III B.Tech II Semester

15ACS33-MOBILE APPLICATION DEVELOPMENT

L	T	P	C
3	1	0	3

Course Objectives:

1. This program provides career options for our students in the emerging technology sector of Mobile Applications. The students will possess the competent knowledge and skills to seek jobs in this sector.
2. The course provides comprehensive knowledge, technical expertise and hands-on experience in the mobile application sector.
3. This course provides students with an understanding of all aspects of mobile technologies. Students will have an in-depth knowledge of Android and iphone (iOS) application development.
4. At the end of this course, the student will be able to understand the basics concepts of mobile networks, architecture and application development, comprehend the features of iOS, Objective C and Android. He/she will also implement Application Development Concepts and Techniques of Android and iOS

UNIT - I :

Small computing Technology: Wireless Technology, Radio Data Networks, Microwave Technology, Mobile Radio Networks, Messaging, Personal Digital Assistants.

J2ME Architecture and Development Environment: J2ME Architecture, Small Computing Device Requirements, Run – Time Environment, MIDlet programming, Java Language for J2ME, J2ME Software Development Kits, Hello World J2ME Style, Multiple MIDlets in a MIDlet Suite, J2ME wireless Toolkit.

UNIT – II:

Introduction Android Programming: What is Android, Activities, Linking Activities Using Intents, Fragments, Calling Built – in Applications using Intents, Displaying Notifications.

Android User Interface: Understanding the Components of a Screen, Adapting to Display Orientation, Managing Changes to Screen Orientation, Utilizing the Action Bar, Listening for UI Notifications.

UNIT – III:

Designing User Interface with Views: Basic Views, Picker Views, Using List Views to Display Long Lists.

Displaying pictures and menus with views and Data Persistence: Views to Display pictures, menus with views, additional views, saving and loading user preferences, persisting data to files, creating and using databases.

UNIT–IV:

Content Providers: Sharing data in android, using a content provider, creating your own content providers.

Messaging and Networking: SMS Messaging, Sending E-Mail, Networking

Location-Based Services: Displaying Maps, Getting Location Data.

UNIT – V:

Beginning Swift Programming: Introduction to swift, Data types, Strings and Characters, Basic Operators, Functions, Collections, Control flow and looping, structures and classes, inheritance, closures, protocols and delegates, generics.

Course Outcomes:

1. The course integrates the mobile application principles with the real-world experience.
2. The course's learning outcomes arm the students with technical expertise and mobile application development experience.
3. Industry leaders support the course by providing valuable industry inputs and invaluable insight into the process of developing cutting edge mobile applications.

TEXT BOOKS :

1. J2ME: The Complete Reference, James Keogh, TMH.
2. Beginning Android 4 Application Development, Wei-Meng Lee, Wiley India
3. Beginning Swift Programming, Wei-Meng Lee, December 2014, ISBN: 978-1-119-00931-3

REFERENCE BOOKS:

1. Enterprise J2ME: Developing Mobile Java Applications, Michael Juntao Yuan, Pearson Education, 2004.
2. Android Application Development for Java programming by James C. Sheusi, Cengage Learning
3. Android A Programmers Guide by Jerome DiMargio, TMH.