AJLON TECHNOLOGIES

Unit 1 – Introduction to Java and Android

- Android Stack Introduction.
- Installing Android and creating first app on emulator
- Android Architecture and building blocks
- Android App build process.
- Java overview– Data types, Loops, Conditionals and Operators
- Android UI– resources, themes, threads etc
- Debugging in android
- Assignments on Java Classes, Objects, Methods, Instances etc
- Activities, Receivers, Adapters and Providers
- Telephony System Architecture of Android

Unit 2 – Systems Programming and JNI Concepts

- Introduction to System programming in Android
- Java interface
- Native library implementation
- Building the sample native library
- Using native functions in Java code
- Security and Permissions.

Unit 3 - Android Graphics and Multimedia

- Basic Graphics - Input Handling, Audio / Video playback
- Assignments on playing audio and playing video
- Accessing Files system, SD Cards
- SQLite overview, Data Binding, Content Provider
- Assignments and exposure to Lab infrastructure
- UI design aspects of Apps
- Gestures/touch/click handling
- Instantiate UI elements at runtime
- Views and Interacting with views

Unit 4 – 3D graphics in OpenGL and Android Widget

- OpenGL Introduction
- Using Threads and Models
- Texture in OpenGL
- Making a application in OpenGL
- Other standard views in Android
- Android Widget Development

Unit 5 – Android Networking

- Accessing the Internet
- Using Web services
- Using Java and Java Script
- Location Sensing
- Client Server Programming
- Working with XML/JSON
- SMS

Unit 6 – Complete App Development

- Developing live App and modules
- Exposure to development on Phones/Tablets/Set top   box.
- Developing custom launchers and skins.
- Full software lifecycle exposure from requirement to   market launch.
- Applications utilizing location and maps