

Module 1:

Introduction to Mobile Technologies.
Detailed description of Industrial working techniques.
(SDLC & Agile)
Introduction to SQLi and SQL Queries.
Introduction to mobile programming.
Java Basics
JRE, JVM, JDK
Variables, Data Types, Control Structures
Arrays and Structures in Java
Object Oriented Programming Features
Java AWT and I/O Classes

Module 2:

Introduction to Android- Platform, Versions, tools
Android Architecture
Tools required for Android Programming
Installation
Working with Android Studio (Official Google App)
Understanding Menu of Android Studio
Detail on basic components needed in all Android Applications
Activity class and its life cycle & reconfiguration
Android Manifest File

Module-3:

GUI Infrastructure
Intent Class and Permissions
Fragment Class
Android widget toolkit
Android Form and its events
Understanding Android Menus
Dialog and Pickers
User Interface Classes
Android persistence and Controls
File System in Android
SD Card Integration

Module-4:

Introduction to Database
Database Connectivity
Creating SQLite Database
SQLite database queries
CRUD operations using SQLite

Module-5:

Understanding and Working with Action Bar
Web Services
Parsing

- XML Parsing
- DOM Parsing
- Pull Parsing
- SAX Parsing
- JSON Parsing

Location services in Android
Google Map Services
GEO Coding and Tagging



Module-6:

Graphics & Animation
Multimedia features in Android
Animation in Android
Background Process

- Alarm Manager
- Push Notification
- Broadcast Services

Android Phone Components

- Wake/Sleep
- Text to Speech
- Camera & Camcorder
- Accessing Phonebook and Applications
- Calls & SMS
- Sensors
 - Bluetooth and Wifi

Service Class
The Content Provider Class
Data Management

Module-7:

Debug and Execution on Real Android Devices
Deployment
Registering on Android Play Store