

## FACULTY DEVELOPMENT PROGRAMME (FDP)

on

# Embedded Systems, Smart Sensors for IOT Applications

(27<sup>th</sup> May to 1<sup>st</sup> June 2019)

Organized by

Academic Staff College, KL University, Vaddeswaram, A.P.

In Association with

DEPARTMENT OF ECE, KL UNIVERSITY and

ELECTRONICS & ICT ACADEMY, NIT WARANGAL

(Sponsored by Ministry of Electronics and Information Technology (MEITY), GOI)



### Preamble:

"Electronics & ICT Academy" was set up at NIT Warangal with financial assistance from MeitY, Govt. of India (GoI). The jurisdiction of this academy is Telangana, Andhra Pradesh, Andaman and Nicobar Islands, Goa, Puducherry and Karnataka states/UTs. This academy role is to offer faculty development programmes in standardized courses and emerging areas of Electronics, Information Communication Technologies, Curriculum development for Industry, Training & Consultancy services for Industry; CEP for working professionals, Advice and support for technical incubation and entrepreneurial activities.

Current trends demand for efficient and secured electronic systems for commercial and industrial applications. Internet of Things (IoT) is one of the major technologies transcending industry, academia and government supporting the demands. It is projected that GDP due to IoT market is going to be \$15 trillion which is larger than the GDP of India (\$6.6 Trillion) by 2030. In this context, IoT became an essential component to make of our daily routine smart and secure. Considering the current thrust on Information Communication Technologies and Electronic Sector Design and Manufacturing by Government of India, and in view of the Internet of Things Policy of India, there is an immediate requirement for building capacity and expertise around Internet of Things.

### Course Contents:

- Embedded Systems
  - Interfacing of Smart Sensors
- Internet of Things
  - Applications, Potentials and challenges in IOT
- IOT Case studies
  - Sensor Body Area Network
  - Control of Smart Home and Smart Vehicles
  - Smart Manufacturing and Smart Factories
- Performance Modeling & Analysis
- IOT Security, IOT Standards and Emerging IOT Standards
- Open Problems and Research Challenges in IOT
- Data Handling & Analytics
- Sensor Cloud and Sensing Nod
  - Case Studies
- D2D Communications

**Hands on session on the above topics will be provided.**

- Python Programming
- Tiny OS and Security
- Implementation of IOT with Raspberry pi.

### Faculty Conducting this Programme :

The programme will be conducted by the faculty members from NIT Warangal. Academicians from IITs / NITs / IIITs in concerned field are invited to deliver lectures in the programme. Speakers from industries are also expecting to deliver lectures.

### Eligibility :

The programme is open to the faculty of engineering colleges and other allied disciplines in India. Industry personnel working in the concerned/allied discipline can also attend.

### Organized at:

The programme will be coordinated and conducted by Academic Staff College in association with ECE department, KL Deemed to be University, Vaddeswaram, Guntur..

### Accommodation :

All the outstation participants will be provided free board and lodging in university hostels at nominal cost. No TA will be paid for the participants.

**Venue:** C-Block, Sunflower Hall, KL University.

### Registration Fee Particulars:

- Faculty / Research Scholars : Rs. 2,500/- Only
- SC/ST Faculty : Rs. 1,875/- Only  
(Should submit Caste Certificate to claim concession)
- Industry participants : Rs. 7,500/- Only

SC/ST Concession is only for Faculty of mentioned states. Research scholars are not eligible for SC/ST Concession.

The participants need to send a crossed demand draft (DD) drawn in favor of "E & ICT Academy, NIT Warangal" and payable at SBI, NIT Warangal branch or remit the necessary course fee to the Bank as per the details given below.

Account Name	Electronics & ICT Academy NITW
Account Number	62423775910
Name	State Bank of India
Branch	REC Warangal (NIT Campus)
Branch Code	20149
IFSC	SBIN0020149

### How to Apply:

A filled in form of application in the prescribed format duly signed and sponsored by appropriate authorities (along with DD/NEFT Receipt) should reach the coordinator by speed post. It is also mandatory to send scanned application form & DD/NEFT receipt through e-mail to [gksantosh17@kluniversity.in](mailto:gksantosh17@kluniversity.in) as selection will be intimated only through mail.

### Selection Criteria:

Selection will be done based on *first-cum-first-serve basis* and the confirmed candidates will be notified immediately. The maximum number of participants will be **50 (fifty)**. Additionally 10 participants from industry are allowed to participate. The list of selected participants will be sent to their personal *e-mail* ids. In case a candidate is not selected, the demand draft will be sent back. A test will be conducted at the end of the course. Candidates will be issued satisfactory certificate on successful completion of the course. Reservations are followed for selecting candidates as per GOI norms.

### Important Dates:

Last date for submission of application : **19<sup>th</sup> May, 2019**

Selection-list intimation/display before : **22<sup>nd</sup> May, 2019**

Duration of Program : **27<sup>th</sup> May - 1<sup>st</sup> June, 2019**

### About NIT Warangal:

National Institute of Technology (formerly Regional Engineering College), 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 Institution imparting technical education of a very high standard leading to the B. Tech degrees in various branches of engineering, M.Tech & Ph.D programs in various specializations.

### About KLU:

The Koneru Lakshmaiah Charities was established as a trust in the year 1980 and started K L College of Engineering in the Academic year 1980-81 and has attained autonomous status in the year 2006 and in February 2009, the Koneru Lakshmaiah Education Foundation Society was recognized as Deemed to be University and also the first to be accredited with NAAC A++. It offers 23 UG programs, 26 PG programs, 28 integrated degree programs and dual degree programs. In addition to the research

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program in 14 disciplines, KLU has the credit of housing world class Centers of Excellence to boost research in emerging areas.

### APPLICATION FORM

1. Name of the Applicant :
2. Designation :
3. Institution :
4. E-mail ID :
5. Mobile No. :
6. Category  
☐ Faculty/Scholars (Rs. 2,500/-) ☐ Demand Draft No: \_\_\_\_\_  
☐ SC/ST Faculty from mentioned states (Rs. 1,875/-) ☐ NEFT/ UTR No. : \_\_\_\_\_  
☐ Industry Participants (Rs. 7,500/-) Bank : \_\_\_\_\_ Date : \_\_\_\_\_
7. Payment Mode
8. Address for Correspondence :
9. Subjects taught so far :
10. Educational Qualifications with specialization :
11. No. of refresher courses/workshops attended :
12. Experience (in years) :  Teaching  Research  Industry
13. Do you belong to reservations SC/ST ( YES / NO ) : If YES, please specify and attach a Should submit Caste Certificate to claim concession
14. Do you require accommodation during Training : YES / NO

### 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.

Place :

Date :

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 “**Embedded Systems, Smart Sensors for IOT Applications**” sponsored by **Electronics & ICT Academy** during 27<sup>th</sup> May to 1<sup>st</sup> June, 2019 at K L University.

Place :

Date :

Signature of Principal / Head of Institution

### Address for correspondence

Post your application form along with DD/NEFT Receipt to

Dr. Sai Krishna Santosh G

Associate Professor,

Dept. of ECE

K L University,

Vaddeswaram, AP - 522502.

Email : [gksantosh17@kluniversity.in](mailto:gksantosh17@kluniversity.in)

Mobile : 9989721790

### Coordinators:

Dr. J. Ravi Kumar

Assoc. Prof,

Dept. of ECE,

NIT Warangal.

Telangana.

Dr. Sai Krishna Santosh G

Assoc. Prof,

Dept. of ECE

K L University

Andhra Pradesh

Dr.V.Rajesh

Principal,

Academic Staff College

K L University

Andhra Pradesh

For more details about Electronics and ICT academy please visit: <http://www.nitw.ac.in/eict/>