+33 (0)1 48 10 09 46
formation@ambient-it.net
140 Avenue Jean Lolive 93500 Pantin - France

Updated on 05/05/2026

Sign up

SnowPro Training: Core Certification (COF-C02)

3 days (21 hours)

Overview

Our SnowPro® Core (COF-C02) certification preparation course will help you validate your foundational knowledge and technical skills regarding the Snowflake platform. You will explore tools and user interfaces for effective data management.

You will learn to configure and manage certain security aspects of Snowflake, such as defining roles and entities or data governance capabilities. You will be able to implement security best practices to protect sensitive data.

The course also covers performance concepts, including how to use a query profile, configure virtual warehouses, and optimize query performance, enabling you to ensure efficient and fast data management.

Additionally, modules on data transformations will be covered to teach you how to work with structured, semi-structured, and unstructured data, as well as data protection with Snowflake.

Like all our training courses, this one will introduce you to **the latest stable version** of the technology and its new features.

Objectives

- Present the main features of Snowflake Data Cloud
- Describe the security principles and roles used in Snowflake
- Explain how to use query profiles to optimize performance

- Define the concepts and best practices for loading and unloading data
- Explain how to work with structured and unstructured data
- Pass the SnowPro® Core certification exam

Target Audience

- Data Analysts
- Data Engineers
- Data Scientists
- Application Developers

Prerequisites

- Basic knowledge of SQL
- Experience with database management systems
- Basic understanding of data warehouses
- Test My Knowledge

Note: Ambient IT does not own SnowPro® Core; this certification is owned by Snowflake Inc.

Snowflake SnowPro® Core Training Program

[Day 1 - Morning]

Data Cloud Architecture and Fundamentals

- Understanding the layers of the architecture: Storage, Compute, Services
- Mastering Multi-Cluster Shared Data and the storage/computing separation
- Overview of interfaces: Snowsight, CLI (SnowSQL), and connectors
- Storage Management: Micro-partitions, Metadata, and Clustering
- Hands-on Workshop: Configuring the Environment and Creating Your First Objects.

[Day 1 - Afternoon]

Virtual Warehouses and Cost Governance (FinOps)

- Advanced configuration of Virtual Warehouses (Scaling up vs. Scaling out)
- Resource Management: Auto-Suspend and Auto-Resume Policies
- Monitoring Usage: Using Resource Monitors
- Performance Analysis: Using the Query Profile
- Hands-on Workshop: Optimizing a warehouse to balance performance and cost.

[Day 2 - Morning]

Security, Identities, and Data Governance

- Security Model: Role Hierarchy and RBAC
- Authentication (MFA, SSO) and Network Policies
- Data Governance: Tagging, Lineage, and Dynamic Masking
- Compliance: Data Encryption (Tri-Secret Secure)
- Hands-on Workshop: Implementing a Security Policy by Department

[Day 2 - Afternoon]

Data Ingestion and Real-Time Data Flows

- Loading Strategies: COPY INTO vs. Snowpipe
- New Features for 2026: Snowpipe Streaming and Direct Integrations
- Format Management: Parquet, Avro, JSON (semi-structured data)
- Data Export to Cloud Storage (S3, Azure, GCS)
- Hands-on Workshop: Creating an Automated Ingestion Pipeline.

[Day 3 - Morning]

Modern Transformation: SQL, Snowpark, and Dynamic Tables

- Mastering Snowflake SQL: Analytical Functions and Window Functions
- Introduction to Snowpark: Using Python to transform data
- Automation: Replacing Tasks/Streams with Dynamic Tables
- Working with Unstructured Data and Directory Tables
- Hands-on Workshop: Deploying a Dynamic Table in Python/SQL.

[Day 3 - Afternoon]

Security, Sharing, and AI (Cortex)

- Continuous protection: Time Travel and Fail-safe
- Zero-Copy: Zero-Copy Cloning for Dev/Test
- Data Sharing: Direct Sharing and Snowflake Marketplace
- Introduction to AI: Using Snowflake Cortex (LLM & ML)
- Hands-on Workshop: Cross-functional Final Project (Ingestion, AI, and Sharing).

Participating companies

This training program is designed for both individuals and businesses—large and small—that wish to train their teams in new, advanced IT technologies or to acquire specific industry knowledge or modern methodologies.

Placement upon enrollment

The pre-training assessment complies with Qualiopi quality standards. Upon final registration, the learner receives a self-assessment questionnaire that allows us to evaluate their estimated proficiency in various types of technologies, as well as their expectations and personal goals for the upcoming training, within the limits imposed by the selected format. This questionnaire also allows us to anticipate certain connection or internal security issues within the company (intra-company or virtual classroom) that could pose challenges for monitoring and ensuring the smooth running of the training session.

Teaching Methods

Practical Course: 60% Practical, 40% Theory. Training materials distributed in digital format to all participants.

Organization

The course alternates between theoretical input from the trainer, supported by examples and reflection sessions, and group work.

Assessment

At the end of the session, a multiple-choice questionnaire is used to verify that the skills have been properly acquired.

Certification

A certificate will be issued to each trainee who has completed the entire training program.