**About the College**

PSG College of Technology, established in the year 1951 by the PSG & Sons' Charities Trust, is an AICTE approved autonomous institution affiliated to Anna University and is an ISO 9001:2008 certified institution. PSG College of Technology believes in creating and disseminating knowledge and skills in core and frontier disciplines through innovative educational programs, industrial training, research and consultancy and developing a new cadre of professionals with a high level of competence, deep sense of social commitment and ethics.

**About the ECE Department**

The Department of Electronics and Communication Engineering came into existence in the year 1968. 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 and Communication Engineering and Post Graduate Programmes in Communication Systems, VLSI Design, Wireless Communication and Nanoscience and Technology offering high class technical experience to the students. Our unique feature is to provide state of art facilities in collaboration with leading industries like Intel, Keysight Technologies, Freescale, Caterpillar and Texas Instruments. The department has bagged the name for the institution by receiving the AICTE-CII award for the best industry linked institute for the ECE programme - 2013. The department is involved in several projects sponsored by MIT, DST, DRDO, UGC, AICTE etc.

**Eligibility:**
- UG/PG Engineering Students
- Research Scholars / Faculty
- Industry Participants

**Registrations Details:**
- Fees: 200/-
- Registration for the workshop must be made online to the following bank account.

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<th>IFSC code</th>
<th>Bank Name</th>
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**Important Dates to Remember**

Last date for receipt of application: 14/12/2020

**Registration Link:**
[https://forms.gle/DoXiZ7dVzYXR8bgkX7](https://forms.gle/DoXiZ7dVzYXR8bgkX7)

**Organized by**
Department of Electronics and Communication Engineering
PSG College of Technology,
Coimbatore – 641004, Tamil Nadu
Phone: 0422-2572177, 2572477, 4344777

**E-certificates will be provided to all the active participants**

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**Workshop Highlights**

- Prototype an embedded system using the ARM processor in Zynq Board using Vivado and IP Integrator
- Use Xilinx Design Constraints to communicate with external world
- Extend the hardware system with Xilinx provided peripherals
- Create a custom peripheral and integrate with the system
- Debug hardware design using Vivado Hardware Analyzer
- Use Vivado HLS to generate an IP-XACT compliant hardware accelerator
- Explore various features of Zynq Soc for hardware software co-design

**Contents of the Workshop**

**Day 1**
- Introduction to Modeling of System on Chip (SoC)
- Lab 1: From HDL design to implementation
- Lab 2: Creating an embedded system
- Lab 3: Addition of IP cores in Programmable Logic (PL)

**Day 2**
- Lab 4: Creating Custom IP
- Lab 5: Addition of Custom IP to the design
- Lab 6: A Case study with Image Processing

**Resource Person:**

**Dr K Rajalakshmi, Associate Professor, Department of ECE, PSGCT**

She has teaching experience of around 23 years and her current research interest is to develop System on Chip (SoC) for the Edge Nodes in Internet of Technology (IoT) Applications and VLSI Signal Processing. Currently she is a Senior Member in the IEEE. She is awarded with NPTEL STAR Motivated learner certificate. She is guiding two PhD scholars in the area of Hardware Security and VLSI Signal Processing. She is the co-coordinator of Special Manpower Development Programme for Chip to System Design sponsored by MeitY, Government of India. She has delivered several guest lectures in AICTE SPONSORED Summer/Winter Schools and STTP. She has organized workshops and FDPS at national and international levels.

**CONVENOR**

Dr V Krishnaveni,
Professor and Head-In charge, ECE

**COORDINATORS**

Dr K Rajalakshmi, Associate Professor, ECE
E-Mail: krl.ece@psgtech.ac.in

Mrs N Devipriya, Assistant Professor, ECE
E-Mail: ndp.ece@psgtech.ac.in

**Technical Assistance**

Mr S Udaya shankar, Project Associate
Mr P Madhan Kumar, Lab Engineer

**Contact:** 9486895278, 9994534485