

## Faculty Development Program

On

# Embedded Systems & IoT Applications

9<sup>th</sup> December – 14<sup>th</sup> December 2017

Jointly Organized by

Electronics & ICT Academy, NIT WARANGAL

And

Department of Electronics and Communication and Engineering

Siddharth Institute of Engineering & Technology, PUTTUR

(Sponsored by MeitY, Govt. of India.)



### Preamble

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

### About the Workshop

Embedded systems have become an important part of every modern electronic component such as – microwave oven, washing machine, remote control, RFID tags, routers, modems, PDAs, mobile phones etc. On the other hand, Internet of Things (IoT) is one of the hottest topics of the industry and has taken its place in conventional business Jargon. This workshop covers both the theoretical and practical know how of the Embedded systems and use of it for the deployment of many Internet of Things (IoT) solutions".

### Major Course Contents

- Overview of Embedded systems in practical world
- Embedded system design using 8051 microcontroller
- Programming 8051 microcontroller
- Introduction to Sensors and Actuators
- 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.

**Structure of the Course:** The theory for the topics specified in the Course Contents is covered over 25 hours in classroom sessions and 15 hours lab sessions.

**Faculty conducting this program:** The program will be conducted by the faculty members from NIT Warangal. Academicians in the concerned field from Reputed Institutes 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 faculty of engineering colleges from Electronics and communication Engineering, Electrical Engineering, and other allied disciplines in Telangana, Andhra Pradesh, Karnataka states and Goa. Industry personnel working in the concerned/allied discipline can also attend.

**Accommodation:** Accommodation is arranged for outstation participants at SIETK campus with a fee of Rs1000/- for the entire duration of the program. No TA/DA will be paid to the participants.

**Venue:** Dept. of ECE, SIETK, Puttur, Andhra Pradesh.

### Important dates:

Last date for submission of application: 30.11.2017

Selection-list intimation/display before: 02.12.2017

### 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/- (SC/ ST participants should submit the copy of their caste certificate to claim the concession along with application form)
Industry Participants	Rs. 7500/-
Participants from other states	Rs. 8500/-

Registration fee includes working Lunch, Tea & Snacks.

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 "Director, NIT Warangal" and payable at SBH, NIT Warangal branch.

### On-line Mode:

Account Name: Electronics & ICT Academy NITW

Account No: 62423775910, IFSC: SBIN0020149

**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 [esiotfdp@gmail.com](mailto:esiotfdp@gmail.com) 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 notified in the institute web site [www.sietk.org](http://www.sietk.org) and also 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 certificates on successful completion of the course along with grade. Reservations are followed for selecting candidates as per GOI norms.

### About NITW & SIETK:

**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 and M.Tech. and Ph.D. programs in various specializations.

SIETK approved by AICTE, affiliated to JNTUA was established in the year 2001 and is accredited by NAAC and NBA as a College with an emerging center for excellence in Engineering & Management education, boast of energetic & experienced faculty, successful students, great infrastructure and excellent placements record.

**Electronics and ICT Academy**  
**Faculty Development Program**  
**On**  
**Embedded Systems and IoT Applications**  
**(9<sup>th</sup> December – 14<sup>th</sup> December 2017)**  
**APPLICATION FORM**

1. Name:

**SPONSORSHIP CERTIFICATE**

2. Designation:

Dr./Mr./Ms. ....

3. Institution:

..... is an employee of our  
Institute/Organization and is hereby sponsored to  
participate in the FDP on **Embedded Systems & IoT  
Applications**, sponsored by Electronics & ICT Academy  
during 9<sup>th</sup> to 14<sup>th</sup> December, 2017 at SIETK, Puttur.

4. E-mail:

5. DD No:

Bank:

Date:

6. Address for Correspondence

Place:

7. Educational Qualifications with specialization:

Date:

Signature of Head of Institution

8. Subjects taught so far :

(with seal)

9. No. of refresher courses/workshops attended:

Address for correspondence:

**Post your application form along with DD to**

10. Experience (in years)

**Ms. P. RATNA KAMALA**

Teaching:

Research:

Industry:

**Professor**

11. Accommodation required: YES / NO

**Department of ECE,**

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

**Siddharth Institute of Engineering and Technology,**

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

**Narayanavanam Road,**

**Puttur-517 583,**

**Chittoor District,**

**Andhra Pradesh.**

**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 Co-ordinator in case, I am unable  
to attend the course.

**Also mail the scanned copies of filled-in and duly signed**

**application form with DD to**

[jrk.nitw@nitw.ac.in](mailto:jrk.nitw@nitw.ac.in), [esiotfdp@gmail.com](mailto:esiotfdp@gmail.com)

Place:

**For more information visit: <http://nitw.ac.in/eict/> OR**

**[www.sietk.org](http://www.sietk.org)**

Date:

Signature of the applicant

**For any enquiry contact:**

**Phone: 9000379559,**

**E-mail: [esiot@gmail.com](mailto:esiot@gmail.com)**

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**Co-ordinators**

**Dr. J. Ravi Kumar**

**Department of ECE,**

**Electronics & ICT Academy and**

**NATIONAL INSTITUTE OF TECHNOLOGY**

**WARANGAL – 506 004 (Telangana State)**

**Prof. P. Ratna Kamala**

**Department of ECE,**

**SIETK**

**PUTTUR - 517 583**

**ANDHRA PRADESH**