

**Uka Tarsadia University**



**M.Sc. (C.A.)**

**Mobile Application Development (040020301)**

**3<sup>rd</sup> Semester**

**EFFECTIVE FROM JUNE-2012**

## Uka Tarsadia University

### M.Sc. C.A. (3<sup>rd</sup> Semester) Syllabus, June 2012

**Prerequisite:** Knowledge of Core java Programming & database concepts.

**Aim and Objective:** To provide comprehensive knowledge of developing software for the mobile, & make student able to create mobile application on the Android platform.

**Subject Code:**  
040020301

**Subject:** Mobile Application  
Development

**Total:** 48 Hrs. [Lecture:4 Tutorial:0 Practical:3]

- 1. Introduction to Android [08 Hrs.]**
  - 1.1 History of Mobile software Development
  - 1.2 The Open handset Alliance
  - 1.3 The Android Platform
  - 1.4 Android SDK
  - 1.5 Building sample Application
  - 1.6 Android Terminologies
- 2. Android Application Design Essentials – I [08 hrs.]**
  - 2.1 Using Application Context
  - 2.2 Performing Application Tasks with activities
  - 2.3 Working with Services
  - 2.4 Receiving & Broadcasting Intents
- 3. Android Application Design Essentials – II [08 hrs.]**
  - 3.1 Android Manifest File & its common settings
  - 3.2 Using Intent Filter, Permissions
  - 3.3 Managing Application resources in a hierarchy
  - 3.4 Working with different types of resources
- 4. Android User Interface Design Elements [09 hrs.]**
  - 4.1 Exploring User Interface Screen Elements
  - 4.2 Designing User Interface with Layouts
  - 4.3 Drawing & working with Animation
- 5. Using Android API'S [08 hrs.]**
  - 5.1 Using Android Data & Storage API
  - 5.2 Managing Data using SQLite
  - 5.3 Sharing Data between Application with Content Providers
- 6. Other API'S & Deploying Application [07 hrs.]**
  - 6.1 Using Android Networking API'S
  - 6.2 Using Android Web API'S

**MODES OF TRANSCATION (i.e. Delivery)**

- Teacher can use chalk-talk/discussion methods.
- Also for some topics where visual representation is necessary teacher can use Multimedia tools for the content delivery.

**Teachers Activities/Practicum:**

The following activities should be carried out by the teachers.

1. Teacher must guide students for developing projects.
2. Provide relevant information to students for other various Mobile software development tools.

**Student Activities/Practicum:**

The following activities may be carried out by the students.

1. Students must develop a mini project on Android platform.
2. Students can search on Internet for various other Mobile software development platform and prepare a presentations on it.

[Weightage to be given in Continuous Internal Evaluation]

**Text Book:**

1. Lauren Darcey and Shane Conder, “ Android Wireless Application Development”, Pearson Education, 2nd Edition

**Reference Books:**

1. Reto Meier, “Professional Android 2 Application Development”, Wiley India Pvt Ltd (2011)
2. Mark L Murphy, “Beginning Android”, Wiley India Pvt Ltd(2009)
3. Sayed Y Hashimi and Satya Komatineni, “Pro Android”, Wiley India Pvt Ltd(2009)