

**Course Name: Certificate Course in Android Programming** 

**Course Objective:** This course introduces the concepts of Android Programming. Prerequisite: Candidates should have knowledge of Programming and database concepts.

## **Teaching Schema:**

Sr. No.	Module Name	Duration (Hrs.)
1	Android Programming	80

## **Detailed Course Contents**

Android Programming Introduction of android, Why develop for android, Activities and Task, Android SDK features, Development Environment of Android SDK, Creating android activities, Fundamental android UI design, Activity Life cycle, Starting Activities and Getting Results, Saving Persistent State, Permissions, Passing Information between Activities, Intents, Android Manifeast file, permission, adapters, dialogs, Android Technique for saving data, Database in Androids, Data Storage and Content Providers, Maps, Geocoding, Location based services, Toast, Alarm Manager, Action Bar, ToolBar, Menus, Recycler View, Material Design, Introducing sensor manager, Managing network and WiFi connection, Play audio or video, Playing from a Raw Resource, Playing from a File or Stream, Audio Capture, Simple Graphics inside a View, Drawables, Shape Drawable, Creating from resource images, Creating from resource XML, Nine-patch, Tween Animation, Frame Animation, Permission, Broadcast Receiver, Service, Service Lifecycle. Web Services API (JSR-172), Fragments, JSON Parsing, Push Notification

## List of Text/Reference Books

• Android Application Development by Rick Rogers / O'reilly

## Requirements (S/W and H/W)

- Android studio, Bundle for windows
- Android Phone with latest Android Version