



# Android Training



Copperseeds Technologies Pvt.Ltd.

Android Training Division

Kinfra Park, Koratty

## **Android Training**

Android is an Open source mobile OS developed by the Open Handset Alliance led by Google, based on Linux 2.6 kernels. Android is an emerging technology with endless possibilities. Today it runs mobile phones and tablets; tomorrow it might run our world.

Android Training Course is a hands-on training for designing and building mobile applications using Android open-source platform. Students will learn skills for creating and deploying Android applications, with particular emphasis on software engineering topics including software architecture, software process, usability, and deployment.

## **Course Description**

Android developers are in high demand, everywhere. They are highly paid and well respected. A well designed training program and some dedication can guarantee you a bright future and a lucrative career in Android.

## **Course Objective**

- Transforming a student into a truly professional Android Developer.
- To enable the students to develop quality Android Application.
- To provide solid understanding of the concepts.
- To provide hands on practical training on latest technology.

## **Course Expectations**

After attending this program, the students will have a complete understanding of application development on the Android platform and will get the confidence to take on the toughest challenges of software industry and to deliver outstanding Android apps.

## **Who can attend?**

Eligibility: +2/Diploma/BA/BCom/BSc/BCA/  
BTech/MA/MCom/MSc/MCA/MTech etc.

(Non IT students and undergraduate may undergo the specifically designed 'bridge program')

## Technology

Operating System	Microsoft Windows7, Windows XP, Linux
Tools	Android SDK, Eclipse IDE with ADT Plug in
Programming Languages	Core Java
Database	SQLite

## Course Overview

This course will transform a candidate into a truly Expert Android developer. To get started with Java language and gain professional programming skills in Android development.

## Learning modules

- Core Java for Android
- Object Oriented Programming
- Design Patterns
- Using the eclipse based development environment

- Android GUI architecture.
- Internal and external storage (Files, directories and accessing SD cards.)
- SQLite and Content providers.
- Utilize the power of background services and broadcast receivers.
- Android Multimedia Framework and Camera
- Geo location and Google Maps
- Touch screen
- Develop and Deploy Android applications

## **Training methodology**

### **Theory Lectures:**

Supported by PowerPoint presentation and video illustration.

### **Workshop modules:**

Lectures generally follows a workshop. A lab session for the theory class. Illustrates what presented in the lecture. A lab assistant/trainer guides the student to explore, code and try some samples.

## **Exercises:**

Short assignments to be solved by the students, with guidance

## **Project:**

The students as a team develop a project sometimes a real time project, by applying all the knowledge acquired through their Android modules.

## **Detailed Course Outline**

- Android OS and Android SDK
- Dev Tools
- Design with User Interface elements
- More UI
- Activities and Intents
- Permissions, Maps and persistence
- Background processing
- UI Inputs, Accelerometer, Sensors Location and Networking APIs
- Persistence: Part2
- Media
- Google Play
- Latest features

- Advanced Camera features
- Bluetooth API
- Media streaming using RTSP
- Concurrency(Threads), Handlers, Async Tasks, Notifications
- Graphics with Canvas and OpenGL ES
- Drawables, OpenGL ES drawing in 2D and 3D, case study of an 3D game in OpenGL
- NFC API
- Google Wallet for Digital Goods API
- Google cloud data store
- Introduction to Android NDK

\*\*\*