

## **Objective C Programming**

#### **Audience Objective C Programming Course**

This course is designed for participants who want to learn the basics of Objective C in preparation for the development of iOS and OS X applications.

#### **Prerequisites Course Objective C Programming**

No programming knowledge is required to participate in this course. Prior knowledge of programming languages such as Java or Visual Basic is beneficial for the understanding.

#### **Realization Training Objective C Programming**

The theory is treated on the basis of presentation slides. Demos are used to clarify the theory. There is ample opportunity to practice and theory and exercise are interspersed. The course uses the XCode development environment.

#### **Certificate Objective C Programming**

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



### **Content Course Objective C Programming**

In the course Objective C Programming participants learn the basics of the Objective C programming language for iOS development. The course does not address the development of iOS app, but is a preparatory course in which the Objective C language in which iOS apps are written is treated.

#### **XCode Development Environment**

First Apple's XCode development environment is discussed and how to create and manage projects.

#### **ANSI C Syntax**

Next attention is paid to the basic syntax of the ANSI C programming language with statements, variables, data types, declarations, selections with if and iterations with for and while loops.

#### **Functions, Data Structures and Pointers**

Also more advanced features of C are addressed like using functions and passing of parameters, creating user defined data types with structs and typedefs, working with pointers and addressing and allocating memory.

#### Classes in Objective C

Next specific Objective C features like objects, classes, instance variables and methods are discussed as well as object communication through messages, accessors and properties.

#### **Foundation Framework**

Also the Foundation framework that provides a set of useful primitive Objective C classes is treated as well as the functionality that it adds to Objective C.

#### **Objective C Memory Management**

Finally the memory management model of Objective C is on the course program.

Houten, Amsterdam, Rotterdam, Eindhoven, Zwolle, Online



# **Modules Course Objective C Programming**

Module 1 : XCode Intro	Module 2 : ANSI C language	Module 3 : C constructs
Xcode IDE	Variables	Arrays
Project creation	Data types	Functions
Setting preferences	Operators	Scope of variables
Using navigator	Selections	Parameter passing
Groups	if and else	Call by value
Code Editor	switch and case	Structs and Enums
Jump bar	Iterations	Typedefs
Utilities	for and while	Pointers
Module 4 : Objective C	Module 5 : Foundation Framework	Module 6 : Memory Management
Objects and Classes	What is Foundation Framework?	Memory Address Basics
Implementing a Class	NSObject	Memory Pointers
Creating Objects	Strings	Addresses
Instance variables	NSString	Understanding Pointers
Using Methods	Using Arrays	Stack and Heap Memory
Using Properties	NSArray	Automatic Memory Management
Property Attributes	NSNumber	Requesting Memory
Method Dispatch	NSDictionary	Deallocating Memory
Custom Initializers	NSError	Managing Memory in Objective-C
Designated Initializers	NSData	Using the Retain/Release Model
Initializer Chain	NSException	Retain counts