

## Android Fundamentals

### Audience Android Fundamentals Course

The course Android Fundamentals is intended for developers, managers and others who want to get an overview of the capabilities and operation of the Android platform.

### Prerequisites Course Android Fundamentals

To participate in the course Android Fundamentals knowledge of the basics of Java programming is required.

### Realization Training Android Fundamentals

The theory is discussed on the basis of presentation slides. Demos are used to clarify the concepts. The theory is interspersed with practical exercises. The course material is in English.

### Certification Android Fundamentals

After successful completion of the course participants receive an official certificate Android Fundamentals.

Duration: 1 day

Price: € 749

[Open Schedule](#)



## Content Course Android Fundamentals

In the course Android Fundamentals participants learn the basic concepts of the Android platform and how to develop mobile apps for Android. The Android Studio Development Environment is used for the development of Android apps and many features of this IDE are discussed.

### Android Intro

The Android Fundamentals course starts with an overview of the architecture of the Android platform and the functionalities in the Android SDK. Activities and the life cycle of Android apps are covered here.

### Android GUI

Next the User Interface of Android apps is discussed. This includes the View Hierarchy, the Layout Containers and the various views and controls in Android. The different device emulators in Android Studio are also treated.

### Android Persistence

Furthermore accessing databases and the file system is part of the program of the course Android Fundamentals. Attention is also paid to content providers that provide access to a central data repository.

### Threads and Services

The use of threads and the asynchronous execution of tasks is covered. And the use of services such as location services and HTTP services is discussed as well.

### Best Practices

Finally participants learn some best practices in Android Development and how to publish an app on Google Play. With the knowledge gained in this course, participants are able to write simple apps themselves and understand the architecture and operation of the Android platform.

## Modules Course Android Fundamentals

<b>Module 1 : Android Intro</b>	<b>Module 2 : Android Development</b>	<b>Module 3 : Android GUI</b>
What is Android? Architecture Explained Role of Java Android SDK Eclipse IDE Plugin Device Emulator Profiling Tools	Unit Testing and Debugging Creating Unit Tests Android Development Tools (ADT) Android Studio Using the Emulator TraceView Analyzing the Heap	Android User Interface View Hierarchy Menus Applying Styles to UI Layout Containers ScrollView, ViewPager, TabView Custom Views
<b>Module 4 : Android Persistence</b>	<b>Module 5 : Android Threads</b>	<b>Module 6 : Android Services</b>
Storing and Retrieving Data Internal and External Storage Preferences SQLite Database Content Providers Querying Content Providers Modifying Data Creating a Content Provider	Asynchronous Tasks Main UI Thread Using AsyncTask Location Services and Maps Location Services Mock Location Data Google Map Libraries Handling Events	Accessing Remote Services HTTP Access DOM Parsing JSON Parsing Alarm Manager Broadcast Receivers Services Notification Manager
<b>Module 7 : Best Practices</b>		
Web Apps Overview Targeting Screens from Web Apps WebView Debugging Web Apps Best Practices for Web Apps Compatibility Supporting multiple screens Optimizing for Other Android Versions		