

COF-C02: Snowflake SnowPro Core

Understand how Snowflake works under the hood and use it confidently for loading, querying, securing and sharing data.

DURATION

2 days · 16 hours

LEVEL

Intermediate

CURRICULUM

7 modules · 5 labs

DELIVERYLive online, Onsite,
Corporate

Course overview

Snowflake is a cloud data platform used by many organisations for warehousing, analytics and data sharing. The SnowPro Core certification checks that you understand its architecture and can use its features correctly — knowledge that pays off directly in cost and performance at work.

Day one covers architecture and security: the separation of storage, compute and cloud services, micro-partitions, virtual warehouses and editions, followed by account access, role-based access control, authentication options, network policies and data governance features such as masking and row access policies. You will then examine performance — caching layers, query profiles, clustering, warehouse sizing and scaling.

Day two focuses on working with data: stages, file formats, bulk and continuous loading, unloading, semi-structured data with VARIANT and FLATTEN, streams and tasks, and transformations with SQL and stored procedures. It then covers data protection — Time Travel, Fail-safe and zero-copy cloning — and secure data sharing and the Marketplace, followed by exam readiness.

Labs run in a Snowflake trial account so you can try every feature yourself.

This course is aligned to the SnowPro Core certification exam. Snowflake revises the exam version periodically; please confirm the current version and guide on the Snowflake certification site before booking.

Highlights

- 16 hours of live, trainer-led sessions
- Hands-on Snowflake account labs
- Warehouses, caching and performance tuning
- Secure data sharing and access control
- Practice questions with review

What's included

- Hands-on labs in a Snowflake account
- Architecture explained with diagrams and demos
- Access control and governance labs
- Performance tuning with query profiles
- Loading, semi-structured data and streams
- Course completion certificate from Ace Skills Consulting

Who this course is for

Who should attend

- Data engineers and analysts using Snowflake
- Data warehouse developers migrating to the cloud
- BI developers and architects
- Database administrators

Prerequisites

- Working knowledge of SQL
- Basic understanding of data warehousing
- Familiarity with cloud concepts is helpful

Detailed curriculum — 2 days, 16 hours, 7 modules, 5 hands-on labs

Day 1 Architecture, Security and Performance

8 hours

1.1 Snowflake architecture

- Storage, compute and cloud services layers
- Virtual warehouses
- Snowsight and SnowSQL
- Micro-partitions
- Editions and cloud regions

1.2 Account access and security

- Role hierarchy and RBAC
- Network policies
- Authentication: MFA, SSO and key pairs
- Masking and row access policies

LAB Design and apply a role hierarchy with masking · 45 min

1.3 Performance

- Result, metadata and warehouse caches
- Clustering keys
- Search optimisation overview
- Query profile analysis
- Warehouse sizing and multi-cluster scaling

LAB Diagnose and tune slow queries · 45 min

Day 2 Loading, Transformation, Protection, Sharing and Exam Readiness

8 hours

2.1 Data loading and unloading

- Stages and file formats
- Snowpipe
- COPY INTO
- Unloading data

LAB Load CSV and JSON files from a stage · 40 min

2.2 Transformations

- Semi-structured data with VARIANT and FLATTEN
- Stored procedures and UDFs
- Streams and tasks
- Dynamic tables overview

LAB Build an incremental pipeline with streams and tasks · 45 min

2.3 Data protection and sharing

- Time Travel and Fail-safe
- Secure data sharing
- Zero-copy cloning
- Reader accounts and Marketplace

LAB Clone, restore and share a database · 35 min

2.4 Exam readiness

- Domain review
- Practice questions with review
- Question styles

Skills and tools

Skills you will build

Snowflake architecture

Virtual warehouses

Role-based access control

Data masking

Query performance

Data loading

Snowpipe

Semi-structured data

Streams & tasks

Time Travel

Zero-copy cloning

Secure data sharing

Tools used in class

Snowflake

Snowsight

SnowSQL

Cloud object storage

Certification exam

This course is aligned to the exam below and prepares you for it. The exam itself is booked and taken with the vendor.

Exam	SnowPro Core Certification
Exam code	COF-C02
Official page	https://www.snowflake.com/en/certifications/

Exam skill areas covered

Snowflake architecture and features and architecture

Exam details are pending verification. Confirm the current exam code, format and fee on the official vendor page before booking.

Frequently asked questions

Which exam version does this cover?

It is aligned to the SnowPro Core exam. Snowflake updates the version periodically, so we confirm the current code and guide with you before booking.

Do I need a Snowflake account?

A free trial account is enough; we help you set it up before the course.

Is this useful without the exam?

Yes. The architecture, security and performance knowledge directly reduces costs and errors in daily work.

What comes after SnowPro Core?

Advanced role-based SnowPro certifications for architects, engineers and administrators build on it.

Book a batch or talk to an advisor

Course page: aceskillsconsulting.com/course/cof-c02-snowflake-snowpro-core · Email: info@aceskillsconsulting.com

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