

Faculty Development Program (FDP)  
On



Real Time Embedded Systems and IoT, Its Applications

09<sup>th</sup> to 15<sup>th</sup> April - 2018

Jointly Organized by  
Electronics & ICT Academy and



Department of Electronics and Communication and Engineering  
Joginpally B. R. Engineering College, Hyderabad

**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, Pondicherry 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 "Embedded Systems" and "Internet of Things (IoT)" is becoming an increasingly growing topic of conversation both in the workplace and outside of it. There are so many complexities around the "Internet of Things" which we are going to discuss the "Things" in the session of Internet of Things.

The course focus on Raspberry Pi 3 upgrades, which is a next generation Quodcore Broadcom BCM 2837, 64-bit ARMv8 processor with Wi-Fi chip built in to Raspberry Pi. The course also focuses on Python Scripting Language and Basic Linux commands with applications of Embedded Systems and IoT.

**Major Course Contents:**

- Overview of Embedded systems in practical world
- 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..

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

**Registration Fee Particulars:**

Faculty & Research Scholars from Telangana, Andhra Pradesh, Karnataka, Goa, Pondicherry and Andaman & Nicobar Islands	Rs. 2500/- Only
SC/ST Faculty members from Telangana, Andhra Pradesh, Karnataka, Goa, Pondicherry and Andaman & Nicobar Islands	Rs. 1250/- Only
Industry participants	Rs. 7500/- Only
Participants from other States	Rs. 8500/- Only

\*SC/ST participants should submit the copy of their 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 code: SBIN0020149

**Eligibility:** The program is open to the teachers of engineering colleges from Electronics and communication Engineering, Electrical Engineering, and other allied disciplines in Telangana, Andhra Pradesh, Karnataka States and Puducherry, Andaman & Nicobar islands and Lakshadweep UTs. Industry personnel working in the concerned/allied discipline can also attend.

**Pre-Requisites:** Basics knowledge of digital signal processing

**Accommodation:** Lodging and boarding will be provided at JBREC campus at no additional cost.

**Venue:** ECE Seminar Hall, JBREC, Hyderabad.

**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 [gutta.saibabu@gmail.com](mailto:gutta.saibabu@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.lbrce.ac.in](http://www.lbrce.ac.in) 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.

**Important dates:**

Last date for submission of application: 07.04.2018

Selection-list intimation/display before: 08.04.2018

**About NITW & JBREC:**

**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. All B.Tech and M.Tech programmes of NIT Warangal are NBA accredited.

**J.B.R.E.C** was sponsored and established by J.B.R. Educational Society that had been a wide canopy, created by progressive, dynamic and productive management, for a lot of institutes marked for excellencies in academic records. Recognized by AICTE and affiliated to JNTU the institute has had its vision, mission and the quality policy and objectives as indicated in the annexure enclosed herewith.

