FACULTY DEVELOPMENT PROGRAMME (FDP)

ON

IOT APPLICATIONS IN GREEN ENERGY SYSTEMS

(27 April, 2018 to 2 May, 2018)

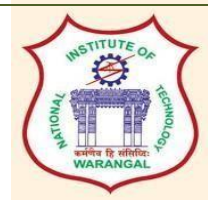### Organized by

Institute of Aeronautical Engineering
Dundigal, Hyderabad, Telangana

in association with

National Institute of Technology, Warangal.
Under the Scheme of Electronics & ICT Academy
(Sponsored by Ministry of Electronics and Information Technology (MeitY), GOI)

Preamble:

"Electronics & ICT Academy at NIT Warangal provides specialized training to the faculty of Engineering, Arts, Commerce & Science colleges, polytechnics etc., by developing state-of-the-art facilities. It is working towards enhancing the domain expertise of interested faculties with special focus on the faculties of Southern States Telangana, Andhra Pradesh, Karnataka, and the Union territories Goa, Puducherry and Andamar & Nicobar Islands. The academy is involved in multitude of activities including training, consultancy and entrepreneurship programmes. The academy offers faculty development programs in standardized courses and emerging areas of Electronics, Information Communication Technologies; provides training and consultancy for industry, CEP for working professionals, apart from rendering advice and support for technical incubation.

Institute of Aeronautical Engineering, Hyderabad is organizing a faculty development program in collaboration with "Electronics & ICT Academy", NIT, Warangal to introduce the upcoming technology of Internet of Things (IOT) and its applications in green energy. The focus will be on introducing raspberry PI (with built in WiFi chip), python scripting language and linux, with applications in embedded systems and IOT. Applications of IOT technology in green energy will be covered extensively in this program. Green energy is relevant to sustain progress of mankind globally because of the necessity to reduce carbon foot print and for ecological consideration.

Major Course Contents:

- Introduction to IoT
- Arduino and its Programming
- Interfacing sensors and actuators to Arduino
- Introduction to Internet of Things (IoT)
- Wireless communication technologies and protocols for IoT
- Implementing IoT with Arduino
- Introduction to Raspberry PI
- Programming RaspberryPi with Python
- Implementing IoT with RaspberryPi.
- Zigbee and IOT based systems
- Applications of IoT - Case Studies, Applications of IoT in electrical energy storage, IoT based smart Industries and factories, IoT based Smart Grid, Smart Cities and Public Places
- Introduction to Green Energy, and Applications
- Roll of IoT in Greening urbanization and urban settlements

Faculty conducting this program:

The program will be conducted by the faculty members from NIT Warangal; Academicians in the concerned field from IITs/NITs/IIITs are invited to deliver lectures in the program. Speakers from industries are also expected to deliver as part of the course.

Eligibility:

The program is open to the teachers of Engineering Colleges, MCA Colleges and other allied disciplines in Telangana, Andhra Pradesh, Karnataka, Goa, Puducherry, Andaman and Nicobar Islands. Industry personnel working in the concerned /allied discipline can also attend.

Organized at:

The programme will be coordinated and conducted by the Electrical and Electronics Engineering department of Institute of Aeronautical Engineering (IARE), Dundigal, Hyderabad. The whole course will be accomplished by academicians from premier institutions, Industry experts and Research advisors.

Registration Fee Particulars:

Faculty and Research Scholars from Telangana, Andhra Pradesh, Karnataka, Puducherry, Andaman and Nicobar Islands, Goa	Rs. 2500/-
Faculty of SC/ST Category from Telangana, Andhra Pradesh, Karnataka, Puducherry, Andaman and Nicobar Islands, Goa	Rs. 1250/-*
Industry Participants	Rs. 7500/-
Participants from other states	Rs. 8500/-

*SC/ ST participants should submit the copy of their caste certificate to claim the concession along with application form and it is only for faculty of mentioned states. Research Scholars are not eligible for SC/ST concession.

The entire registration fee is to be collected in the form of DDs/online transfer using the following details:

DD Details	Online Transfer Details
Demand Draft in favor of "Director, NIT Warangal" payable at any bank in Warangal	Account Name: Electronics & ICT Academy NITW Account No: 62423775910 IFSC: SBIN0020149

Accommodation:

All the selected participants will be provided FREE boarding & lodging in the institute guest house. No TA will be paid for the participants.

How to apply:

A filled in form of application in the prescribed format duly signed and sponsored by appropriate authorities (along with demand draft) should reach the coordinator by speed-post. It is also mandatory to send scanned application form and demand draft through e-mail to **hod-eee@iare.ac.in** and **ravikumar@nitw.ac.in** as selection will be intimated only through mail.

Selection Criteria:

Selection will be done based on first-come-first-serve basis to a maximum number of 50 (fifty). Additionally 10 participants from industry are allowed to participate. The list of selected participants will be intimated through e-mail. In case a candidate is not selected, the DD will be sent back. Candidates will be issued certificates on successful completion of the course. Reservations are followed for selecting candidates as per GOI norms.

Important dates:

Last date (Application & DD)	16 April, 2018
Selection List by E- mail	20 April, 2018
Duration	27 April to 02 May 2018

About NIT Warangal:

National Institute of Technology, Warangal is the first among 17 RECs setup as joint venture of the Government of India and the state government. Over the years the college has established itself as a premier Institute imparting technical education of a very high standard leading to the B.Tech degrees in various branches of engineering, M.Tech and Ph.D programs in various specializations. All B. Tech and M. Tech programmes of NIT Warangal are NBA accredited.

About Institute of Aeronautical Engineering:

Institute of Aeronautical Engineering (IARE), Hyderabad was established in the year 2000 by a devoted group of eminent professionals and industrialists, having a long and outstanding experience in educational system with a mission 'Education for Liberation'. Started with aircraft maintenance engineering in the year 1994, it has gradually transformed itself into a premier integrated interdisciplinary technological institute offering B.Tech and M.Tech programs in CSE, IT, ECE, EEE, Aeronautical, Mechanical and Civil Engineering and MBA. IARE is Autonomous institute with permanent affiliation from Jawaharlal Nehru Technological University, Hyderabad. The institute is accredited by NAAC with 'A' Grade from 2015 to 2020 and also accredited by NBA (National Board of Accreditation) in Tier-II for all seven B.Tech programs - CSE, IT, ECE, EEE, Aero, ME and CE for a period of 3 years from June 2016 to June 2019.

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APPLICATION FORM
IOT Applications in Green Energy Systems

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1. Name   :
2. Designation :
3. Institution   :
4. Email   :
5. Ph. No   :
6. DDNo :   Bank :   Date :

    Amount:

7. Address for Correspondence :

8. Educational Qualification :

9. Subjects taught sofar :

10. No. of refresher courses / workshops attended :

11. Experience (inyears) :

    Teaching: Research :   Industry :

12. Accommodation required :   YES / NO

13. Do you belong to SC / ST :   YES / NO

(If yes, please specify and attach a copy of caste certificate to claim the concession)

Declaration
The information provided is true to the best of my knowledge. If selected, I agree to abide by the rules and regulations of the FDP and shall attend the course for the entire duration. I also undertake the responsibility to inform the Coordinator in case, I am unable to attend the course.

Signature of the Applicant

SPONSORSHIP CERTIFICATE

Dr. /Mr. /Ms. …………………………………... is an employee of our Institute / Organization and is hereby sponsored to participate in the FDP on **"IOT Applications in Green Energy Systems"**, sponsored by Electronics & ICT Academy during   27 April, 2018 to 2 May, 2017 at IARE, Hyderabad–500043

Signature of Head of Institution
(With seal)

Address for correspondence
Post your application form with DD to

Dr. P Sridhar, Professor & HOD
Coordinator
FDP on IoT Applications in Green Energy Systems
Department of Electrical and Electronics Engineering
Institute of Aeronautical Engineering
Dundigal, Hyderabad-500043
Telangana, India

E-mail the scanned copies of filled-in and duly signed application form along with DD to
hod-eee@iare.ac.in / Sridhar@iare.ac.in

For more details about Electronics & ICT Academy, NIT, Warangal, please visit: *https://nitw.ac.in/eict*

For more enquiries please contact:
Mobile: +91-8886023000

Coordinators

Dr. J Ravi Kumar	Dr. P Sridhar
Department of ECE	Professor & HOD, EEE
National Institute of Technology	Institute of Aeronautical Engineering
Warangal - 506 004	Dundigal, Hyderabad - 500043
Telangana State, India.	Telangana State, India.