

Pre-requisite: Completed Value Added Course on 'Mobile Development'

**Objective:** This course will familiarize the students with the architecture, protocols, mobile databases and Mobile Applications using Android.

**Course Outcome:** After successful completion of course the students will be able to

- Understand fundamental concepts of GSM, GPRS, CDMA, U.S.S.
- Comprehend Mobile database concepts such as caching, data delivery, selecting tables and indexes in various Mobile OS.
- Develop interactive Mobile applications using android platform
- Test and debug mobile applications on virtual and physical devices.

**UNIT-I**

Introduction to Mobile Applications, Main Stages in development of Mobile Applications  
 Introduction to Android and Emulators - Android Virtual Device, Android Studio, Creating an App in Android Studio-II, Building an App using Java Programming in Android Studio-III, User Interface with Views-Text View, EditText, Image View, Spinner, CheckBox, RadioButton, Date Picker, Radio button, Check Box button Using LinearLayout and RelativeLayout, Using GridLayout, Adding functionalities to an App, Testing and running an App.

**UNIT-II**

Basics of App Resources - Strings, Drawable, Font etc., Using App resources, Android Activity Life Cycle and related methods, Android Intent and Manifest, Explicit and Implicit, Building an App using Dialogs in Android, Building an App Session-IV, Using Database in Android App, App Call, Participants (Practical)