

# Chettinad College of Engineering & Technology, Karur

## Department of Electronics and Communication Engineering

### News Report

**Programme Name** : Value Added Course on “PIC Microcontroller Based Embedded Systems”

**Resource Person(s)** : 1. Mr.K.Gopalakrishnan, Manager.  
2. Mr.E.Kishok Kumar, Embedded Developer,  
Galwin Technology, Trichy

**Course Coordinator** : Mr.M.Prabhakaran, AP/ECE

**Date** : 23.07.2025 to 25.07.2025

**Venue** : DSP & VLSI Laboratory

**Number of Participants** : 58

#### Description:

The Department of Electronics and Communication Engineering organized a three-day intensive course on "PIC Microcontroller Based Embedded Systems" with the objective of equipping students with practical knowledge and application-level skills essential for embedded systems development.

The sessions were handled by expert resource persons:

- **Mr. K. Gopalakrishnan**, Manager, Galwin Technology, Trichy
- **Mr. E. Kishok Kumar**, Embedded Developer, Galwin Technology, Trichy

During the course, students gained in-depth knowledge of:

- PIC Microcontroller architecture and registers
- Programming using **MPLAB IDE**
- Simulation and testing using **Proteus software**
- Real-time execution using the **PIC16F877A Microcontroller Kit**

Students practiced writing programs in MPLAB IDE, dumping them into the PIC16F877A microcontroller kit, and executing them on real-time hardware. They successfully implemented and tested applications involving LEDs, switches, LCDs, and various sensors interfaced with the PIC microcontroller.

By the end of the course, students were capable of designing and implementing PIC microcontroller-based systems for various sensor-based applications.

The course proved to be a highly beneficial initiative, significantly enhancing the technical skills and employability of ECE students.

### Case Study done by Students:

1. Blinking LEDs using Timers
2. Displaying values on LCD
3. Reading sensor data via ADC
4. UART based communication between PIC and PC

### Training Outcomes:

- Understand the architecture and functionality of the PIC microcontroller.
- Write embedded C programs using MPLAB IDE.
- Interface PIC with peripheral devices like LCDs, sensors, and keypads.
- Develop and test embedded applications in real-time.
- Improve problem-solving skills in embedded system design.

### Event Photos :



