

# Programming Objects with C++ – Fundamentals

## Description

This course teaches you everything about OOP in C++ starting with basic in object oriented concepts to advanced concepts in OOPS. It covers all the topics in OOPs from basics to most advanced topics.

### Classroom Registration Price (CHF)

3100

### Virtual Classroom Registration Price (CHF)

2900

## Course Content

### Module 1: C++ Flow Control

- Lesson 1: C++ if...else
- Lesson 2: C++ for Loop
- Lesson 3: C++ do...while Loop
- Lesson 4: C++ break & continue
- Lesson 5: C++ switch Statement
- Lesson 6: C++ goto Statement

### Module 2: C++ Functions

- Lesson 1: C++ Function Types
- Lesson 2: C++ Function Overloading
- Lesson 3: C++ Default Argument
- Lesson 4: C++ Storage Class
- Lesson 5: C++ Recursion
- Lesson 6: C++ Return Reference

### Module 3: C++ Arrays & String

- Lesson 1: C++ Arrays
- Lesson 2: Multidimensional Arrays
- Lesson 3: C++ Function and Array
- Lesson 4: C++ String

### Module 4 : C++ Structures

- Lesson 1: C++ Structure
- Lesson 2: Structure and Function
- Lesson 3: C++ Pointers to Structure
- Lesson 4: C++ Enumeration

### Module 5: C++ Object & Class

- Lesson 1: C++ Objects and Class
- Lesson 2: C++ Constructors
- Lesson 3: C++ Objects & Function
- Lesson 4: C++ Operator Overloading

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## **Module 6: C++ Pointers**

- Lesson 1: C++ Pointer
- Lesson 2: C++ Pointers and Arrays
- Lesson 3: C++ Pointers and Functions
- Lesson 4: C++ Memory Management

## **Module 7: C++ Inheritance and introduction to advanced topics**

- Lesson 1: ANSI C++ Library and others.
- Lesson 2: Templates and Container Classes
- Lesson 3: Exception Handling
- Lesson 4: Basic C++ Data Types

## **Lab / Exercises**

- During the course, participants are encouraged to actively participate in the learning experience by running example files during lectures and performing coding challenges during labs. Each lab session allows you to compare your solution to the instructor's

## **Documentation**

- Digital courseware included

## **Participant profiles**

- Softwares developers who want to use C++ based on object-oriented concepts

## **Prerequisites**

- Knowledge of C programming

## **Objectives**

- Hands-on introduction to object oriented programming in C++ for C programmers
- Emphasis is placed on the features of C++ that support effective modeling of the problem domain and reuse of code

## **Niveau**

Fondamental

## **Duration (in Days)**

4

## **Reference**

CPP-01