



Marwadi University

Master of Science (Information Technology)

Semester III

Subject Code: 02MS0306

Subject Name: (Elective-II) Advanced Mobile Programming

Learning Objectives:

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| <ul style="list-style-type: none">• To be able to understand the process of developing software for mobile.• To be able to create real life mobile applications using android platform. |
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Prerequisites:

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| <ul style="list-style-type: none">• Knowledge of Core Java Programming• Basic of Database Concepts |
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Unit	Course Content	Hrs.
1	Android Architecture Android Application internals	07
2	Building User Interface Fundamentals of android UI design Introduction to layouts Introduction to fragments Creating new Views Introduction to adapters Intent and broadcast receiver Introduction to intents Creating intent filter and broadcast receivers	10
3	File saving state and preferences Saving simple application data Creating and saving shared preferences Retrieving shared preferences Including static file as application resources Working with file system Database and Content Providers Introduction to Android databases Introduction to the SQLite Content value and cursors Working with SQLite databases Creating content providers Using content providers Working with native content providers Working in the Background Introduction to service in android Using background threads	09
4	Expanding the user experience Introduction to Action Bar Creating and using menus and action bar action items Introduction to Dialog in Android Toast in Android Introduction to Notification in Android Advanced user Experience Design for every screen size and density Enhancing your views	06



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5	Hardware Sensors Using sensors and the Sensor Manager Monitoring a device movement and orientation Maps and Location Based Services Using location based services Finding your current location Best practice for location updates	05
6	Audio, Video and Using the Camera Playing audio and Video Manipulating the RAW Audio Using the camera for taking pictures Recording Video Telephony and SMS Hardware support for telephony Introduction to SMS and MMS in Android	08
7	Publish Android Applications into Market Signing and publishing android applications Distributing applications Creation and Consuming web services	03

Text Book(s):

1. Retro Meier, Professional Android 4 Application Development, Wrox (Latest Book to be given)

Reference Book(s):

1. Lauren Darcey and Shane Conder, "Android Wireless Application Development", Pearson Education, 2nd ed. (2011)
2. Mark L Murphy, "Beginning Android", Wiley India Pvt. Ltd
3. Edx.org
4. Coursera.org
5. nptel

Chapter wise coverage from Text Book:

Unit No.	Chapters
1	Chapter 1,2,3
2	Chapter 4,5
3	Chapter 7,8,9
4	Chapter 10,11
5	Chapter 12,13
6	Chapter 15,17
7	Chapter 19