# Object Oriented Analysis and Design – Fundamentals

# **Description**

This object-oriented design training course provides a solid understanding of modern analysis and modeling methods. Participants learn how to effectively represent software requirements through use cases and UML diagrams. This approach enhances communication between teams and ensures the development of reliable and scalable systems.

# Why take this object-oriented training

Object-oriented design has become essential for creating robust and scalable software. With a use case—driven approach, this course offers a practical and immediately applicable method. Participants will learn how to use UML to visually represent processes and clarify architectural choices. Each module combines theory with concrete examples to make application easier in a professional context.

#### **Course Content**

## Module 1: Unified Modeling Language and object-oriented concepts

- Relationships
- Classes
- Polymorphism
- Interfaces
- Requirements
- Structured classes and ports

# Module 2: Architectural analysis

- Key concepts
- Defining a high-level organization of the model
- Identifying analysis mechanisms
- · Identifying key abstractions
- · Creating a realization case study

## Module 3: Analysis case study

- Additional descriptions of a case study
- Finding classes in a case study
- Distributing case study behaviors across classes
- Describing responsibilities
- Describing attributes and associations
- Qualifying analysis mechanisms
- Unifying analysis classes

#### Lab / Exercises

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

#### **Documentation**

• Digital courseware included

## **Participant profiles**

- IT Analysts
- Software Developers
- Application Architects
- Technical Project Managers

# **Prerequisites**

• Having followed the training UML Foundation

# **Objectives**

- Use an efficient method for IT analysis
- Use iterative and Use Case centric and architecture model
- Use UML to represent the model
- Use objects paradigms (abstraction, encapsulation, inheritance, ...)

## Description

Object-Oriented Analysis and Design Training – Fundamentals

## Niveau

**Fondamental** 

**Classroom Registration Price (CHF)** 

2300

**Virtual Classroom Registration Price (CHF)** 

2150

**Duration (in Days)** 

3

Reference

OOAD-01