

Google advanced Android Development

Course Duration: 40 Hours

Course code: Android Development

1. Course Overview

This course is designed for Android developers who already have fundamental Android knowledge and want to advance into building high-performance, scalable, and feature-rich Android applications. It covers advanced UI, architecture components, background processing, security, testing, and deployment practices.

2. What you'll learn?

- Master advanced Android components and Jetpack libraries.
- Implement MVVM, LiveData, ViewModel, Room, and WorkManager.
- Design responsive UIs with Material Design 3 and Jetpack Compose.
- Work with background services, notifications, and scheduling.
- Secure apps with best practices and encryption techniques.
- Write unit, UI, and instrumentation tests.
- Integrate APIs, Firebase, and cloud services.
- Optimize, debug, and publish advanced Android applications.

3. Target Audience

- Android developers with prior experience (Associate level or equivalent).
- Professionals aiming to deepen their Android expertise.
- Teams building enterprise-grade or large-scale Android apps.
- Students and IT professionals preparing for advanced Android careers.

4. Pre-Requisites

- Strong knowledge of Java or Kotlin.
- Familiarity with Android Studio and Android fundamentals.

- Prior experience developing basic Android apps.

5. Course content

1. Expand the User Experience

- Fragments
- App Widgets
- Sensors

2. Make Your Apps Fast and Small

- Performance

3. Make Your Apps Accessible

- Localization
- Accessibility

4. Add Geo-Features in Your Apps

- Location
- Places
- Mapping

5. Advanced Graphics and Views

- Custom Views
- Canvas
- Animations
- Playing Video

6. Architecture Components