

# SnowPro Core Certification

**Prerequisites:** Basic knowledge of Computers, SQL commands, and Cloud computing Service (Amazon S3, Microsoft Azure or Google Cloud Platform)

**Duration:** 5 Days (8 Hrs/Day)

**Course Objective:** This course aims to equip participants with essential skills and knowledge required for the SnowPro Core Certification exam. Covering key topics such as data loading, transformation, virtual warehouse performance, DDL/DML queries, handling semi-structured/unstructured data, cloning, time travel, data sharing, and account structure management, participants will learn to navigate Snowflake efficiently. By the end, they'll be proficient in optimising performance, managing concurrency, and securely sharing data, ensuring they're well-prepared for certification and adept at leveraging Snowflake for diverse data management needs.

**Lab Requirement:** Koenig-DC/Windows

## Module 1 - Getting started

The Snowflake Architecture

Shared-Disk (Scalable) Architecture

Shared-Nothing (Scalable) Architecture

NoSQL Alternatives

**Lab:** Navigation of Snowsight

## Module 2 - Data Loading and Transformation in Snowflake.

Data Types

File Formats

Data File Compression

Frequency of Data Processing

Snowflake Stage References

Data Sources

**Lab:** Snowflake Worksheet SQL Using INSERT INTO and INSERT ALL Commands

**Lab:** Web UI Load Data Wizard

**Lab:** SnowSQL CLI SQL PUT and COPY INTO Commands

## Module 3 - Virtual Warehouse Performance and Concurrency.

Virtual Warehouse Size

Scaling Up a Virtual Warehouse to Process Large Data Volumes and Complex Queries

Scaling Out with Multi-cluster Virtual Warehouses to Maximise Concurrency



Creating and Using Virtual Warehouses

Separation of Workloads and Workload Management

Billing for the Virtual Warehouse

**Lab:** Creating a virtual warehouse

**Lab:** Scaling a virtual Warehouse

**Lab:** How to stop a virtual warehouse

#### **Module 4 - DDL and DML Queries.**

Understanding DDL commands

Understanding DML queries

**Lab:** How to use CREATE statement

**Lab:** How to use ALTER statement

**Lab:** How to use TRUNCATE statement

**Lab:** How to use RENAME statement

**Lab:** How to use DROP statement

**Lab:** How to use DESCRIBE statement

**Lab:** How to use SHOW statement

**Lab:** How to use USE statement

**Lab:** How to use SET/UNSET statement

**Lab:** How to use COMMENT statement

**Lab:** How to use INSERT statement

**Lab:** How to use MERGE statement

**Lab:** How to use UPDATE statement

**Lab:** How to use DELETE statement

**Lab:** How to use COPY INTO statement

**Lab:** How to use PUT statement

**Lab:** How to use GET statement

**Lab:** How to use LIST statement

**Lab:** How to use VALIDATE statement

**Lab:** How to use REMOVE statement

#### **Module 5 - Using Semi-Structured and Unstructured Data.**

Introduction to Semi-Structured data

Semi-Structured data Supported formats

Loading of semi-unstructured data

Introduction to Unstructured data

Loading of Unstructured data

**Lab:** Loading of semi-structured data

**Lab:** Loading of unstructured data

**Module 6 - Cloning and Time Travel.**

Introduction to Time Travel

Introduction to Database cloning

Zero-copy cloning

**Lab:** How to perform Time travel

**Lab:** How to perform Data Cloning

**Module 7 - Data Sharing.**

Introduction to secure data sharing

Introduction to listings

Introduction to Snowflake marketplace

Introduction to data exchange

**Lab:** Navigation of Snowsight for data sharing

**Module 8 - Snowflake Account Structure and Management.**

Navigating Accounts tab in snowsight

Resource monitor

Understanding Snowflake account costs

**Lab:** How to create resource monitor