

Bachelor of Computer Application
(Semester – V and Semester - VI)
Saurashtra University
Effective from June - 2018

CS-31 Mobile Computing using Android and iPhone				
Sr. No	Topic	Detail	Weight age In %	Approx . Lectures
1	Introduction to Android Android Application Design	<ul style="list-style-type: none"> • The Open Handset Alliance • The Android Platform, Android SDK • Building a sample Android application • Anatomy of an Android applications • Android terminologies • Application Context, Activities, Services, Intents • Receiving and Broadcasting Intents • Android Manifest File and its common settings • Using Intent Filter, Permissions • Managing Application resources in a hierarchy • Working with different types of resources 	20	12
2	Android User Interface Design	<ul style="list-style-type: none"> • User Interface Screen elements <ul style="list-style-type: none"> ○ Button, EditText, TextView, DatePicker, TimePicker, ProgressBar, ListView, GridView, RadioGroup, ImageButton, Fragement • Designing User Interfaces with Layouts <ul style="list-style-type: none"> ○ Relative Layout, Linear Layout, Table Layout etc • Dialogs • Drawing and Working with Animation <ul style="list-style-type: none"> ○ Frame By Frame Animation ○ Twined Animation 	20	12
3	Database Connectivity Using SQLite and Content Provider	<ul style="list-style-type: none"> • Using Android Data and Storage APIs • Managing data using SQLite • Sharing Data Between Applications with Content Providers 	20	12

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4	Location Based Services (LBS), Common Android API, Notifications, Services, Deployment of applications	<ul style="list-style-type: none"> • Using Global Positioning Services (GPS) • Geocoding Locations • Mapping Locations • Many more with location based services • Android networking API • Android web API • Android telephony API • Notifying the user, Notifying with the status bar • Vibrating the phone • Blinking the lights • Customizing the notifications Services • Application development using JSON in MySQL • Publish android application 	20	12
5	Introduction To iPhone	<ul style="list-style-type: none"> • Introduction To X-Code (IDE) • Framework, Design User Interface for button, text view, text field, etc. • Creating And Building Simple Application • Cocoa Touch And MVC 	20	12
TOTAL			100	60

Notes: Android application must be developed using ANDROID STUDIO.

Reference Books:

- (1) Android Wireless Application Development By Lauren Darcey and Shane Conder, Pearson Education, 2nd ed. (2011)
- (2) Beginning iOS 6 Development By David Mark , Jack Nutting , Jeff LaMarche , Fredrik Olsson Apress Publication.
- (3) Using SQLite By Jay A. Kreibich, Publisher: O'Reilly Media
- (4) Mobile Computing using Android and iPhone [ISBN: 978-93-81786-93-2] by Bharat & Company
- (5) Professional Android 2 Application Development Reto Meier, Wiley India Pvt Ltd (2011)
- (6) Beginning Android Mark L Murphy, Wiley India Pvt Ltd