



Dimensional Modeling Education

Duration: 1/2 day

Objectives: Participants will learn dimensional modeling techniques through a combination of lecture, interactive class discussion and hands-on design workshops.

Target Audience: Data warehouse project managers, business analysts, DBAs and other team members involved in the dimensional design process.

Prerequisites: Basic understanding of relational database terminology

Agenda:

- **Introductions**
Course agenda and assumptions
- **Dimensional Modeling Fundamentals**
Fact and dimension tables
- **“Basics” Case Study** – class design for retail sales
Four-step design process
Dimension table hierarchies
Degenerate dimensions
Surrogate key recommendations
Factless fact tables
- **“Beyond 1st Data Mart” Case Study** – class design for retail inventory
Data Warehouse bus matrix
Conforming and reusing dimensions
Semi-additive facts
Star versus snowflake design variations
Exercise: Translate requirements into data warehouse bus matrix
- **More Dimensional Design Fundamentals**
Techniques for slowly changing dimensions
- **“Transaction Detail” Case Study** – class design for manufacturer invoicing
Dimension table role playing
Complications with invoice data
Communicating dimensional models to users
- **Workshop (Time Permitting)** – small group design for transaction/snapshot schema