# Object Oriented Analysis and Design - Fundamentals

# **Description**

This course allows participants to understand the key concepts and techniques required to perform an objectoriented system analysis.

#### **Course Content**

Module 1: The Unified Modeling Language, Process and Visual Modeling, Analysis & Design Key Concepts, Concepts of Object Orientation

- Lesson 1: Relationships
- Lesson 2: Class
- Lesson 3: Polymorphism
- Lesson 4: Interface
- Lesson 5: Provided
- Lesson 6: Required
- Lesson 7: Structured Classes & Ports

#### **Module 2: Architectural Analysis**

- · Lesson 1: Key Concepts
- Lesson 2: Define high-level organization of the model
- Lesson 3: Identify analysis mechanisms
- · Lesson 4: Identify key abstractions
- Lesson 5: Create use-case realizations

#### Module 3: Use Case Analysis

- Lesson 1: Supplement the Use-Case Description
- Lesson 2: For each Use-Case Realization
- Lesson 3: Find Classes from Use-Case Behavior
- Lesson 4: Distribute Use-Case Behavior to Classes
- Lesson 5: For each resulting analysis class
- Lesson 6: Describe Responsibilities
- Lesson 7: Describe Attributes and Associations
- Lesson 8: Qualify Analysis Mechanisms
- Lesson 9: Unify 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**

Any professionnal who needs to analyze object-oriented software solutions

# **Prerequisites**

• Having followed the training <a href="UML Foundation">UML Foundation</a>

# **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, ...)

### Niveau

**Fondamental** 

**Classroom Registration Price (CHF)** 

2300

**Virtual Classroom Registration Price (CHF)** 

2150

**Duration (in Days)** 

3

Reference

OOAD-01