



Engineering Staff College of India

Autonomous Organ of The Institution of Engineers (India)
Old Bombay Road, Gachi Bowli, Hyderabad – 500 032. Telangana India



INFORMATION TECHNOLOGY DIVISION

PROFESSIONAL DEVELOPMENT PROGRAMME

Mobile Application Development Using Android

(Hands-on Practical on Android Studio)



06 – 10 Feb 2017

Venue:

Hotel Pai Vista, Mysore, Karnataka



(An ISO 9001:2008 Certified, AICTE & CEA Recognized Institution)

Centre for Promotion of Professional Excellence

Introduction

The Android open source platform offers compatibility with a wide range of devices, which provide global access to the mobile market. It's the largest installed base of any mobile platform and growing fast —every day, millions of user's power up their Android devices for the first time and start looking for apps, games, and other digital content. Android gives you a world-class platform for creating apps and games for Android users everywhere, as well as an open marketplace for distributing to them instantly

In this course, you learn to build on your existing Java knowledge to deliver robust business applications for Android phones and tablets and integrate them with enterprise systems

Objectives

- To learn how to deliver robust Mobile business applications.
- Hands-on Practical Training on Android application for Developing Mobile Applications
- Design UIs that work seamlessly with a range of phones and tablets
- Manage data with content providers and the SQLite database

Course Coverage

Introduction to Android

- Introduction to Android Development
- Installing Android Studio and Creating Android Application
- Introduction to Gradle

Delightful User Experience

- Defining Styles & Themes
- Understanding Style Inheritance
- Events and Event Management

Data - Saving, Retrieving, Loading

- Storing and Retrieving Data
- SQLite Database
- Content & Content Providers

Background Tasks and Events

- Services & IPC (Inter-process Communication)
- Broadcasting & Broadcast Receivers
- Background processing with Handlers, AsyncTask and Loaders

Activities & Intents

- Understanding Activity Lifecycle
- Learning on Activity Stack and Navigation in Android Activity
- Activity with Explicit Intents and Implicit Intents

User Interface

- User Interface Controls
- Menu & Dialog
- List, View and Layout

Testing and Debugging

- Testing UI and Android App
- Using Espresso Framework
- Debugging using Logcat in Android, UI Automator

Integration with Web Services

- Introduction to Web Services
- Building, Publishing and Accessing Web Services
- RESTful Web Services

Polish and Publish

- Widgets, Fragment
- Publishing & Licensing
- Security & Permission

Advanced Topics

- Resources, Multimedia & Location Based Services
- Material Design & Search
- Advanced Concepts, Hardware & Multiple Form Factors

Training Prerequisites

Training attendees must be fluent in concepts of Core Java & OOP (Object Oriented Programming)

Note: Participants should bring their Laptop for Hands-on Practical & Case Studies

Methodology

Methodology of the programme includes class room sessions with Hands-on Practical, Lecture / Discussion with audio visual aid, bench marked video shows, Chalk & Talk sessions, group discussions, case studies, debates, sharing of experiences etc. All the sessions will be interactive demanding active participation from all the members.

Target Participants

- Professionals working in the field of software development, Web Administrators, Programmers, Application Developers, Web developers in IT departments.
- IT Managers, Systems Managers, Scientists, Engineers and Consultants working in governmental, defense, Police public, private sector organizations and Industries.
- Professors, Faculty members and Technical Staff of Engineering and MCA colleges.

Benefits to the participants

After completing this course, the Participant will be able to:

- Hands – On experience on Mobile Application development using Android.
- Learn security procedures for Developing Mobile Applications & Project Experience on Android

Programme Venue, Dates & Timings



Venue: Hotel Pai Vista, Mysore, Karnataka

Dates: 06 – 10 Feb 2017, **Timings:** 09:30 – 17:00 hrs

Course Director

Mr. Syed Azgar

Faculty & Manager-IT, Information Technology Division, ESCI

Course Fee

- ₹ **35,000/- (Residential Fee)** per participant. Fee includes **Twin-sharing AC Accommodation**, course material, course kit, Breakfast, Lunch, Dinner Tea / Coffee and Snacks during the actual days of the training program.
- ₹ **25,000/- (Non- Residential Fee)** per participant. Fee includes course material, course kit, Lunch, Tea / Coffee and Snacks during the actual days of the training program.

Discounts

- ❖ **Group Discount** - Additional 10% discount for three or more participants if sponsored by the same organization

(All discounts are applicable only if fee is received at ESCI before commencement of the programme)

Service Tax @15% is to be paid extra and above the training fee as training is also brought under the purview of Service Tax in Finance Bill 2010. **PAN Card No.** AAATT3439Q. **Service Tax Registration No.** AAATT3439QST008

Programme fee is to be paid in favour of **“THE INSTITUTION OF ENGINEERS (INDIA) – ENGINEERING STAFF COLLEGE OF INDIA”** in the form of demand draft payable at Hyderabad.

Alternatively the payment may be made by **Electronic Fund Transfer (EFT)** to ESCI S – SB A/c No. 10007111201 with The SBI, PBB Rajbhavan Road Branch, Khairatabad, Hyderabad – 500 004 by RTG's / NIFT / IFSC Code No: SBIN 0004159 – MICR No: 500002075. **While using EFT/Draft method of payment, kindly forward a covering letter giving details on the name of the participants, Title and the programme schedule so that proper accounting can be done.**

Online registration shall be available on ESCI webportal IT Domain, on www.escihyd.org.

To register manually please send your nominations giving details of name, designation, contact address, email address, mobile no, telephone and fax number of the participant along with the details of mode of payment of fee, addressed to :

The Head

Information Technology Division

Engineering Staff College of India

Gachi Bowli, Hyderabad – 500 032

Phone: 66304100 (EPABX) / 040 – 66304123/24/25 (Direct), Fax: 040 - 23000336

Email: it@escihyd.org, Portal: www.escihyd.org

A Certificate of participation will be awarded to each participant on conclusion of the programme.

- ESCI encourages participants to present case studies from their respective organizations.
- For the convenience of outstation participants, ESCI will facilitate pick-up and drop from Airport / Railway Stations / Bus Stations, if travel plans are received at least 3 days in advance along with mobile number by fax or email. The charges shall be paid by the participant directly to the Cab.
- ESCI provides complimentary accommodation and boarding to the participants one day before the commencement (Check-in 1200 h) and one day after conclusion (Check-out 1200 h) of the programme duration. Overstay charges will be applicable as per Hotel rules (subject to availability of accommodation)
- **Single Accommodation : Rs.1000 per day**
- **Family Accommodation: Rs.1000 per day (Exclusive of Food charges).**