

Swift Programming

Audience Swift Programming Course

The course Swift Programming is designed for participants who want to learn the basics of the newest version of Apple's programming language Swift for iOS apps.

Prerequisites Course Swift Programming

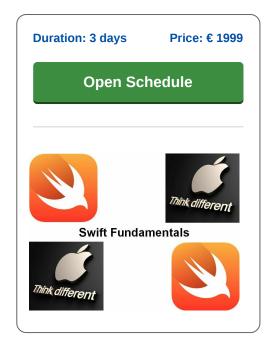
No programming knowledge is required to participate in the course Swift Programming. Prior knowledge of other programming languages such as Objective C, Java or JavaScript is beneficial for the understanding.

Realization Training Swift Programming

The theory is treated on the basis of presentations. Demos are used to explain the theory. There is ample opportunity to practice and theory and exercises are interspersed. The course uses the newest version of the XCode development environment.

Certification Swift Programming

After successful completion of the course participants receive an official certificate Swift Programming.



Content Course Swift Programming

In the course Swift Programming participants learn the basics of the powerful and intuitive Swift programming language developed by Apple for creating apps for iOS, Mac, Apple TV, and Apple Watch. Swift is a modern language, easy to use and open source.

Swift Intro

After an introduction to the XCode development environment, the playground projects and the iOS projects, the syntax of the Swift language is discussed. The relationship with the older Objective C language is also treated.

Variables and Types

Attention is paid to Swift versions of well-known C data types such as Int and Float. The course also covers the main Collection types, Array and Dictionary, and new advanced types such as tuples. Swift uses a lot of variables whose value should not change, making the code more secure and clear.

Swift Syntax

Next the Swift syntax is discussed, in which control flow with conditionals and loops and operators are covered. Functions and the transmission of parameters are also on the agenda.

Classes and Objects

Then it's time to treat classes with properties and methods. Unlike some other languages, in Swift it is not necessary to create separate interface and implementation files for classes.

iOS App Architecture

The schedule of the Swift Programming course also covers how the Swift language is used in the development of iOS Apps. This includes the architecture of iOS Apps with Models, Views, Controller, IBOutlets and IBActions.

Views and Controls

The course concludes with a treatment of Interface Builder and the various controls and views that can be used in iOS Apps.



Modules Course Swift Programming

Module 1 : Swift Intro	Module 2 : Swift Types	Module 3 : Swift Syntax
What is Swift?	Constants	Operators
Why Swift	Variables	Conditionals
Comparison with Objective C	Strings	Overflow Checking
XCode Environment	Interpolation	Looping
Environment setup	Statements	XCode Playground Timeline
Creating Playground Project	Integers and Floats	Defining Functions
Creating iOS Project	Dictionaries and Tuples	Calling Functions
.playground files	Arrays	Parameters
Setting preferences	Optionals	Scope of Declarations
Using navigator	Enumerations	Default Parameter Values
Module 4 : Classes and Objects	Module 5 : iOS Apps	Module 6 : Views and Controls
Class Definition	MVC Architecture	Interface Builder
Access Modifiers	Model and View	Basic Interaction
Class Methods	Controller	Buttons and Text Fields
Properties	IBOutlets	Action sheets and Alerts
Attributes	IBActions	The View Hierarchy
Initializers	Subclassing	View Behavior
Value Types	Delegation	Containers and Controls
Reference Types	Root View Controller	Collection Views
Method Overloading	Navigation Controller	Navigation View
Inheritance	Controlling Stack Navigation	Tab Bars
Polymorphism	Controller Communication	Alert Views and Action Sheets