

## Training Program on Secure Android Development

Date: 16<sup>th</sup> March 2016.

Mobile Application Development is very fast growing industry trend and thus becoming very important to learn for the students. This subject is not covered in the regular programs of MTEch, MCA and BTech.

The main objective of the training program is to give hands on practical exposure to students along with strong theoretical concepts of mobile application development. The training program will help students to develop secure applications on Android Platform.

The content of the program are designed by considering the basic and advanced concepts of Android. Sessions on security aspects for mobile application development are also planned in the syllabus. The Session-wise details of the programme is as under:

Session 1	Overview of Android Stack, Android Features, Introduction to OS layers, <b>Deep Overview in Android Stack:</b> Linux Kernel, Libraries, Android Runtime, Application Framework
Session 2	Java Basics (OOPS, Java Basics)
Session 3	Java Basics (Advance Concepts)
Session 4	Android Components: Activities, Services, Broadcast Receivers, Content Providers
Session 5	Intent + Service + Fragment
Session 6:-	UI Components (View Hierarchy, Layouts, Menu ): Activities, Views, layouts and Common UI components, Creating UI through code and XML, Activity lifecycle, Intents, Communicating data among Activities
Session 7	MVC (Adapter Implementation)
Session 8	Data Storage: Shared Preferences, Android File System, Internal storage, External storage, SQLite, SQLiteOpenHelper and creating a database, Opening and closing a database, Working with cursors Inserts, updates, and deletes, Network
Session 9	Information Security 1 (Encryption, Security Services)
Session 10	Application Security + User Interface Best Practices

16/03/2016

CHANDRU SURESH

Assistant Prof. Deptt of IT

I GDTUW.