



Courses

Doreen Evans Associates, Inc.

Data Modeling Concepts

2-Day Course and Workshop

Course Number: NT-250

This two-day course teaches the basics of data modeling, focusing on both conceptual and logical modeling techniques. Topics include definitions for entities and attributes, building subject area models, and defining relationships among entities.

Data modeling as a critical function of business analysis is often overlooked. This course will discuss why incorporating data modeling is important and how it can be used for business process analysis as well as for helping to define requirements for systems design and development. DEA's Business Analysis curriculum closely follows the IIBA's Business Area Body of Knowledge (BABOK). As the BABOK is updated, our courses are also updated to follow and reflect the industry best practices. Our courses are developed and delivered by professionals with extensive hands-on experience in business analysis covering many different industries.

The course will rely on examples and a case study developed and refined over the last 15+ years to allow participants sufficient experience to learn how to apply the techniques that they have been taught. This course is database independent. Its concepts apply regardless of the database environment that may be the ultimate target of a system implementation.



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Course Objectives:

After taking this course students will be able to:

- Understand the importance of data modeling to business analysis and requirements analysis
- Understand how data modeling and data mapping are used to represent expert business knowledge
- Use the IIBA Bodies of Knowledge and apply them to data modeling
- Understand entity, attribute and relationship concepts
- Describe data modeling terminology
- Understand different data modeling techniques and approaches
- Build entity relationship models and define their details
- Understand how data entities, attributes and associations are used to represent business meaning in a design partnership with business and IT staff.
- Know how data modeling can identify business requirements for data bases, Internet/Intranet and Data Warehousing projects

Who Should Attend?

- Entry-level Business Analysts who need to understand basic data modeling concepts and techniques
- Self-taught Business Analysts
- Experienced Business Analysts interested in expanding their skills to include data modeling
- Business managers and their staff who need to understand the concepts of data modeling, so they can participate actively in partnership with Business Analysts



Data Modeling Concepts *2-Day Course and Workshop*

Introduction to Data Modeling Concepts

- Why Data Modeling Is Important
- Multiple Perspectives and Levels of Detail
- The Role and Tasks of the Business Analyst in Building a Data Model
- The IIBA Bodies of Knowledge Areas and How They Apply to Data Modeling

Data Modeling Concepts

- Basics and Terminology
 - Entities
 - Attributes
 - Relationships and How They Can Be Represented
 - Cardinality and Conditionality
 - Supertypes and Subtypes
 - Entity Relationship Diagrams
- Strategic Data Modeling for Planning
- Functional Area Data Modeling

Building a Conceptual Data Model

- Why Build a Conceptual Model
- Defining Concepts Important to the Business
 - What Is a “Conceptual” Entity?
 - Do You Need a Key?
 - What About Attributes?
 - Defining Many-to-Many Relationships
 - Why Data Business Rules Are Important
- As-Is vs To-Be
- Worksession: Identify Entities, Attributes and Relationships

Building a Logical Model

- Resolving Many-to-Many Relationships
- Associative Entities
- Cardinality and Conditionality
- Normalization Concepts
- Model Notation
- Worksession: Build a Logical Entity Relation Diagram

Tying It Together

- How Does the Data Model Help Functional Requirements?
- Deliverables Roadmap