

CSE11133	Mobile Computing and Android	L	T	P	C
Version 1.0	Contact Hours 45	3	0	0	3
Pre-requisite/Exposure					
Co-requisite					

Course Objectives:

- Encourage students to learn by building increasingly more sophisticated and meaningful mobile applications for Android
- Enable students to build their own complete Android application incorporating most of the key aspects of the platform

Course Outcomes:

CO1: Explain concepts of JAVA and SQL

CO2: Understand basic concepts of Android

CO3: Build basic applications, interfaces and UI

CO4: Explore advanced concepts of Android

CO5: Utilize various services provided by android.

Course Description:

-source platform. It will be a

combination of lecture and laboratory course which will help the student understand the philosophy of developing

Course Content:

Units	Lecture Hours
Unit-I: JAVA Concepts - OOPs Concepts, Inheritance in detail, Exception handling, Packages & interfaces, JVM & .jar file extension, Multi threading (Thread class & Runnable Interface) SQL - DML & DDL Queries in brief	9
Unit-II: What is Android?, Setting up development environment, Dalvik Virtual Machine & .apk file extension Fundamentals: Basic Building blocks - Activities, Services, Broadcast Receivers & Content providers UI Components - Views & notifications, Components for communication - Intents & Intent Filters, Android API levels (versions & version names)	9
Unit-III: Application Structure: AndroidManifest.xml, uses-permission & uses-sdk, Resources & R.java o AssetsLayouts & Drawable Resources, Activities and	9

Units	Lecture Hours
Activity lifecycle, First sample Application Emulator-Android Virtual Device, Basic UI design, Form widgets, Text Fields, Layouts	
Unit-IV: Preferences: Shared Preferences, Preferences from xml, Examples, Menu : Option menu, Context menuSub menu, menu from xml, menu via code, Examples Intents, Explicit Intents, Implicit intents UI design: Time and Date, Images and media, Composite, AlertDialogs & Toast, Popup, Examples, Tabs and TabActivity, Styles and Themes	9
Unit-V: Content Providers, SQLite, Android Debug Bridge, Linkfy, Adapters and Widgets, Notifications, Threads, Advanced Services: Maps, GPS, Call, SMS etc., Network connectivity, Sensors	9

Examination Scheme:

Components	Mid Term	Class Assessment	End Term
Weightage (%)	20	30	50

Relationship between Course Outcomes (COs) and Program Outcomes (POs):

1 = Weakly Mapped, 2 = Moderately Mapped, 3= Strongly Mapped

Course Code	Course Name	COs	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2	PS O3
CSE11	Mobile	CO1113	2	2	3	3	3	1	3	-	2	-	3	2	1	3	2
133	Comput	3.1															
	ing and Android	CO1113 3.2	1	3	2	3	2	3	3	-	3	-	3	2	3	3	3
		CO1113	2	2	2	3	2	3	1	-	3	-	2	2	1	1	3
		3.3															
		CO1113	3	3	3	2	3	2	2	-	1	-	3	3	3	3	2
		3.4															
		CO1113	1	2	3	2	2	1	1	-	1	-	2	2	1	2	3
		3.5															
		CO1113	1.	2.	2.	2.	2.	2.	2.	-	2.	-	2.6	2.2	1.8	2.4	2.6
		3	8	4	6	6	4	0	0		0						