

Mobile Application Development					
Credit Hours:	3	Course Code:	INFT-3117	Prerequisites:	None
Course Learning Outcomes (CLOs):					
At the end of the course, the students will be able to:				Domain	BT Level*
1. Understand layout management and multi-layout definition techniques to create adaptable user interfaces for mobile applications that share a common data model.				C	2
2. Explain how to manage user data and multimedia on a mobile device via the Android framework libraries.				C	2
3. Use the Sensors available on mobile devices to enhance user interaction and feedback.				C	3
4. Publish Applications to the Google play store.					
* BT= Bloom's Taxonomy, C=Cognitive Domain, P=Psychomotor Domain, A=Affective Domain					
Course Contents:					
Mobiles Application Development Platform; HTML5 for Mobiles; Android OS: Architecture, Framework and Application Development; iOS: Architecture, Framework; Application Development with Windows Mobile; Eclipse; Fragments; Calling Built-in Applications using Intents; Displaying Notifications; Components of a Screen; Adapting to Display Orientation; Managing Changes to Screen Orientation; Utilizing the Action Bar; Creating the User Interface; Listening for UI Notifications; Views; User Preferences; Persisting Data; Sharing Data; Sending SMS Messages; Getting Feedback; Sending E-mail; Displaying Maps; Consuming Web Services Using HTTP; Web Services: Accessing and Creating; Threading; Publishing, Android Applications; Deployment on App Stores; Mobile Programming Languages; Challenges with Mobility and Wireless Communication; Location-aware Applications; Performance/Power Tradeoffs; Mobile Platform Constraints; Emerging Technologies..					
Teaching Methodology:					
Lectures, Written Assignments, Practical labs, Semester Project, Presentations.					
Course Assessment:					
Mid Term Exam, Home Assignments, Quizzes, Project, Presentations, Final Exam.					
Reference Material:					
1. Code Complete: A Practical Handbook of Software Construction by Steve McConnell, Microsoft Press, 2nd Edition, 2004, ISBN-13: 978-0735619678 2. PeopleSoft People Tools: Mobile Applications Development (Oracle Press) by Jim J Marion, Sarah K Marion, McGraw-Hill Education, 1st Edition, 2015, ISBN-13: 978-0071836524 3. Android Application Development Cookbook by Rick Boyer and Kyle Mew, Packt Publishing, 2nd Revised Edition, 2016, ISBN: 13: 978-1785886195					