a unique opportunity to the faculty members, researchers, engineers and research student working in the relevant topics of electromechanical system, renewable energy and materials. Talks will be delivered by eminent academicians as well as field professionals.

Eligibility for Participants

The faculty development programme is open to faculty members, research scholars, students and industry personnel belonging to engineering / Science disciplines.

Resource Person

- 1. Prof. Bhim Singh, IIT Delhi
- 2. Prof. (Retd.) G N Tiwari, IIT, Delhi
- 3. Prof. Majid Jamil, JMI, Delhi
- 4. Prof. M M Tripathi, DTU, Delhi
- 5. Prof. Priyanka Kaushal, IIT, Delhi
- 6. Dr. P C Pant, MNRE, New Delhi
- 7. Prof. Manoi Gaur, MITS, Gwalior
- 8. Dr. U K Kalla, NIT Bhopal
- 9. Dr. Anil Kumar Tiwari, DTU, Delhi
- 10. Mr. Himanshu Mishra, Sun Source Pvt Ltd.
- 11. Mr. Sachin Gopal Soni, First Solar, Arizona, USA
- 12. Dr. Arun Kumar Tiwari, AKTU, Lucknow