

COURSE OUTLINE

Course Version: 17 Course Duration:

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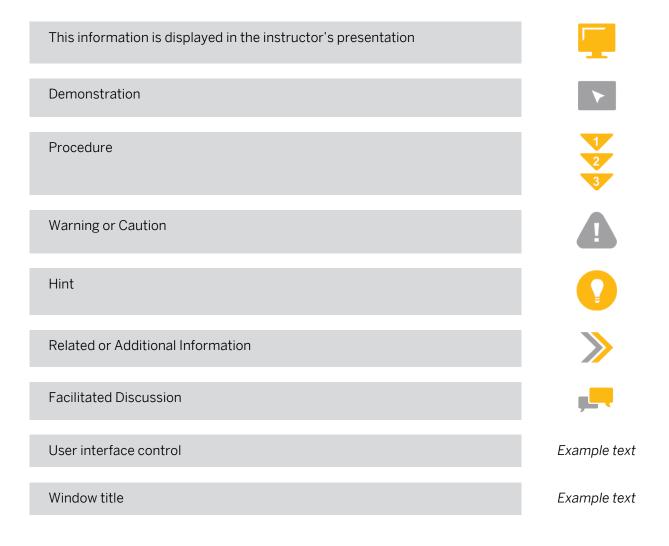
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Typographic Conventions

American English is the standard used in this handbook. The following typographic conventions are also used.





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Course Overview

TARGET AUDIENCE

This course is intended for the following audiences:

• Database Administrator



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UNIT 1 Calculation Views

Lesson 1: Introducing Calculation Views

Lesson Objectives

After completing this lesson, you will be able to:

• Explain modeling objects

Lesson 2: Understanding the Different Types of Views

Lesson Objectives

After completing this lesson, you will be able to:

• Explain the types of views used in graphical modeling

Lesson 3: Working with Common View Design Features

Lesson Objectives

After completing this lesson, you will be able to:

- Use common features to design calculation views
- Get an overview of the different types of nodes



UNIT 2 Using Nodes in Calculation Views

Lesson 1: Using Projection Nodes

Lesson Objectives

After completing this lesson, you will be able to:

• Use a projection node

Lesson 2: Using Joins Nodes

Lesson Objectives

After completing this lesson, you will be able to:

- Use joins to combine data sources
- Join more than two tables in a single join node
- Work with non-equi joins
- Use a Dynamic Join
- Define Join Columns Optimization

Lesson 3: Working with Data Sets

Lesson Objectives

After completing this lesson, you will be able to:

- Use Union Nodes to combine data sets
- Use Set Operations: Minus and Intersect

Lesson 4: Aggregating Data

Lesson Objectives

After completing this lesson, you will be able to:

- Use Aggregation Nodes
- Control the behavior of the Aggregation Node

Lesson 5: Creating CUBE with Star Join Calculation Views



Lesson Objectives

After completing this lesson, you will be able to:

• Use a Star Join in a CUBE calculation view

Lesson 6: Extracting Top Values with Rank Nodes

Lesson Objectives

After completing this lesson, you will be able to:

• Use a rank node to extract the top values of a data set

UNIT 3 Modeling Functions

Lesson 1: Creating Restricted and Calculated Columns

Lesson Objectives

After completing this lesson, you will be able to:

Create restricted and calculated columns

Lesson 2: Filtering Data

Lesson Objectives

After completing this lesson, you will be able to:

• Filter data

Lesson 3: Using Variables and Input Parameters

Lesson Objectives

After completing this lesson, you will be able to:

- Implement variables
- Define input parameters
- Map variables and input parameters

Lesson 4: Using Hierarchies

Lesson Objectives

After completing this lesson, you will be able to:

• Use hierarchies

Lesson 5: Implementing Currency Conversion

Lesson Objectives

After completing this lesson, you will be able to:

• Explain the general principles of currency conversion



UNIT 4 Using SQL in Models

Lesson 1: Introducing SAP HANA SQL

Lesson Objectives

After completing this lesson, you will be able to:

• Describe SAP HANA SQL

Lesson 2: Query a Modeled Hierarchy Using SQL

Lesson Objectives

After completing this lesson, you will be able to:

• Query a modeled hierarchy using SQL

Lesson 3: Working with SQLScript

Lesson Objectives

After completing this lesson, you will be able to:

• Develop Skills using SQLScript

Lesson 4: Creating and Using Functions

Lesson Objectives

After completing this lesson, you will be able to:

• Work with functions

Lesson 5: Creating and Using Procedures

Lesson Objectives

After completing this lesson, you will be able to:

• Create and use procedures



UNIT 5 **Optimization of Models**

Lesson 1: Implementing Good Modeling Practices

Lesson Objectives

After completing this lesson, you will be able to:

• Implementing good modeling practices

Lesson 2: Using Tools to Check Model Performance

Lesson Objectives

After completing this lesson, you will be able to:

Use tools to check model performance

Lesson 3: Developing a Data Management Architecture

Lesson Objectives

After completing this lesson, you will be able to:

• Implement Good Data Management Architecture



UNIT 6 Management and Administration of Models

Lesson 1: Working with Modeling Content in a Project

Lesson Objectives

After completing this lesson, you will be able to:

- Analyze and document information models
- Explain the structure of a project
- Build modeling content
- Modify and move modeling content

Lesson 2: Creating and Managing Projects

Lesson Objectives

After completing this lesson, you will be able to:

- Define the key settings of a project
- Manage the lifecycle of a project

Lesson 3: Enabling Access to External Data

Lesson Objectives

After completing this lesson, you will be able to:

• Set up access to external data

Lesson 4: Working with GIT Within the SAP Web IDE

Lesson Objectives

After completing this lesson, you will be able to:

• Use the Native Git Integration of the SAP Web IDE

Lesson 5: Migrating Modeling Content

Lesson Objectives

After completing this lesson, you will be able to:



- List the deprecated modeling artifacts
- Explain how to migrate modeling content

UNIT 7 Security in SAP HANA Modeling

Lesson 1: Understanding Roles and Privileges

Lesson Objectives

After completing this lesson, you will be able to:

• Understand roles and privileges

Lesson 2: Defining Analytic Privileges

Lesson Objectives

After completing this lesson, you will be able to:

• Define analytic privileges

Lesson 3: Defining Roles

Lesson Objectives

After completing this lesson, you will be able to:

• Create a design-time role

Lesson 4: Masking Sensitive Data

Lesson Objectives

After completing this lesson, you will be able to:

• Restrict access to columns containing sensitive data within a View

Lesson 5: Anonymizing Data

Lesson Objectives

After completing this lesson, you will be able to:

• Protect sensitive data with anonymization

