

A Faculty Development Program on
“Advanced Embedded System Design on Zynq
Ultra scale+ using Vivado”

Organized by Department of ECE, JNTUCEH

30th July -3rd August 2018

REGISTRATION FORM

Name:

Designation:

Qualification:

Name of the college:

.....

Mailing address:

.....

.....

Pin:

Mobile:

Email

Signature of participant

Signature of principal

with seal

Registration Fee:

Faculty/Research Scholars: **Rs.2500 /-**
(Working lunch will be provided)

Interested persons may send their registration forms
to given mail ID.

(Note: Accommodation (if required) will be
provided on payment basis in JNTUH Guest house)

**Last date for registration: 27th July,
2018**

Limited seats: Registration is on first come first
serve basis. Selected participants will be informed
by mail by **28th July, 2018**. Seats will be blocked
based on receipt of registration forms.

Address for Correspondence

Mr. M. Sampath, 9493260075
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ECE Department, JNTUH CEH

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In collaboration with



CoreEL Technologies, Bangalore

Coordinator
Dr. T. Satya Savithri
Professor & HEAD, Dept. of ECE

Department of
Electronics & Communication Engineering
JNTUH College of Engineering
Hyderabad-500 085, Telangana

Jawaharlal Nehru Technological University, the **First Technological University** of India, was established on 2nd October 1972 in Andhra Pradesh with head quarters located in a historical city **Hyderabad**. The University is one of the premier Universities in India accredited by **NAAC** with **A** Grade. After successful and proven levels of appreciated existence and stature spanning over 36 years, JNTU has been divided into four different universities by Govt. of Andhra Pradesh, through Act No.30, Dt. 24th September, 2008. One of the constituent colleges of the University “**JNTUH College of Engineering, Hyderabad**” is regarded as a pioneer in shaping the excellence of some of the leading organizations of the industry, by churning out the finest professionals with a resolve to scale greater heights in the technological scenario, every year. Other constituent college of JNTUH is located at Jagityal and 11 other academic units at Hyderabad campus.

The Department of **Electronics & Communication Engineering** established in 1973, is instrumental in moulding the careers of students and helping them to become world-class professionals. The department is offering UG, PG, Research and Collaborative Programmes with well experienced faculty and as well as established laboratories. Vision of the department is to become pioneer of present and future trends in Electronics and Communication technology with comprehensive outlook

through the continuous process of integrating Academia, Industry and synergizing global collaborations.

CoreEL Technologies is a technology company with businesses spread across design services & product development, distribution and training. Head Quartered in Bangalore, India, CoreEL is a leading provider of VLSI & Embedded System design services and Intellectual Property. Since its inception in 1999, CoreEL Technologies a privately held corporation has always strived to deliver quality solutions & support in all the business areas that it serves.

Course Outline and Structure

Day 1:

- ❖ 7-Series Architecture Overview
- ❖ Vivado Design Flow
- ❖ Synthesizing a RTL Design
- ❖ Implementing the Design and Static Timing Analysis

Day 2:

- ❖ IP Integrator
- ❖ Using the IP Catalog and IP Integrator
- ❖ Xilinx Design Constraints

Day 3:

- ❖ Hardware Debugging
- ❖ Zynq Architecture

- ❖ Adding Peripherals in Programmable Logic

Day 4:

- ❖ Creating and Adding Your Own Custom IP
- ❖ Writing Basic Software Applications
- ❖ Review Embedded System Design in Zynq using Vivado
- ❖ Create a SoC-Based System using Programmable Logic
- ❖ System Debugging using Vivado Logic Analyzer and SDK

Day 5:

- ❖ Introduction to Zynq Ultra Scale+ Devices
- ❖ Introduction to PetaLinux Tools
- ❖ Debugging using Vivado Logic Analyzer cores
- ❖ Memory Interfacing
- ❖ Extending Memory Space with Block RAM

Technical Resource Persons:

1. Prakash Ganesh, Lead Application Engineer
2. Nagendra Bandi, Application Engineer