#### **Registration Form**

Name of Applicant (first, last):	Affix passport
Fathers Name:	size photograph
Mothers Name:	
Date of Birth (DD/MM/YY):	
Gender:	
Category(General/SC/ST):	
Designation:	
Highest Qualification:	
Name and Address of the Institute/ Organization:	
City/town:	
Postal Address:	
City/town:	
Email:	
Landline Number (with STD code):	
Mobile Number:	
Do you need accommodation? (Yes/No):	
Transaction ID:	
Transaction Date:	
Issuing Bank	
Signature of the Applicant:	
I hereby agree to relieve Mr./ Ms./ Dr	
in case he/she is selected to attend the prog	ramme.
Signature and Seal of the Forwarding Authority	ority.
Name	

Name .

Designation.....

#### Note:

- 1) The Faculty/Staff are requested to submit the NOC from respective department before attending the session.
- The Faculty member belonging to SC/ST Category need to carry caste Certificate(both in original & photocopy).
- 3) The participant need to carry the Institute/Organization valid Identity Card (Both in Original & Photocopy).
- 4) Hostel facility is available on paid basis. For details please contact:
- Ms. J. Kokila (Ph. No. 9597818491)
- Ms. R. Shathanaa (Ph. No. 9442506338),

Guest House Tariff: Rs.300/- per participant-Single/Double sharing with AC. Hostel Tariff: Rs.150/- per participant – Double/Four sharing – Non AC.

#### **Course Coordinators from Academy**

Prof. Ratnajit Bhattacharjee

Principal Investigator, E&ICT Academy, IIT Guwahati.

Dr. Gaurav Trivedi

Co-Principal Investigator, E&ICT Academy, IIT Guwahati. Coordinators from NIT Trichy

#### • Ms. B. SHAMEEDHA BEGUM,

Assistant Professor, Department of Computer Science and Engineering, National Institute of Technology, Trichy

• Dr. RAJESWARI SRIDHAR,

Associate Professor, Department of Computer Science and Engineering, National Institute of Technology, Trichy

• Dr. N. RAMASUBRAMANIAN,

*Professor*, Department of Computer Science and Engineering, National Institute of Technology, Trichy

## How to Reach NIT Trichy

Trichy is connected by road to Chennai (320 km), Madurai (142 km) and to all major towns in South India by regular bus services. Tiruchirapalli is an important junction on the Southern Railway. It connects Madras, Thanjavur, Madurai, Tuticorin, Tirupati, Rameswaram, Bangalore, Coimbatore, Cochin and Mangalore. It has an international airport and is connected with Chennai (Madras), Singapore, Colombo, Kuwait, Sharjah, Calicut. Indian Airlines connects Trichy with Chennai, Sharjah, Calicut Kuwait and Colombo. Air Lanka Service connects Tiruchirapalli with Colombo.

NIT-T is in Tiruchirapalli (also know as Trichy or Tiruchy). It is located about 22 km from Tiruchurappalli Jn / Central Bus stand on the Trichy-Thanjavur Highway.The simplest and most economical way to reach NIT-T is by bus. Any city Bus at the Tiruchirapalli Jn will take you to the central bus stand. Board Thanjavur bound mofussil or route bus. The journey time from Trichy will be around 30 minutes. Taxis may charge around Rs.500/-

> Course Duration 40 Hrs

## An Initiative of Ministry of Electronics & Information Technology (MeitY), Government of India



Electronics & ICT Academy IIT Guwahati, Assam Faculty Development Programme on



Xilinx SoC: FPGA Based Design (30 July- 3 Aug, 2018)



#### Organized with support from



National Institute of Technology, Tiruchirappalli



Enabling Excellence

**CoreEL Technologies** 

Course Date: 30 July- 3 Aug, 2018 Last Date of Registration: 25.07.2018 (Online Registration Link will be open from 22.06.2018) Venue: NIT Trichy

#### **Objective of the Course**

This course will give you the foundation for FPGA design in Embedded Systems along with practical design skills. You will learn what an FPGA is and how this technology was developed, how to select the best FPGA architecture for a given application, how to use state of the art software tools for FPGA development, and solve critical digital design problems using FPGAs.

#### Who can Attend

This course is for anyone with a solid background in digital electronics and logic design, including engineering students; design engineers with either an electrical engineering, mechanical engineering, or computer science background

## **Assignments & Project**

- 1. Assignments will be of the following type:
  - MCQ based questionnaire.
  - Programming Assignments (Problem statement will be provided.)
- 2. At the end of the course "Project" will be assigned to the participants based on the Practical Case Studies.

## **Contact Details**



For Online Transfer Bank Name: State Bank of India Account Name: IIT Guwahati R and D E and ICT Academy Account No.: 36071160089 IFSC Code: SBIN0014262 Bank Name: State Bank of India Bank Address: IIT Guwahati, GHY- 39.

#### **Course Outcome**

The participants will be given a thorough understanding of the following topics:

- Rapidly architect an FPGA embedded system targeting the ARM processor of Zynq located on ZedBoard using Vivado and IP Integrator
- Extend the hardware system with Xilinx provided peripherals
- Create a custom peripheral and add it to the system
- Write a software application to access peripherals
- Accelerator Coherence port
- NEON<sup>™</sup> media-processing engine
- Single and double precision Vector Floating Point Unit (VFPU)
- Perform IP-level Bus Functional simulation verification
- Cache-coherent access to CPU data in the L1 and L2 caches
- Xilinx Microblaze softcore processor and its integration with Zynq SoC
- Vivado static timing analysis
- Explore various features of Zynq Soc for hardwaresoftware co-design
- Design and integrate peripherals using interrupts
- Analyze system performance
- Utilize hardware debugging technique
- Introduction to Zynq® UltraScale+™ MPSoC devices provide 64-bit processor
- Introduce the concept of "software-defined" systems on chip (SDSoC)
- Understand the capabilities and limitations of the SDSoC development environment
- Get hands-on experience creating application-specific systems on chip from C/C++ programs using the SDSoC
- Gain practical understanding of the SDSoC design flow.

For details of the programme and course contents etc., please log on to Electronics and ICTAcademy website: <u>http://eict.iitg.ernet.in/</u>

#### About E&ICT Academy

Electronics and ICT Academy is an initiative of Ministry of Electronics & Information Technology (MeitY) Ministry of Communications and IT, Govt. of India for Faculty/ Research Scholar Development Programme.

Academy has planned short term training programmes on fundamental and advanced topics in IT, Electronics & Communication, Product Design, Manufacturing with hands on training and project work using latest software tools and systems.

## **About NIT Trichy**

The National Institute of Technology (formerly known as Regional Engineering College) Tiruchirappalli, situated in the heart of Tamil Nadu on the banks of river Cauvery, was started as a joint and co-operative venture of the Government of India and the Government of Tamil Nadu in 1964 with a view to catering to the needs of manpower in technology for the country. The college has been conferred with autonomy in financial and administrative matters to achieve rapid development. NIT-T was registered under Societies Registration Act XXVII of 1975. The College has a total campus area of 800 acres.

## **Registration Fee Including GST**

# Registration Fee (Including Snacks, Lunch and course material)

- Rs. 2,950/- for Faculty, Lab Technicians & Project Staff.
- Rs. 1,475/- for Faculty members belonging to ST/SC category.
- Rs. 5,900/- for Industry Personnel, Student & Research scholar (Subjected to Availability of Seat).

## Venue

National Institute of Technology Tiruchirappalli - 620015 Tamil Nadu, INDIA Ph. No.: 0431 250 3000

Mode of Payment: Online Only (RTGS/NEFT)