

ABOUT THE PROGRAMME

Reprogrammable Silicon has become more and more common as a core technology used to build electronic systems. By integrating soft-core or hard-core processors, these devices have become complete system on a chip, steadily replacing general purpose processors and ASICs. In particular, high performance systems are now almost implemented with FPGAs. The main objective of this STTP is to introduce the participants to the significance of FPGA based implementation in the various application domains such as signal, image and video processing, physical layer implementation of wireless communication, secure implementation of cryptographic algorithms and power electronic systems. In addition, the participants will be exposed to the software development kit in Xilinx Vivado Platform through which hardware/software co-design and implementation can be done.

COURSE CONTENTS

FPGA based

- ❖ Embedded Systems
- ❖ Signal Interfacing and Conditioning
- ❖ Image Processing and Analysis
- ❖ Video Processing and Analysis
- ❖ Wireless Communications Applications
- ❖ Semiconductor Validation
- ❖ Hardware Security and Trust
- ❖ Power Electronic Systems
- ❖ Electric Power System Control

DEMONSTRATION

- ❖ Signal Processing (XADC) using Artix FPGA Board
- ❖ Real-time Video Processing using Genesys2 Board
- ❖ IOT Demonstration on Temperature Sensor using ZedBoard and Google Firebase Cloud.
- ❖ Image Processing using Python Productivity for Zynq based Pynq Z2 Board.

RESOURCE PERSONS

Experienced faculty from NIT Trichy, NIELIT Calicut and other renowned institutions, experts from industries will deliver lectures and conduct hands-on practical sessions.

ORGANIZING COMMITTEE

CHIEF PATRON

Shri. L. Gopalakrishnan

Managing Trustee

PATRON

Dr. R. Rudramoorthy

Principal

CONVENER

Dr. S. Subha Rani

Professor and Head, ECE

COORDINATOR

Dr. P. Saravanan

Associate Professor, ECE

CO-COORDINATOR

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Assistant Professor (SL), ECE

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AICTE Sponsored

One Week

SHORT TERM TRAINING PROGRAMME

on

**From Idea to Implementation:
Exploring the Potentials of FPGA
in Smart Environment**

17th - 22nd June 2019



Organized by

**Department of Electronics and
Communication Engineering
PSG COLLEGE OF TECHNOLOGY**
Peelamedu, Coimbatore - 641 004.
Tamil Nadu



ABOUT THE COLLEGE

PSG College of Technology, a premier institution for engineering, started in 1951, is well equipped with modern facilities of world class standards. The college is government-aided, autonomous, NAAC accredited, ISO 9001 certified and affiliated to Anna University. The college offers a total of 63 full time and part time programmes in Engineering, Technology, Science and Management at UG, PG and Doctoral levels. The institution holds extremely proud alumni at renowned institutions. The college maintains close interaction with several R&D institutions in India and abroad. It also has close collaborative links with industries. Several advanced centres are set up with financial support from the Ministry of Human Resources Development, DST and other agencies.

ABOUT THE DEPARTMENT

The Department of Electronics and Communication Engineering started in the year 1968, is celebrating its golden jubilee this academic year. Ever since its inception, it has been splendid in providing dynamic and quality engineers to the society till date. The Department has Undergraduate programme in Electronics & Communication Engineering and Post Graduate Programmes in Communication Systems, VLSI Design, Wireless Communication and Nanoscience & Technology offering high class technical experience to the students. In the Department, BE ECE, ME Communication Systems and ME VLSI Design Programmes have been accredited for 6 years (in 2018), 5 years (in 2017) and 5 years (in 2016) respectively by National Board of Accreditation (NBA). The strong industry oriented curriculum of the department equips the students with profound knowledge and special experimental skills to make successful career in renowned industries which helped in bagging the AICTE-CII award 2013 for the best industry linked institute in the stream of ECE. The department has involved in several projects sponsored by MeitY, DST, DRDO, UGC, AICTE etc.

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PSG College of Technology, Coimbatore - 641 004.

REGISTRATION FORM

Name Dr./Mr./Mrs. :
(in Block letters)

Designation :

Department :

Name of the
Institution :

Address :

Mobile :

Email id :

Is the Institution approved by AICTE? (Yes/No)

Accommodation required? (Yes/No)

DD Number and Date :

Bank and Branch :

Declaration by Applicant

The given information is true to the best of my knowledge. I agree to abide by the rules and regulations governing the programme. If selected, I shall attend the workshop for the entire duration.

Place :

Date :

Signature of the Applicant

SPONSORSHIP

This is to certify that _____ is a regular employee of our institution and is hereby sponsored for AICTE sponsored one week STTP on "From Idea to Implementation: Exploring the potentials of FPGA in smart environment" at PSG College of Technology, Coimbatore - 641 004 from 17.06.2019 to 22.06.2019. He/She will be permitted to attend the course for the entire duration if selected.

Place :

Date :

Signature of the Principal with Seal

ELIGIBILITY

This course is open to Faculty members and Research scholars of AICTE approved Engineering colleges and Polytechnic colleges.

REGISTRATION DETAILS

The registration is free for faculty members from AICTE approved institutions. However, the participants are requested to make payment of Rs. 1000/- by demand draft drawn in favour of "PSG CNCE" payable at Coimbatore, which will be refunded only when the participant attends the course completely. The number of participants is limited to 40 and the selection is based on first come - first served basis.

ACCOMMODATION DETAILS

Accommodation will be provided to the outstation participants subject to the availability.

Important Dates

Last Date for Registration : 10.06.2019

Intimation of Acceptance : 12.06.2019