

**M.KUMARASAMY COLLEGE OF ENGINEERING, KARUR**  
**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING &**  
**IETE STUDENTS FORUM**

**EVENT REPORT**

**Title: Hands-On training "RTL Design and Implementation of Digital System using PYNQ Board"**

**Venue: Digital Signal Processing Laboratory**

**Date: 25.09.2026**

**Time: 9.30 AM to 4.30 PM**

A Hands-on Training program titled **“RTL Design and Implementation of Digital System using PYNQ Board”** was successfully conducted at M. Kumarasamy College of Engineering. The hands-on training programme was organized by the Department of Electronics and Communication Engineering and IETE Students Forum. The event was efficiently coordinated by Mrs. M. Sentamilselvi. The training sessions were expertly handled by Dr. K. Sivanandam, who guided the participants through clear explanations, practical demonstrations and interactive activities.

The Head of the Department of Electronics and Communication Engineering, Dr. N. Mahendran, delivered the Presidential Address. In his speech, he emphasized the vital role of such programmes in enhancing the technical competencies of students. He highlighted the importance of developing software skills along with core domain knowledge to improve employability prospects. He also encouraged the students to understand current industry requirements and prepare themselves to meet emerging professional challenges.

Students from various engineering colleges actively and enthusiastically participated in the programme, demonstrating keen interest in gaining practical exposure to advanced digital and FPGA-based design techniques. The interactive sessions encouraged participants to clarify their doubts and engage in meaningful technical discussions.

During the training, the fundamental concepts of FPGA architecture, including logic blocks, interconnections, and configurable resources, were explained clearly and systematically. The trainer also provided a comprehensive introduction to Verilog Hardware Description Language (HDL), covering modules, data types, operators, and design hierarchies. The participants were guided through the process of writing, simulating, and synthesizing Verilog code for basic digital circuits. Step-by-step demonstrations helped the students understand how design specifications are translated into practical hardware implementations. Special emphasis was placed on implementing the developed designs using the PYNQ board, enabling the participants to bridge the gap between theoretical concepts and practical applications. The hands-on sessions provided participants with practical experience in configuring the FPGA, generating and uploading bitstreams, and verifying the outputs in real time. The event concluded with the distribution of certificates to all the participants, marking the successful completion of the hands-on training programme.

## EVENT GALLERY

