

**Snowflake SnowPro Core Exam Prep**

**Course Number:** SQL-714EC  
**Duration:** 4 days

**Overview**

This Snowflake course prepares attendees for the SnowPro Core exam and teaches real-world data management skills in Snowflake, the industry's leading cloud data platform.

**Prerequisites**

All attendees must have Data Warehouse knowledge.

**Materials**

All Snowflake training students receive comprehensive courseware.

**Software Needed on Each Student PC**

All attendees will need access to a Snowflake SQL environment with Accelebrate’s sample data loaded.

**Objectives**

* Master the cloud data warehousing landscape and modern data demands
* Understand Snowflake's architecture, including its cloud services, compute, and storage layers
* Implement best practices for optimal transfer within and beyond Snowflake
* Master Snowflake's objects and commands, using Snowpipe for efficient data pipelines
* Use SQL for data analysis, using advanced functions, crafting impactful queries, and creating custom UDFs and stored procedures
* Protect data by implementing encryption, authentication, and role-based access control
* Build a high-performing Snowflake environment using caching, data optimization, and cost-saving strategies

**Outline**

* Introduction
* Data Warehousing Overview
  + Data warehousing evolution
  + Cloud data warehousing
  + Adapting to increasing demands for data access and analytics
  + Adjusting to how data is created and used today
* Architecture and Overview
  + Technical Overview
  + Cloud Services Layer
  + Compute Layer
  + Storage Layer
* Architecture Deep Dive
  + Optimization
  + Security
  + Tokenization
  + Best Practices
* Data Movement
  + Data Loading
  + Data Unloading
  + Best Practices
  + Data Sharing
  + Snowpipe
* Objects and Commands
  + Query Constructs
  + Data Description Language (DDL)
  + Data Manipulation Language (DML)
  + Local only resources
* SQL Support for Data Analysis
  + SQL Support and Query Best Practices
  + SQL Analytic Functions
  + High Performing Estimation Functions
  + UDF and Stored Procedure
  + Demo Query Profile
* Managing Security
  + Data Encryption
  + Authentication
  + Role-Based Access Control
* Semi-structured data
  + Working with semi-structured data
  + Queries
  + Data Optimization
* Caching
  + Caching Features
  + Performance Improvements
  + Cost Optimization
* Clients and Ecosystem
  + Clients
  + Connectors
  + SnowSQL
* Security
  + Continuous Data Protection
  + Time Travel
  + Fail Safe
  + Cloning
* Performance and Concurrency
  + Query Profile
  + Micro-Partitions
  + Data Clustering
  + Scaling a Virtual Warehouse
* Account and Resources Management and Monitoring
  + System Resource Usage and Billing
  + Managing Virtual Warehouses
  + Workload Independence and Segmentation
  + Resource Monitors
  + Information Schema and Account Usage
* Conclusion