

# Data Modeling: Data Analysis and Design for BI and Data Warehousing Systems

**Duration:** 2 Days

## Description

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Business intelligence and data warehousing systems challenge the proven data modeling techniques of the past. From requirements to implementation, new roles, uses, and kinds of data demand updated modeling skills. The data modeler's toolbox must address relational data, dimensional data, unstructured data, and master data. For those with data modeling experience, this course extends their skills to meet today's modeling challenges. Those new to data modeling are introduced to the broad range of modeling skills needed for BI/DW systems. Those who need to understand data models, but not necessarily develop them, will learn about the various forms of models and what they are intended to communicate.

## You Will Learn

- Differences in modeling techniques for business transactions, business events, and business metrics
- Different types of data and their implications
- Application of business context to modeling activities
- The role of business requirements in BI data modeling
- The role of source data analysis in data modeling
- Use of normalized modeling techniques for data warehouse analysis and design
- Use of dimensional modeling techniques for data warehouse analysis and design
- The roles of generalization and abstraction in data warehouse design
- The roles of identity and hierarchy management in data warehouse design
- How time-variant data is represented in data models
- Implementation and optimization considerations for warehousing data stores

## Audience

- Data architects

- Data modelers
- BI program and project managers
- BI/DW system developers

## Prerequisite

This course assumes basic understanding of data warehousing fundamentals.

## Outline

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Different types of data and their implications

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The roles of generalization and abstraction in data warehouse design

The roles of identity and hierarchy management in data warehouse design

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