

IN-HOUSE TRAINING · COURSE CONTENT

OOP (Object-Oriented Programming)

Thematic Training · 3 days (21 h)

This training course covers Object-Oriented Programming, classes, methods, constructor, inheritance, properties, encapsulation, overloading, polymorphism, overriding, abstract class, Design Patterns (including MVP), UML, the philosophy of multi-platform processing (n-tier), arrays and structures, arrays of objects, and integrating and using a .NET assembly.

Prerequisites (Who is this training course intended for?)

Target audience: developers who want to structure their code using OOP (classes, inheritance, polymorphism, Design Patterns, UML).

Prerequisite: have already developed applications with WINDEV or have previously attended the Fundamentals training courses.

Practical information

Format
In-house

PCSoft Level
Level 3

Duration
3 days (21 h)

Price
Flat rate for 1 to 8 on-site developers and 1 to 6 remote developers.

Training Provider Registration Number (NDA)
91340055934

Last updated
September 2026

Detailed Program

The following is the suggested content of this training session:
(This content can be fully customized)

The instructor uses the course materials, which are tailored to the training objectives (the materials are provided at the beginning of the course). This course support material is divided into subjects.

All of these methods and exercises will help you put into practice what you have learned, when you return to your company.

Each subject is based on 3 axes:

Axis 1

The trainer gives a theoretical presentation of the topic, followed by any questions and answers.

Axis 2

Practical application exercise (individual work) to be completed within a set time limit. The trainer remains available to help and provide additional explanations.

Axis 3

Correction of the exercise, with all necessary explanations and any questions and answers. The trainer makes sure that each trainee has fully understood the exercise before continuing.

OOP (Object-Oriented Programming)

3 days (21 hours)

OBJECTIVES

- Implement object-oriented programming (topics 1, 2, 3, 4)
- Handle classes, UML (topics 2, 3)

CONTENT

Topic 1. The basics — 5 h

- From object-oriented analysis to object-oriented programming
- Creating classes
- Members
- Methods
- Objects
- Constructors
- Destructors

Topic 2. Advanced concepts — 9 h

- The objet keyword
- Encapsulation
- Accessors (Getter)
- Modifiers (Setter)
- Properties
- Inheritance
- Polymorphism
- Virtual methods
- Global methods (static)
- Global members
- Abstract classes
- Abstract methods (pure virtual)
- Private constructors
- Weak and strong references
- Interfaces
- Serialization
- Dynamic objects
- Mapping
- Databinding

- Keywords (objet, This, ObjetAssocié, Ancêtre, <associé>, <présentation>, MonFichierMappé, MaCléUniqueMappée>
- 3-Tier architecture
- Using a .NET framework
- Immutable classes
- Member immutability
- Scope attributes of members and properties
- Extension procedures on controls
- Extension procedures on WLangage types

Topic 3. UML — 15 min

- Class diagram

Topic 4. Design Pattern — 7 h

- Singleton
- Observer
- MVP
- Visitor
- The Factory (Design Pattern)

Teaching, technical and supervisory resources

In-person in-house training

Each participant is equipped with:

- printed course materials
- a notebook
- a pen

The instructor leading the training is an experienced PCSoft employee.

In-house Online Training

During the training, you will be in constant contact with the trainer via the GoTo Meeting (©) software, which allows you to share your screen and the trainer's screen. You will connect to the workstations using RustDesk (©); the trainer will provide you with the login information on the first day of the training.

You can also interact with the other participants to foster a friendly atmosphere during the training and promote productive technical discussions.

The course materials (PDF format) are sent to you with the joining instructions before the training begins.

Learn more about the online format

Arrangements

Price	Flat rate for 1 to 8 on-site developers and 1 to 6 remote developers. Ask us for a free quote.
Financing	skills development plan, OPCO, direct funding.
Agreement	A detailed training agreement is available upon request.
General conditions	PCSoft's general terms and conditions and specific training terms and conditions apply. General Terms and Conditions Special Terms and Conditions of Service
Rules and Regulations	Please review the rules and regulations for trainees at the PCSoft training center. Rules and Regulations Procedure for the Prevention and Handling of Violence, Harassment, and Discrimination

Methods for monitoring the execution of the training session

At the end of the training course, participants' mastery of the skills is assessed through a multiple-choice test. Non-certification, non-degree program—certificate of completion.

Prices and VAT

It all depends on where you live:

- Mainland France: The training is subject to French VAT (20% as of 01/01/2014).
- Overseas Departments (DOM): The VAT rate (known as "octroi de mer") varies by DOM (Martinique, Guadeloupe, and Réunion: 8.5%; French Guiana: VAT-exempt).
- COM and POM: excluding tax.
- EEC: Invoicing excluding tax (provide the European VAT number).
- Other countries (outside the EEC): excluding tax.

Accessibility

PCSoft is particularly committed to including people with disabilities in its training programs.

Contact the disability liaison officer

Learn more

Access Lead Times

The training date will be set in consultation with you: it can begin 2 to 4 weeks after the quote is approved, depending on the trainers' availability.

PCSoft is Qualiopi-certified for its training programs; certified process No. 2021/92442.2 (AFNOR Certification).

Learn more