

Basics of Object-oriented Software Development («OGL»)

In diesem Seminar verschaffen Sie sich einen umfassenden Überblick über die Konzepte und Methodiken der objektorientierten Softwareentwicklung. Dabei lernen Sie die einzelnen Begriffe und Techniken der Objektorientierung kennen.

Duration: 1 day

Price: 800.–

Course documents: Digicomp Kursmaterial

Content

In this course you will gain an insight into fundamental aspects of the implementation of object-oriented projects and corresponding development processes. You will learn to understand the basic concepts of this approach. The most important object-oriented programming languages are also introduced and their respective suitability for the different areas of software development is discussed. Otherwise, this seminar is neutral with regard to the programming language. However, the concrete implementation of an object-oriented design in programming is programming language-specific, which is why this is not part of this course.

1. Motivation
 - Reasons for failures
 - Costs of software development
 - Key differences between OO and structured methods
2. OO history and UML
3. Basic concepts and terms
 - Abstraction, decomposition, encapsulation (information hiding), hierarchy
 - Object, class, inheritance, etc.
 - Polymorphism
 - Most important application notes
4. Object-oriented development process
 - Iterative-incremental development
 - Analysis and design
 - RUP
5. Success factors and advice
6. Example of a multi-tier architecture
7. OO programming languages
 - Ada, C++, Smalltalk, Java, C#, Visual Basic etc.

Key Learnings

- Knowledge of the most important concepts of software engineering and object orientation from both a theoretical and practical perspective
- Applying the concepts of object orientation in your projects
- Assessing the advantages, disadvantages and limitations of object-oriented programming

Target audience

IT project managers, IT architects and IT developers who want to get an introduction to the object-oriented paradigm. This seminar is also particularly suitable for users who are involved as experts in the object-oriented analysis of a software system.

- C# Introduction («CSE»)
- Object-oriented Design with Patterns («ODP»)
- Object-oriented concepts in Java – Basics («JAVA02»)
- Object-oriented Analysis and Design (OOAD) («OOU»)
- Sparx Enterprise Architect – An easy entry-level («SEELG»)
- Introduction to Programming with Python («PYTHON»)
- UML Professional 2 Foundation («UMLZFP»)
- Unified Modeling Language («UML»)

Any questions?

We are happy to advise you on +41 44 447 21 21 or info@digicomp.ch. You can find detailed information about dates on www.digicomp.ch/courses-software-engineering/it-architecture/enterprise-software-architecture/course-basics-of-object-oriented-software-development