

Data Modeling Course Outline	Duration::Approx 25 hours
Database design and data modeling overview	3
Database design	
Data modeling and methodologies	
Conceptual, logical, and physical modeling	
Logical Modeling	4
Building blocks, components, standards	
Entities, attributes	
Unique identifiers and access concepts	
Keys – Primary, Foreign, Alternate, Surrogate	
Relationships	
Cardinality	
Normalizing the model	
Object documentation	3
Model notation, definitions and descriptions	
Extended data typing	
Metadata creation	
Standards	
Audit and Validation	2
Syntactical validation	
Conceptual validation	
Practical approach to model auditing	
Model Presentation	3
Enterprise Security Model	
Subject Areas – business dimensions within a model	
Stored Displays - organizing views in a model	
Model Object Reporting	
Report Template Builder deliverables	
Model printing	
Advanced Data Modeling	3
Understand complex relations	

Modeling for history	
Referential integrity	
Resolve many to many relationships	
Build entity type hierarchies	
Build recursive relationships	
Independent attributes	
Physical Modeling	3
Logical/Physical model implementation considerations	
Defining physical properties	
Referential integrity constraints	
Maintaining referential integrity	
Building and maintaining a database	4
Business Views	
Physical model forward engineering	
Database reverse engineering	
Comparing a model to a database	
Modifying an existing database through the model	
Forward Engineering Templates	