

# **ANDROID SYSTEM DEVELOPMENT**

CODE: (ASD/TRA-01B)

## **1. INTRODUCTION TO ANDROID**

- a. A brief history of android
- b. Android System Architecture.
- c. Overview of Android Linux kernel
- d. Android Native Libraries
- e. Dalvik and Android Runtime Environment
- f. Application framework.

## **2. PORTING ANDROID SYSTEM PRE-REQUISITES**

- a. Introduction to the BSP
- b. ARM Tool chain for Android System development
- c. Cross compilation, patching, configuration and porting the Android kernel
- d. Preparing host working setup on Linux OS.

## **3. INTRODUCTION TO mini2440 ARCHITECTURE**

- a. Introduction to Embedded Mobile devices
- b. Introduction to development boards and hardware
- c. Introduction to ARM Processor, ARM architecture and Arm programmer's model
- d. Understanding the mini2440 development board

**4. PORTING ANDROID FOR mini2440 ARM DEVELOPMENT BOARD.**

- a. Configuration and compilation of Android kernel.
- b. Preparing customized file system with native libraries and Application
- c. Inserting new modules in the Android System Architecture.
- d. Porting new application to mini2440 board.

**5. LAB SESSIONS**

- a. EMULATOR
- b. HARDWARE (mini2440)

**6. PROJECT WORK**

S-CUBE™