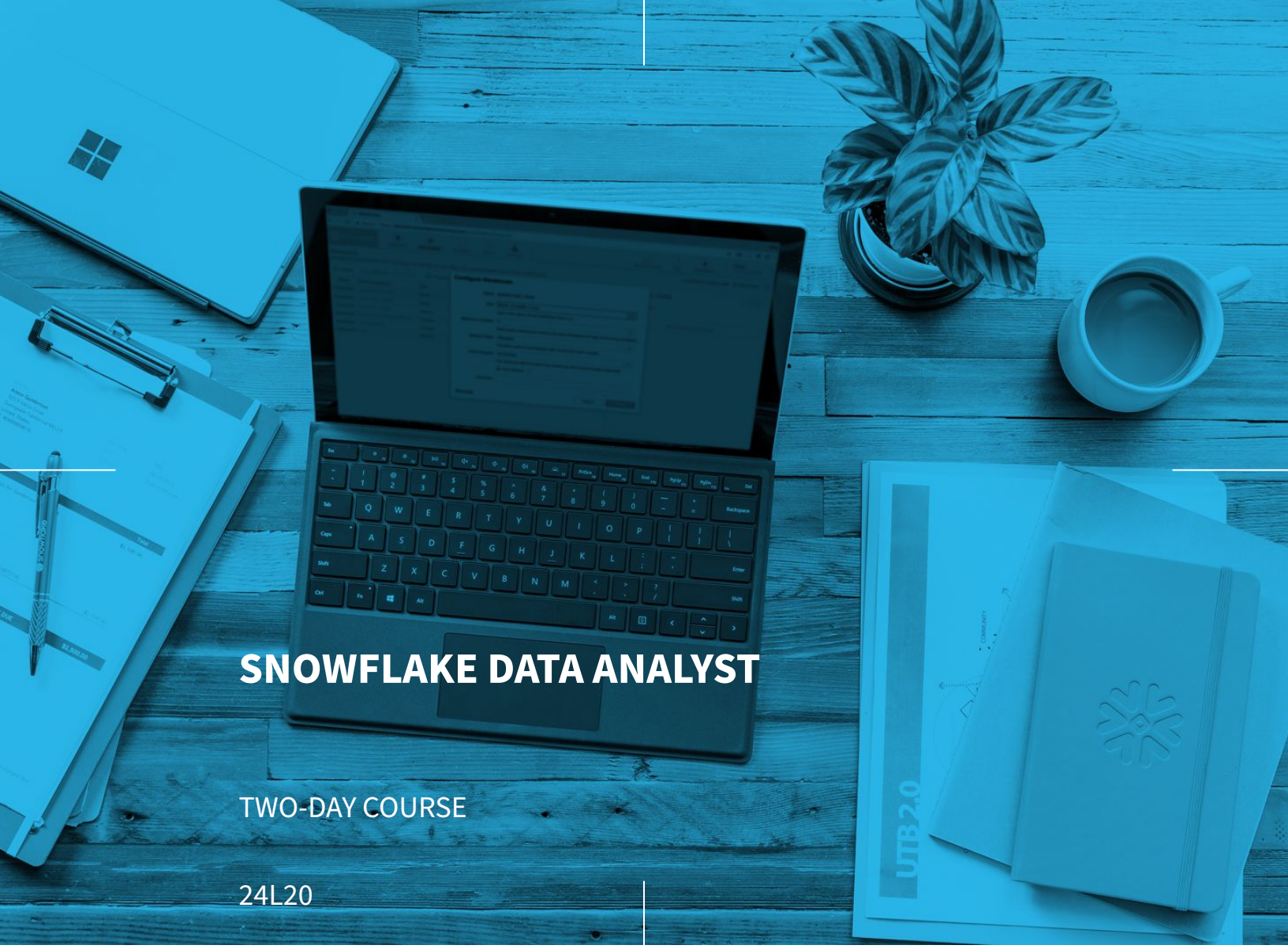

SNOWFLAKE DATA ANALYST

TWO-DAY COURSE

24L20

snowflake® | UNIVERSITY

DATASHEET

OVERVIEW

This two-day, role-specific course introduces data analysts to how the Snowflake AI Data Cloud enables them to deliver actionable insights and reports to their organization to drive business value. The course is structured around a data analysis lifecycle placing each capability Snowflake provides in the data analyst's context. The course begins with how to connect to the Snowflake Data Cloud. It then covers how to analyze, ingest, enrich, report, and diagnose data insights with Snowflake. The course consists of lectures, labs, demonstrations, and discussions.

ACQUIRED SKILLS

- Outline the unique and differentiated architecture of the Snowflake AI Data Cloud.
- Exploit the options provided to connect and interact with the Snowflake AI Data Cloud.
- Describe how to use BI tools for data analysis in Snowflake.
- Summarize query constructs, Data Definition Language (DDL), Data Manipulation Language (DML), and Data Query Language (DQL) operations.
- Use Snowflake's extensive SQL capabilities and the built-in table, scalar, window, and estimation functions to support data analysis.
- Apply Snowflake best practices when working with semi-structured data.
- Load and transform data.
- Visualize data outside of Snowflake.
- Employ Snowflake features in the reporting process and activities performed by the data analyst to create analytic visualizations.
- Explain Snowflake's unique approach to caching and the benefits to query performance.
- Perform query evaluation, pre- and post-execution, using Snowflake's Explain, Query History, and Query Profile.

WHO SHOULD ATTEND

- Data Analysts
- Business Intelligence users

PREREQUISITES

- Basic knowledge of SQL is required

DELIVERY FORMAT

Instructor-led Public or Private classes are available.

TOPICS COVERED

Data Analysis with Snowflake

Snowflake Overview

- Why Snowflake?
- Snowflake Functional Architecture
- Platform Features
- Getting Started with Snowflake

Snowflake Architecture

- Snowflake Architecture Layers
- Snowflake Structure

Account Usage and More

- Information Schema and Account Usage
- Using Parameters to Control Snowflake
- Query Tags
- Sample Data Sets

Client Interfaces

- Client Interface Overview
- Authentication
- Snowsight
- SnowSQL
- Connecting Tools to Snowflake

SQL Support in Snowflake

- Data Definition Language (DDL)
- Data Manipulation Language (DML)
- Data Query Language (DQL)
- Set Operations and Joins
- Subqueries and Common Table Expressions
- Dynamic Pivot Queries
- Constructing Efficient Queries

- Copilot

Functions in Snowflake

- Function Overview
- Estimation Functions
- User-defined Functions
- Stored Procedures
- Snowflake Scripting

Other Snowflake Features

- Collation
- Sampling
- Snowflake Tasks
- Alerts

Creating More Complex Queries

- Window Functions, Syntax, and Usage
- Group By and Grouping Sets
- Recursive With and Connect By

Semi-structured Data

- Semi-structured Data Overview
- Query Semi-structured Data

Continuous Data Protection

- Time Travel
- Cloning

Collaboration

Data Loading

- Data Loading Concepts
- Examples of Data Loading

Snowflake Data Lake Support

Reporting Using Snowflake

- Explore Data
- Prepare Data
- Analyze Data
- Visualize Data
- Integrate BI Tools

Caching and Query Pruning

- Metadata and Caching Overview
- Metadata
- Query Result Cache
- Data Cache
- Query Pruning

Visualizing Query Execution with Query Profile

- Using Explain
- Using Query Profile

Performance Tips and Troubleshooting

- SQL Performance Tips
- Performance Bottlenecks