



**VIT**<sup>®</sup>

**Vellore Institute of Technology**  
(Deemed to be University under section 3 of UGC Act, 1956)

## School of Electronics Engineering

### Department of Micro and Nano Electronics

**Cordially invites you for**

**One-day Workshop**

**on**

## **An Interactive FPGA SoC Design Workshop**

**29<sup>th</sup> March 2025 (9:00 AM - 5:00 PM)**

**Venue: TT237A(FN), and TT727(AN)**

#### **Who Can Attend**

**Research Scholars**

**Faculty**

#### **Resource Person**

**Dr. Antony Xavier Glittas X,**

**Dr. Vetriveeran Rajamani, Asso. Prof. Grad. 1,**

**VIT University, Vellore**

#### **Chairperson**

**Dr. Jasmin Pemeena Priyadarisini,**

**Professor & Dean, SENSE.**

#### **Convenor**

**Dr. Sriadibhatla Sridevi,**

**Professor & Head,**

**Department of Micro & Nano Electronics,  
SENSE.**

#### **Coordinators**

**Dr. Antony Xavier Glittas, Asst. Professor Sr.,**

**Dr. Vetriveeran Rajamani, Asso. Prof. Grad. 1,**

**Department of Micro & Nano Electronics,  
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**An E-certificate will be provided to all the participants**

# Agenda

Session	Topics
<b>Session 1 (09:00 AM – 10:30 AM)</b>	<ul style="list-style-type: none"><li>➤ Introduction to FPGA SoC Architectures</li><li>➤ Vivado Design Flow using PYNZ Z2 SoC</li></ul>
<b>Session 2 (10:45 AM – 12:30 PM)</b>	<ul style="list-style-type: none"><li>➤ Vivado Block design example</li><li>➤ Custom Block design</li></ul>
<b>Session 3 (1:30 PM – 3:00 PM)</b>	<ul style="list-style-type: none"><li>➤ PYNQ Z2 overlay</li><li>➤ Loading the bitstream &amp; device tree setup</li><li>➤ Writing Python APIs for overlay interaction in Jupyter Notebook</li></ul>
<b>Session 4 (3:15 PM – 5:00 PM)</b>	<ul style="list-style-type: none"><li>➤ Implementation of the AI algorithm in the ZYNQ PS system</li><li>➤ Vitis HLS Design Flow: C++ to Hardware</li></ul>