

# Android Training

The course will offer to learn Android programming concepts, and further how to build a variety of apps. It will empower you with the technical expertise to make a fully functional app. It starts with the History and Introduction of Android, along with schedule jobs, update settings, and use Android Architecture Components, and moves on to cover Android Studio.



## Course Objective

Upon successful completion of this training, you will:

- Understand the practical/theoretical foundations of Android App Development
- Learn the right techniques and strategies used to develop Apps
- Learn to establish intuitive mobile applications



## Course Content

### Unit 01 Android: History and Introduction

- Java Concepts
- What is Android?
- Android History
- Android Versions
- Platform and Architecture
- Android Market

### Unit 02 Android Studio, Gradle and ADB Tools

- Development Tools
- Working with Android Studio
- Understanding Gradle
- Project Dependencies
- ADB
- Build and Run your App
- Generate APKs
- Instant Run

### Unit 03 Activity, UI basics and Intents

- Core Building Blocks
- Activity in Android
- Layouts and ViewGroups
- Layout Attributes
- Resources
- Languages and Local Support
- Custom Views
- Making Apps more Accessible
- Runtime configuration changes
- Events and Listeners
- Intents
- Synthesizing Task Stacks

### Unit 04 Advanced UI: Style, Themes, Material UI and Menus

- Working with Styles and Themes
- Introduction to Material Design
- Material Themes
- Cards
- Elevation and shadow
- Menus

### Unit 05 Android Threading: AsyncTask, Loaders, Handler

- Android Threading Model
- Processes and Lifecycle
- AsyncTask
- Loaders
- Handlers

### Unit 06 Fragment and Advanced Views

- Fragments
- ListView
- RecyclerView
- CoordinatorLayout
- TabLayout
- Snackbar
- Advanced Views

### Unit 07 Service, Notification and Broadcast Receiver

- Services
- Intent Service
- Notifications
- Broadcast Receivers
- Pending Intents

### Unit 08 Content Provider and Job Scheduler

- Content Provider
- Content Observer
- Job Scheduler
- Adding support Libraries

### Unit 09 SQLite Database and Networking

- Working with SQLite database
- CRUD Operations
- Cursors
- SQLite Transaction
- Working with Assets
- Networking in Android

### Unit 10 Android Storage System

- SharedPreferences
- "Listening" to preference changes
- Internal Storage
- External Storage

### Unit 11 Application Widgets and Working with Google Map

- Adding widget to user screen
- Designing the widget
- Updating widget
- Working with Google Map API
- Markers on Map
- Drawing on Map
- UI Controls and Listeners for Google Map API

### Unit 12 Testing, Debugging and Deploying

- Testing in Android
- Unit Testing
- Instrumentation Testing
- Libraries for Testing
- Understanding LogCat
- Debugging
- Stacktraces and StrictMode
- Publishing application to Play Store

# Why LearnAtRISE

- LearnAtRISE is a skill enhancing initiative powered by Rishabh Software (RSPL), an IT Company with over **20 years of experience**, specializing in software development, engineering, recruitment process, and training services
- Full-time training Program**, Up-to-Date, and thorough course content
- Wholistic **training and development** (Soft skills training included)
- State-of-the-art** infrastructure
- Access our vast **network of experts**



Hands-on Practical Experience



Guidance from Industry  
Experts



Full-time classroom training



Assured 100% placement  
assistance