

ITE6016 Web Technology and Mobile Application			
Version : 1.00 Pre-requisite: Nil			LTP JC 30 0 4 4
Objectives: <ul style="list-style-type: none"> To understand the Internet and World Wide Web concepts. To learn user interface design considerations. 			
Expected Outcome : On completion of this course, student should be able to <ul style="list-style-type: none"> Design, implement and deploy mobile applications using an appropriate software development environment. Develop applications for Android and IOS devices. 			
Module	Topics	L Hrs	SLO
1	Basics of Java: Fundamentals of Java, Classes and objects, Extending classes, Interfaces, Inner classes, Packages, Exceptions, Strings and String Buffers-threads Garbage collection, package.	6	2
2	Client-side Technologies: Introduction- HTML5.0, CSS3, XML, JavaScript, JQuery, AJAX, JSON.	8	5
3	Mobile web services and user interface design: Introduction to web service languages, debugging web services, mobile application users, mobile information design, mobile platforms, tools for mobile interface design.	7	5
4	Android Application Basics: Introducing Android, Android Development Environment setup, Essentials of Writing Android Application. Anatomy of an Android Application, Application Using the Android Manifest File, Managing Application Resources.	6	14
5	Android User Interface and Application Design Essentials: User Interface Building Blocks, Designing with Layouts, Partitioning the User Interface with Fragments, Displaying Dialogs. Android Preferences, Files and Directories, Content Providers, Designing Compatible Applications.	5	5
6	Android Building Blocks: Activities, Services, Intents, Broadcast Receivers, Content Providers, Different ways to store data in Android, Using SQLite Database, Cloud Storage.	5	5
7	Software Methodology: Mobile Development Process, Choosing Software Methodology (Waterfall vs Agile), Gathering requirements and assessing risks, Configuration Management, Designing and developing Mobile Applications, Testing and deploying mobile applications, Supporting and maintaining mobile	5	5

	applications, Agile Project Management and SCRUM Methodology		
8	Expert Talk on Mobile application development	3	17
Total Lecture Hours # Mode: Flipped Class Room, [Lecture to be videotaped], Use of physical and computer models to lecture, Visit to Industry, Min of 2 lectures by experts		45	
Text Books 1. Jeff McWherter, Scott Gowell, “Mobile Application Development”, First Edition, Wrox Publishers, 2012. Reference Books 1. Kogent learning solutions, “Web technologies black book”, First Edition, Dreamtech Press, 2013. 2. Pradeep Kothari, “Android Black book”, Dreamtech Press, First Edition, 2014. 3. Hazem Saleh, “Javascript Mobile Application Development”, Kindle Edition, Packt Publishing, 2014. 4. Joseph Annuzzi, Jr., Lauren Darcey, Shane Conder, “Introduction to Android Application Development”, Fourth Edition, Addison Wesley, 2014.			
Compiled by: Prof. M.Deepa			
Date of approval by the Academic Council : 18.03.16			