

## Mobile Application Development using Android Programming

**7 Weeks Online Course**

**7 Weeks / 100 Hrs. (3 Hrs. per day)**

**Timing: 10:00AM to 01:00PM**

**Medium of Instruction: Bilingual (English & Hindi)**

### Objective

The Android is an operating system and programming platform developed by Google for mobile phones and other mobile devices, such as tablets. This is a practical oriented course which provides participants with the information and lab experience necessary to develop and deploy Android applications. This course covers core java and basic Android application Development. It provides theoretical background as well as in-depth knowledge of app development related environment and packages.

B.E./B.Tech.\* (in Any Stream), MCA\*/BCA\*/B.Sc.\* (IT/CS)/ M.Sc.\* (IT/CS), Diploma\* (CS/IT), NIELIT A Level (\*pursuing candidate may also apply) OR Professional/Official with Graduation (in Any Stream) and working in relevant domain, having knowledge of Computer Programming and Operating System.

- ✓ Candidate must have latest computer/laptop with at least 8 GB RAM.
- ✓ Internet connection with good speed (*preferably 2 Mbps or higher*)

### Eligibility

### Prerequisites

### Course Fees

Rs 4,000.00 (Including GST)

### Certificate

Certificate will be provided to the participants, based on minimum 75% attendance and on performance (minimum 50% marks) in the online test, conducted by NIELIT Gorakhpur, at the end of the course.

### How to Apply?

**Step-1:** Read the course structure & course requirements carefully.

**Step-2:** Visit the Registration portal and click on apply button.

**Step-3:** Create your login credentials and fill up all the details, see the preview and submit the form.

**Step-4:** Login with your credentials to verify the mobile number, email ID and then upload the documents, Lock the profile and Pay the Fees online, using ATM-Debit Card / Credit Card / Internet Banking / UPI etc.

### Salient Features

Instructor Led Online Training

E-Learning Contents

Self-Assessment

Real World Demo

## Course Content

Day	Topic	Day	Topic	Day	Topic
Day #01	<ul style="list-style-type: none"> <li>Introduction to JAVA</li> <li>Feature of JAVA</li> <li>JVM and their environments</li> <li>Difference between JDK, JRE and JVM</li> </ul>	Day #02	<ul style="list-style-type: none"> <li>Java Variables</li> <li>Flow Control ( If, switch)</li> <li>Loop (for each, while, do while)</li> </ul>	Day #03	<ul style="list-style-type: none"> <li>Java Variables</li> <li>Arrays</li> <li>Arrays List</li> <li>String</li> </ul>
Day #04	<ul style="list-style-type: none"> <li>OOPs Concept</li> <li>Object ,Class, Polymorphism</li> </ul>	Day #05	<ul style="list-style-type: none"> <li>Inheritance</li> <li>Type of Inheritance</li> </ul>	Day #06	<ul style="list-style-type: none"> <li>Interface</li> <li>Packages</li> </ul>
Day #07	<ul style="list-style-type: none"> <li>Multithreading</li> <li>Life Cycle of Thread</li> <li>Thread Priorities</li> </ul>	Day #08	<ul style="list-style-type: none"> <li>Exception Handling</li> <li>Types of Exception</li> <li>Advantage of Exception Handling</li> </ul>	Day #09	<ul style="list-style-type: none"> <li>SQL</li> <li>Type of SQL Commands</li> <li>DDL and DML Query</li> </ul>
Day #10	<ul style="list-style-type: none"> <li>Android Architecture Overview</li> <li>Linux Kernel</li> <li>Application Framework</li> <li>Android Stack</li> </ul>	Day #11	<ul style="list-style-type: none"> <li>Android Versions</li> <li>Installing of Android SDK</li> <li>Updating SDK Components</li> <li>Update SDK Packages</li> </ul>	Day #12	<ul style="list-style-type: none"> <li>Android Studio IDEs</li> <li>ADT plug-in</li> <li>Emulator, GenyMotion</li> <li>Using the Emulator</li> <li>Android Vs. Other mobile platforms</li> </ul>
Day #13	<ul style="list-style-type: none"> <li>Application Life Cycle</li> <li>Application Components,</li> <li>Activity life cycle</li> </ul>	Day #14	<ul style="list-style-type: none"> <li>Manifest File</li> <li>Layout XML Code</li> <li>Strings</li> <li>The R File</li> </ul>	Day #15	<ul style="list-style-type: none"> <li>Java Source Code</li> <li>Java based layout vs. xml based layout</li> <li>Logging</li> </ul>
Day #16	<ul style="list-style-type: none"> <li>Using different layouts</li> <li>Linear Layout</li> <li>Table Layout etc.</li> </ul>	Day #17	<ul style="list-style-type: none"> <li>Drawable Resources</li> <li>Resolution and density independence</li> <li>Working with common widgets</li> </ul>	Day #18	<ul style="list-style-type: none"> <li>Working with ListView</li> <li>Adapters</li> <li>Creating and using menu</li> </ul>
Day #19	<ul style="list-style-type: none"> <li>Working with preferences</li> <li>Working with Dialogs and Toasts,</li> <li>Working with Graphics and Animation</li> </ul>	Day #20	<ul style="list-style-type: none"> <li>Intents,</li> <li>Intent filters</li> <li>Invoking activities by class name and URI</li> </ul>	Day #21	<ul style="list-style-type: none"> <li>Sharing data using Extras Bundle and URI parameters</li> <li>Working with Tabs and Fragments</li> </ul>
Day #22	<ul style="list-style-type: none"> <li>Using File System</li> <li>Introducing SQLite on Android</li> <li>Database Connectivity</li> </ul>	Day #23	<ul style="list-style-type: none"> <li>Cursors and content values</li> <li>Using Content Provider to share data</li> </ul>	Day #24	<ul style="list-style-type: none"> <li>Introducing Service and its life cycle</li> <li>Creating and starting a service</li> </ul>
Day #25	<ul style="list-style-type: none"> <li>Types of services,</li> <li>Working with multi-threading and AsyncTask</li> </ul>	Day #26	<ul style="list-style-type: none"> <li>Broadcast receivers</li> <li>Triggering receivers with intents</li> </ul>	Day #27	<ul style="list-style-type: none"> <li>Responding to system events using Broadcast receivers</li> </ul>
Day #28	<ul style="list-style-type: none"> <li>Notification, Broadcast notification using firebase</li> </ul>	Day #29	<ul style="list-style-type: none"> <li>Login Activity with firebase</li> <li>Integration of Youtube</li> </ul>	Day #30	<ul style="list-style-type: none"> <li>Process of uploading .APK file on Google Play Store</li> </ul>
Day #31	<ul style="list-style-type: none"> <li>Question and Answer Session</li> <li>Distribution of Mini Project</li> </ul>	Day #32	<ul style="list-style-type: none"> <li>Mini Project [Phone Calling, Messaging ]</li> </ul>	Day #33	<ul style="list-style-type: none"> <li>Mini project [Notification , Student Registration System]</li> </ul>
Day #34	<ul style="list-style-type: none"> <li>Presentation of Mini Project</li> </ul>	Day #35	<ul style="list-style-type: none"> <li>Final Test</li> </ul>		

## COURSE COORDINATOR

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**CLICK HERE TO REGISTER**