ITE1016	Mobile Application Development	L	T	P	J	C
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Pre-requisite	**CSE1001**	**Syllabus version**				
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Course Objectives:

- To expose the technology and business trends in mobile applications.
- To understand the mobile design principles
- To gain the working knowledge of Apple's Xcode app development tool.

Expected Course Outcome:

1) Understand different mobile application models/architectures and patterns.

2) Evaluate and contrast the requirements for mobile platforms.

3) Describe the components and structure of a mobile development framework.

4) Apply mobile development framework for the development of mobile applications.

5) Create apps for Android and iOS platform devices.

6) Interpret a scenario to plan, design and develop a prototype as a native mobile application.

7) Understand, design and implement the data storage of iPhone for various applications.

8) Develop the various mobile applications for the operating systems of android and iPhone.

Student Learning Outcomes (SLO):	**5, 6, 12**
[5] Having design thinking capability	
[6] Having an ability to design a component or a product applying all the relevant standards and with realistic constraints	
[12] Having adaptive thinking and adaptability	

Module:1	**Introduction to Mobile Application:**	**6 hours**
A brief history of mobile-Mobile ecosystem, Designing for context, Developing a Mobile Strategy, Mobile Information Architecture, Mobile Design, Types of mobile application.		

Module:2	**Technologies**:	**6 hours**
Introduction-HTML5, CSS3, Javascript, JQuery.		

Module:3	**Introduction to Android programming:**	**5 hours**
Android toolkit, Java for android, components of an Android Application.		

Module:4	**Android software development:**	**7 hours**
Eclipse Concepts and Terminology, Eclipse Views and Perspectives, Eclipse and Android, Effective java for Android		

Module:5	Android Framework:	6 hours
Building a View, Fragments and Multiplatform Support, Drawing, Handling and Persisting Data.		
Module:6	Introduction to iOS:	6 hours
Basic iPhone Styling, Advanced iPhone Styling, Animation		
Module:7	Iphone data storage:	6 hours
local Storage and session Storage, Client-Side Database PhoneGap tool.		
Module:8	Contemporary issues:	3 hours
	Total Lecture hours:	**45 hours**

Text Book(s)	
1.	App Programming Guide for iOS-Apple developer - 2014 Apple Inc

Reference Books	
1.	Jonathan Stark, Building iPhone Apps with HTML, CSS and JavaScript, O'Reilly Media, 2011.
2.	Paul Deitel, Harvey Deitel, Android for programmers an app-driven approach Deiteldeveloper series, Abbey Deitel,Michael Morgano-2012 Pearson Education, Inc.
3.	Laird Dornin, G. Blake Meike, and Masumi Nakamura, Programming Android by Zigurd Mednieks, O'Reilly Media, 2011.

Recommended by Board of Studies	05-03-2016		
Approved by Academic Council	No. 40	Date	18-03-2016