Department   : **BSAU APPLE iOS APPLICATION DEVELOPMENT CENTRE**

Programme   : **Certificate Course in iOS Application Development**

Contact Person   : **N. RAJENDRAN, AP(SG)/ IT**   **Cell No.: 9962265750**

Content of Course:

Theory

Module I: iOS Development Fundamentals   **7**

iOS Basics - iOS Architecture - Integrated development Tools - Swift - Frame work and Libraries - Project templates - Resource & Application Settings - Views & Controls - Debugging & Running - Building Block Approach - Application Life cycle - MVC – Pattern - View.

Module II: Advanced Concepts in iOS   **8**

Data Management - Core Data - Application Storage - External Storage - Memory Management - Leaks and Allocations - UI Design - Design Tools - Interface Builders - Story board - View Controllers - Drawing model – Windows - Event Handling - View data Source and delegates - Multimedia and Networks - Library - Location Services - Google Maps - Apple Push and Local Notifications - Accelerometer.

Practical   **30**

Tools for iOS Application Development – Xcode - Hands on iOS Programs – Developing Simple iOS Apps - Building and Running iOS Apps – Uploading to App Store.

                                                                        Total Hours: 45

HOW WILL THIS PROGRAMME BENEFIT YOU?

This certificate program provides a comprehensive set of courses that cover basic knowledge in iOS fundamentals to advance topics for application development. Students can gain in-depth knowledge of the iOS application development platform and adequate hands on experience from a technological standpoint and familiarity with the graphic design elements that are crucial for building an attractive and highly functional App. Students will also learn about deployment of iOS Apps and uploading to App Store. The course content is also delivered by iOS developers from reputed industries so that they bring clearly the industry environments to student community.

Department   **: BSAU APPLE iOS APPLICATION DEVELOPMENT CENTRE**

Programme   **: Certificate Course in Android Application Development**

Contact Person   **: N. RAJENDRAN, AP (Sr.Gr.)/ IT   Cell No.: 9962265750**

Content of the Course:

Theory

Module I: Android Development Fundamentals   **8**

      Android Basics - Android Architecture - Application Framework - The Manifest file - Libraries – Developing - Managing Virtual Devices - Building and Running – Debugging – Testing - Building Blocks - Application Components - Content Providers - Broadcast Receiver - Processes and Threads

Module II: Advanced Concepts in Android   **7**

      Data storage -SQLite Databases -Localization - User Interface - XML Layouts - Styles and Themes - Web Applications - Multimedia and Camera - Media Playback - Audio Capture – Sensors - App Widgets – Bluetooth - Wi-Fi Direct - Location and map - Network Communication.

Practical   **30**

      Tools for Android Application Development - Hands on Android Programs– Developing Simple Android Apps - Building and Running Android Apps – Publishing in Google Play Store.

                                                   Total Hours: 45

HOW WILL THIS PROGRAMME BENEFIT THE STUDENTS?

      The explosive growth of Android applications has created a boom in demand for developers. This certification programme provides comprehensive training in Android application development in the Java language. Students can have good exposure on application design, tools and techniques. The highlight of this certification program is to provide good hands on experience to students on developmental tools so that the students will be able to develop applications that run on Android OS platform. Students will be able to develop applications that run on the Android OS platform and acquire the advanced development skills needed to release their own high-quality App to the Google Playstore.

Department   : BSAU APPLE iOS APPLICATION DEVELOPMENT CENTRE

Programme   : Certificate Course in Flutter Application Development

Contact Person   : N. RAJENDRAN, AP(SG)/ IT   Cell No.: 9962265750

Content of Course:

Theory

Module I: Flutter Fundamentals   **7**

Introduction to Flutter – Development Tools Setup MAC & Windows – Introduction to Dart Programming Language – Control Flow and Functions in Dart – If Statements – Logical Operators – For Loops - Object Oriented Programming.

Module II: Advanced Concepts in Flutter   **8**

Layouts – AppBar & TabBar Widget – Custom Widgets – Input & Selections Widgets – Drawer Widget & Routes – Notification Widgets.

Practical   **15**

Downloading / Cloning the Flutter SDK – Installing Flutter Plugin - Hands on Flutter Programs – Developing Simple iOS & Android Apps - Building and Running Apps – Uploading to App Store.

Total Hours: 30

HOW WILL THIS PROGRAMME BENEFIT YOU?

This certificate program provides a comprehensive set of courses that cover basic knowledge in Flutter and dart fundamentals to advance topics for application development. Students can gain in-depth knowledge of the mobile application development in cross platform IDE and adequate hands on experience from a technological standpoint and familiarity with the graphic design elements that are crucial for building an attractive and highly functional App. Students will also learn about deployment of Apps and uploading to App Store and Play Store. The course content is also delivered by App developers from reputed industries so that they bring clearly the industry environments to student community.