Object Oriented Analysis and Design – Advanced

Description

It enables the development of robust, scalable systems tailored to the real needs of businesses. This advanced training offers a practical approach to analysis and design, with a strong focus on methods, UML diagrams, and design patterns. Participants gain precise skills that can be applied immediately in their professional projects.

The object-oriented analysis and design course highlights the importance of use cases and software architecture. It also covers distribution mechanisms and interactions between subsystems. Through a hands-on teaching approach, learners strengthen their understanding of object-oriented principles and learn how to design coherent, well-structured models. Topics range from identifying classes to managing non-functional requirements, following a clear and logical progression.

Course Content
Module 1: Identify design elements

- Identify classes and subsystems
- Identify interfaces between subsystems
- Update the organization of the design model

Module 2: Identify design mechanisms

- Categorize the clients of analysis mechanisms
- Document architectural mechanisms

Module 3: Distribution

- Define the network configuration
- Allocate processes to nodes
- Define distribution mechanisms

Module 4: Use case design

- Describe interactions between design objects
- Simplify sequence diagrams using subsystems
- Describe persistent behaviors
- Refine the description of event flows
- Unify classes and subsystems

Module 5: Subsystem design

- Distribute subsystem behaviors to subsystem elements
- Document subsystem elements
- Describe subsystem dependencies

Module 6: Class design

- Create initial design classes
- Define operations
- Define methods

- Define states
- Define attributes
- Define dependencies
- Define associations
- Define internal structure
- Define generalizations
- Resolve case study conflicts
- Manage non-functional requirements in general

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

- Software analysts and designers
- Application architects
- Experienced developers
- Technical project managers

Prerequisites

- Having followed the course Object Oriented Analysis & Design - Fundamentals

Objectives

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

Description
Object-Oriented Analysis and Design – Advanced Training
Niveau
Avancé
Classroom Registration Price (CHF)
1600
Virtual Classroom Registration Price (CHF)
1500
Duration (in Days)
2
Reference
OOAD-02