Module One

Dimensional Data Modeling Concepts

- Dimensional Modeling Basics
  - dimensional modeling defined
  - business metrics defined
  - business metrics examples
  - dimensional data models
- Comparing Relational and Dimensional Models
  - a quick review of relational models
  - introduction to dimensional models
  - dimensional is relational with additional constraints
  - example
- Concepts Summary – Review of Key Points

Module Two

Requirements Gathering for Dimensional Modeling

- Business Context for Data Modeling
  - business alignment
  - process alignment
- Business Questions as Requirements Models
  - addressing performance, people, and process
  - a framework for business questions
  - examples
- Fact/Qualifier Analysis
  - from business requirements to data requirements
  - mapping business questions
- Requirements Gathering Summary – Process Review

Module Three

Logical Dimensional Modeling

- Modeling Meters and Measures
  - meter – a group of related business measures
  - meters and measures in the data model
- Modeling Dimensions
  - finding hierarchies in qualifiers
  - adding dimensions to the model
  - refining the dimensions
  - completing the dimensions
- More About Meters and Measures
  - granularity and the meter
  - granularity and the measures
  - completing the meter
- Logical Modeling Summary – Process Review

Module Four

From Logical Model to Star Schema

- Star Schema Dimensions
  - naming the dimensions
  - modeling the dimension tables
  - degenerate dimensions
  - defining dimension table keys
- Star Schema Fact Tables

    - defining the fact table key
    - supporting calculated measures
- Star Schema Design Challenges
    - conformed dimensions
    - slowly changing dimensions
    - semi-additive and non-additive facts
- Modeling Process Summary – From Business Requirements to Star Schema

Module Five

Dimensional Data and Business Analytics

- Delivering Business Value
- An OLAP Demonstration