

CLUSTER UNIVERSITY SRINAGAR

(SYLLABUS)

Course Code	BCA-CR6103
Course Title	Android Programming
Semester	BCA 6 th Semester
Course Type & Credits	Discipline Specific Elective 04 Credits (L) + 02 Credits (P) = 06 Credits

UNIT I

Introduction, Android Stack & Application Structure, Setting up development environment: Installing & Using Eclipse with ADT Plugin, Installing & Configuring Android Studio, , Dalvik Virtual Machine, , Views & Notifications, Intent & Intent Filters, Android API Levels, Android Manifest File, User Permissions, Resources & R.java, Layout & Drawable Resources, Activities.

UNIT II

Services, Broadcast Receivers, & Content Providers, Form Widgets, Text Fields, Layouts, Button Controls, Toggler Buttons, Spinner(Combo boxes), Option Menu, Context Menu, Sub Menu, Images & Media, Alert Dialogues & Toast, Popup,

UNIT III

ArrayAdapters, BaseAdapters, ListView & ListActivity, GridView using Adapters, Custom Tabs, String Arrays, Creating lists, Threads: runOnUiThreadThread, Worker Thread, Handlers & Runnable, AsyncTask, Sensors, Using Orientation & Accelerometer Sensors, Basic working of Services: Telephony, Camera, Bluetooth, Wi-Fi.

UNIT IV

Introduction to SQLite Programming, SQLiteOpenHelper, SQLiteDatabase, Connecting with the Database, Insert, Update, Delete, Retrieve Operations, Cursor, Reading & Updating Contacts & Bookmarks, Web Services, HTTP Client, Working with XML & JSON, Security & Database Permissions.

Recommended Readings.

1. Android Programming, O'Reilly Media, Bill Phillips.
2. Android Programming for Beginners, John Horton.
3. Professional Android, Reto Meier.
4. Android Programming: Pushing the Limits, Erik Hellman