

# Sapthagiri College of Engineering

14/5, Chikkasandra, Hesaraghatta main road, Bengaluru-560057 (Affiliated to Visvesvaraya Technological University, Belgaum & Approved by AICTE, New Delhi)

## **DEPARTMENT of ECE**

### **WORKSHOP REPORT ON**

"ARM 7"

**Date:** 17.09.2016 to 19.09.2016

#### Objective of the workshop:

The objective of this workshop is to provide an opportunity for students to get aware of ARM7 thereby developing a stepping stone towards the development of an Embedded System.

Venue: DSP and HDL Lab, Faraday block, SCE

Coordinated by: Prof. Vani V and Prof. Vani A

In Association with: M/S V&V Technologies, Bengaluru.

Number of Participants: 58

Inauguration and Lamp Lightning by Principal Dr. Aswatha Kumar, HOD Prof.Sandhya Rani MH, Mr. Kumaraswamy and Mr. Kumaraswamy from M/s V&V Technologies, Bangalore.





Principal Dr. Aswath Kumar M and Prof. Sandhya Rani MH, HOD ECE, SCE addressing the participants.

#### **Summary Report:**

The workshop is aimed at helping the students of final year in improving their technical skills in embedded domain as education is incomplete without IT today. This workshop will cover the aspects of embedded system design, applications, and current scenario in the industry. The main theme of this workshop is the hands on training on ARM 7 processor. Its architecture, instruction set and programmer's model will be demonstrated with the popular C language in windows platform. The course was practical oriented. In this workshop participants worked directly on the ARM7 platform and developed programs for various interfaces and run them on the ARM 7 hardware.



Mr. Kumaraswamy K from M/s V&V Technologies, Bangalore delivering speech to students.

On the first day students were exposed to understand the basic concepts of ARM7 processor and its trends, Introduction to ARM Processor. The theory session extended with introduction to LPC2148 series, System connection block, Memory Mapping, Vectored Interrupt Controller, Pin Configuration by Mr. Kumaraswamy K from M/s V&V Technologies, Bangalore. Afterwards in the laboratory session, expert started with the basic examples students understood how to work on Keil version 4 tool.

On the second day students were exposed to more examples including Kiel Programming on LPC2148 Controller, Port Programming, LED & LCD Programming (4 Bit & 8 Bit), Motor interfacing, Key Pad, ADC, ADC with LCD, UART0, UART1 interfacing.

On the last day Expert gave brief about Different way of programming using ADC, UART 0/1 & LCD, RFID, Zigbee interfacing, GSM interfacing and Mini Project. They also briefed how to do debugging and demonstrated the same.

This workshop proved to be an important one for students and faculty members who attended the same. The entire workshop was co-ordinated by Prof.Vani A & Vani V and student Coordinators.





Students and faculties participating in the ARM 7 workshop.

(HOD ECE)