15CSE 375 -- Android Application Development   **3-0-0-3**

Unit-1

Basics of Android - Java Basics, Object Oriented Programming, Android architecture,First application - Basic UI design - Advanced UI - Selection components -Notifications, Activity and Fragment, Fragment Lifecycle, Intents, Navigation Drawer, Data storage, Services, Web Services and WebView.

Unit – 2

APIs and Devices communication - Location Based Services and Google Maps, Sensors, Motion sensors, Environmental, Position sensors, External APIs, Apps with Connectivity and the Cloud, Telephony Services, Google play and Services.

Unit -3

Expert Android Apps Development, mobile applications - Understand the app idea and design user interface/wireframes of mobile application - Set up of mobile app development environment - Developing and debugging mobile app components – User interface, services, notifications, broadcast receivers, data components. Using emulator to deploy and run mobile apps. Testing mobile app - unit testing, black box testing and test automation.

TEXTBOOKS:

❖ Barry Burd, "Android Application Development All in one for Dummies" 2nd edition, John Wiley & sons, 2015.

REFERENCES:

1. Sams, "Teach Yourself Android Application Development in 24 Hour", 2nd edition, Pearson education, 2011.
2. Bill Philips & Brian Hardy, "Android Programming: The Big Nerd Ranch Guide, Addison-Wesley professional, 2013.