

Introduction to Dimensional Modeling

Course Number: DW-100

Format: Instructor Led, Classroom

Standard Duration: 21 hours

Overview



- The purpose of this course is to introduce students to the use and application of data warehousing modeling technique commonly known as “dimensional modeling”.
- Using a combination of theory and practice, the goal is to first understand the conventions, approaches, and techniques then, if possible, apply them to actual data and requirements in the workplace.

Learning Outcomes

- Be able to describe the basic concepts, terms & definitions associated with BI/DW.
- Develop familiarity with the key architectural components and layers required for a complete data warehouse solution.
- Develop core skills in dimensional modeling techniques.
- Apply dimensional modeling techniques to create a preliminary model or set of models.

Course Content: Detailed Outline and Timing (all timings are approximate)



Day 1 Outline

~Timing	Topic	Exercise
20m	Introductions / Objectives	
40m	1. General Data Modeling Primer: Filling some of our knowledge gaps	
40m	2. DW/BI Architecture Basics & Terminology	
15m	< Break >	
60m	Lunch	
60m	3. Demystifying Dimensional Modeling: Relating to The Basic Idea	
15m	< Break >	
60m	4. Gathering Requirements: Input to the Modeling Process	
30m	1. Recap/Review, Q&A	

Day 2 Outline

~Timing	Topic	Exercise
30m	Recap & Q/A Session	
20m	1. Dimensional Modeling Terminology, Theory, and Guidelines	
15m	< Break >	
90m	2. Basic Modeling Exercises	
60m	< Lunch >	
20m	2. Dimensional Role Playing & The Date Dimension	
60m	3. Handling History: Slowly Changing Dimensions	
60m	4. Modeling Exercises: Handling History	
60m	Lunch	
90m	5. Intermediate/Advanced Topics - Degenerate Dimensions, Snowflakes, Mini Dimensions	
15m	< Break >	
90m	6. Modeling Exercises	
30m	7. Recap/Review, Q&A	

Day 3 Outline

~Timing	Topic	Exercise
30m	Recap & Q/A Session	
120m	1. Modeling Workshop/Case Study 1	
15m	< Break >	
30m	2. Case study recap	
60m	< Lunch >	
90m	3. Modeling Workshop/Case Study 2 or Project Content	
15m	< Break >	
60m	4. Case Study Recap	
30m	5. Recap/Review, Q&A	