



GUJARAT UNIVERSITY

BCA SEM-V SYLLABUS

COURSE TITLE		SEC301 Mobile Application Development
COURSE CODE		SEC-301
COURSE CREDIT		3
Session Per Week		3
Total Teaching Hours		40 HOURS
AIM		
To develop the skill about the basic mobile application development using Android		
To create android apps with different features and basic functionalities		
LEARNING OUTCOMES		
On the completion of the course students will:		
1.Understand the meaning and syntax of android programming		
3.Understand the basic android terminology and technology		
4.To design activities using simple and advanced controls of android		
5.To understand the fundamental concepts of mobile app development		
DETAIL SYLLABUS		
UNIT	TOPIC / SUB TOPIC	TEACHING HOURS
1	Introduction to Android	10
	<ul style="list-style-type: none"> ❖ History of Mobile Software Development ❖ The Open Handset Alliance ❖ The Android Platform ❖ Android SDK ❖ Building a first Android application ❖ Anatomy of Android Application 	4

	<ul style="list-style-type: none"> ❖ Android Terminology ❖ Context, Activity, Services, Intents ❖ Application tasks with activities ❖ Activity Life cycle ❖ Managing activity transitions with intents ❖ Working with services ❖ Receiving and Broadcasting intents 	6
	Android Application Design	10
2	<ul style="list-style-type: none"> ❖ Using Android Manifest File ❖ Editing Manifest file using Eclipse ❖ Editing Manifest file manually ❖ Managing applications identity and system requirements ❖ Registering activity with manifest file ❖ Working with permissions 	4
	<ul style="list-style-type: none"> ❖ Managing Application Resources ❖ Working with different types of resources ❖ String, color, Dimensions, Drawables, images, animation, menu 	6
	User Interface Elements	10
3	<ul style="list-style-type: none"> ❖ Android views and layouts <ul style="list-style-type: none"> ➤ TextView, Spinner, Buttons, Checkboxes, Switches, RadioGroups ➤ ToggleButton, Date and Time Controls ➤ Progressbar, Seekbar, Ratingbar, Chonometer, clocks 	6
	<ul style="list-style-type: none"> ❖ User Interfaces and Layouts <ul style="list-style-type: none"> ➤ Viewgroups ➤ Built-in Layout classes ➤ FrameLayout, LinearLayout, RelativeLayout, TableLayout, GridLayout ➤ Multiple Layouts on a screen 	4
	Data driven Containers	10
4	<ul style="list-style-type: none"> ❖ Listview, Gridview , Galleryview, ArrayAdapter, CursorAdapter ❖ AdapterView, ListActivity, TabActivity 	6
	<ul style="list-style-type: none"> ❖ Fragment Lifecyle ❖ List Fragment ❖ WebView Fragment ❖ Working with Dialogs ❖ Types of Dialogs ❖ Lifecycle of a Dialog 	4

TEXT BOOK/S:

❖ Lauren Darcey and Shane Conder, “Android Wireless Application Development”, Pearson Education
REFERENCE BOOKS:
❖ Reto Meier, “Professional Android 2 Application Development”, Wiley India Pvt Ltd (2011) ❖ Mark L Murphy, “Beginning Android”, Wiley India Pvt Ltd (2009) ❖ Sayed Y Hashimi and Satya Komatineni, “Pro Android”, Wiley India Pvt Ltd (2009)
WEB RESOURCES:
❖ https://developer.android.com/training/index.html ❖ http://www.androidhive.info/2011/ ❖ https://developer.android.com/guide/components/index.html
REQUIRED SOFTWARE/S
❖ Android Studio 2.3 (https://developer.android.com/studio/index.html) ❖ Java version 1.8