

# FACULTYDEVELOPMENT PROGRAMME (FDP) ON



# REAL TIME EMBEDDED SYSTEMS AND IOT, ITS

# **APPLICATIONS**

(2<sup>nd</sup> June - 8<sup>th</sup> June, 2018)

Organized by

## RAGHU INSTITUTE OF TECHNOLOGY, DAKAMARRI, VISAKHAPATNAM

in association with

# E & ICT Academy, National Institute of Technology, 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, Gol. The jurisdiction of this academy is Telangana, Andhra Pradesh, Karnataka, Goa, Puducherry and Andaman & Nicobar Islands. This academy role is to offer faculty development programmes 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:**

The proposed FDP course is on today's most buzzing words "Embedded systems" and "Internet of Things (IoT)". The embedded systems and Internet of Things (IoT) are expanding at a rapid rate, and it is becoming increasingly important for professionals to understand what it is, how it works, and how to harness its power to improve business. The explosive growth of the "Internet of Things" is changing our world and the rapid drop in price for typical IoT components is allowing people to innovate new designs and products at home. The course focuses on Rasberry Pi 3 upgrades, which is a next generation Quadcore Broadcom BCM 2837, 64 bit ARM processor and WiFi chip built in to it. The course also focusses on Python scripting language and basics Linux commands with applications of embedded systems and IoT.

### **Major Course Contents:**

- Introduction to Embedded Systems and its Applications
- Hardware and Software Co-design
- System on Chip
- Introduction to Internet of Thongs (IoT)
- Practical Live Examples
- Getting started with Raspberry Pi
- Raspberry Pi Architecture Specifications
- Interfacing and Programming
- Introduction to IoT Cloud
- Use cases
- MQTT Protocol

## Faculty conducting this programme:

The programme 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 programme. Speakers from industries are also expected to deliver as part of the course.

# **Eligibility:**

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

# Registration Fee Particulars:

Faculty and Research Scholars	Rs. 2500/-
Faculty of SC/ST Category	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/-

SC/ST concession is only for faculty of mentioned states. Research Scholars are not eligible for SC/ST concession.

The fee is to be paid either in the form of DDs or online transfer using the following details:

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

#### Accommodation:

Free accommodation will be provided for the outstation participants by the host Institute on prior request.

#### 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 <a href="mailto:satishchowdary@ieee.org">satishchowdary@ieee.org</a> 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 satisfactory certificates on successful completion of the course. Reservations are followed for selecting candidates as per GOI norms.

## **Important dates:**

Last date (Application & DD)	19 <sup>th</sup> May, 2018
Selection List by E- mail	22 <sup>nd</sup> May, 2018
Duration	2 <sup>nd</sup> – 8 <sup>th</sup> June, 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 SRIT:**

The Department of Electronics and Communication Engineering was established in 2007 and accredited by NBA and NAAC with 'A' grade. The department offers a four year degree program in Electronics and Communication Engineering with an annual intake of 180 students and M.Tech P.G. program in embedded system & VLSI with an annual intake of 18 students. The ECE department emphasizes teaching and research in the areas of electronic devices and circuits, computer engineering, VLSI design testing, controls, communications, and signal processing. The department has a large number of interconnected computers with both Linux and Windows operating systems. The Department has internet facility through LAN and WiFi system. The students of the department are well connected to the external likeminded community through several professional bodies like IETE, IE and IEEE.

# **APPLICATION FORM**



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1. Name	:		
2. Designation	:		
3. Institution	:		
4. Email	:		
5. Mobile No	:		
6.			

DD	Online Transfer
DD No:	Reference No:
Amount:	
Bank:	
Date:	

- 7. Address for Correspondence:
- 8. Educational Qualification:
- 9. Subjects taught so far:
- 10. No. of refresher courses/workshops attended:
- 11. Experience (in years):

Teaching: Research: Industry:

12. Accommodation required: YES /NO13. 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

Signature of Head of Institution (with seal)

### Address for correspondence

Post your application form with DD to **Dr. P. S. R.Chowdary**,

Professor & Vice Principal, Coordinator

FDP on Real Time Embedded Systems and IoT, Its Applications,

Department of Electronics & Communication Engineering,

Raghu Institute of Technology Dakamarri, Visakhapatnam-531162, AP. India

E-mail the scanned copies of filled-in and duly signed application form along with DD to

satishchowdary@ieee.org

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

For more enquiries please contact:

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**Coordinators** 

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