SNOWFLAKE ADVANCED ANALYTICS

TWO-DAY COURSE

24I19

snowflake® | UNIVERSITY

DATASHEET

OVERVIEW

This two-day, role-specific course introduces participants to the advanced analytic capabilities provided by the Snowflake AI Data Cloud. Participants learn to employ these analytical capabilities to derive deeper insights, discover patterns, and pinpoint trends. This course will provide participants with the skills to begin accessing information that supports a more predictive approach to identifying what could happen instead of only looking at what has happened. The course consists of lectures, labs, demonstrations, and discussions.

ACQUIRED SKILLS

- Use the advanced analytic capabilities provided in Snowflake to improve decision-making.
- Show quick insights into trends, correlations, and predictions using linear regression.
- Exploit windowing functions to provide efficient query processing and support comparative analysis.
- Manipulate semi-structured data in its raw format to expand analysis capabilities.
- Explain how geospatial data can enhance operational efficiencies, support location-based analysis, and augment visualizations.
- Perform analysis using algorithms designed for “big data” to facilitate predictive analytics.
- Employ complex query syntax in Snowflake.
- Utilize Streamlit in Snowflake apps for analysis.
- Summarize Snowflake’s LLM and ML capabilities.
- Use a Snowflake Notebook to perform analysis and visualizations using SQL and select Python packages.

WHO SHOULD ATTEND

- Data Analysts
- Citizen Data Scientists
- Anyone interested in advanced analytics

PREREQUISITES

- Completion of “Snowflake Data Analyst” two-day course or equivalent Snowflake knowledge.
- Knowledge of SQL is required.
- Familiarity with statistical analysis and its terminology is recommended.
- Previous Python programming experience is beneficial.

DELIVERY FORMAT

Instructor-led Public or Private classes are available.

TOPICS COVERED

Snowsight Analytics

- Loading Data
- Running Queries
- Visualizations

Exploratory Data Analysis

- Descriptive Statistics
- Time Travel-based Analytics
- Times Series Analytics
- Linear Regression

Windowing Functions

- Over Clause Review
- Rank and Dense Rank
- Row Number
- Lead and Lag
- Other Functions

Semi-structured Data Analysis

- Unnesting Data Using Flatten
- Using Other Semi-structured Functions
- Extracting and Checking Data Types
- Creating Semi-structured Elements From Structured Data
- Unloading Semi-structured Data
- Loading Semi-structured Data
- Schema Detection
- Benefits of Structured vs Non-structured Tables

Working With Unstructured Data

Geospatial

- Geospatial Overview
- Geometry Data

- Geography Data
- Using Geospatial Functions

Big Data

- Processing Big Data
- Comparing Data Sets
- Top- K Frequency
- Counting Distinct Elements
- Percentile Distributions

Streamlit

- Streamlit Overview
- Streamlit in Snowflake

Snowflake ML Functions

- Snowflake ML Functions - Overview
- Snowflake ML Functions - Generalized Workflow
- Snowflake ML Functions - Specifications
- Snowflake ML Functions - Cost Considerations

Cortex LLM Functions

- Generative AI
- Cortex LLM Functions - Overview
- Cortex LLM Functions - Specialized Functions
- Cortex LLM Functions - COMPLETE
- Cortex LLM - Cost Monitoring

Snowflake Notebooks

- Introducing Snowflake Notebooks
- Using Notebook Cells
- Integrating Snowflake ML and Cortex LLM