Module One

Data Warehousing Concepts

- Data Warehousing Basics
  - Understanding Data, Information, and Knowledge
  - Data Warehousing and Business Intelligence
  - Data Warehousing Defined
  - Business Intelligence Defined
- The Data Warehousing Application
  - The Building Blocks
  - Sources and Targets
  - Common Variations and Multiple ETL Streams
- Warehousing Data Stores
  - Data Store Responsibilities
  - The Data Warehouse
  - Data Marts
  - Persistent Data Staging
  - Integrating Operational Data
  - Day-to-Day Business Data
  - Comparing and Contrasting Data Stores
- The Data Warehousing Process
  - Process Overview
  - Incremental and Evolutionary
- Data Warehousing Deliverables
  - Results of Architecture, Implementation & Operation Activities
- The Data Warehousing Program
  - Program Planning
- Readiness Assessment
  - Readiness in Program Planning
  - Techniques
  - Self Assessment Readiness Scale
  - Self Assessment Measurement Technique
  - Using Self Assessment Results

Module Two

Data Warehousing Architecture

- Business Architecture
  - Business Context for the Data Warehouse
  - Business Drivers, Goals & Strategies
  - Business Processes
  - Examples
- Data Architecture
  - Data Analysis and Data Standards
  - Information Needs Analysis
  - Business Questions
  - Refinement of Information Needs
  - Information Needs Example
  - Data Modeling Concepts
  - Architectural Data Models
  - Warehousing Subject Model
  - Business Questions Example
  - Business Questions Mapped as Facts & Qualifiers
  - Warehousing Targets Analysis
  - Integration and Data Flow Standards
  - Warehousing Targets Configuration
  - Source Subjects and Source Data Composition

    - Source Logical Data Model
    - Metadata Requirements
- Technology Architecture
    - Technology Requirements and Standards
- Project Architecture
    - Implementation Planning
    - Methodology
    - Incremental Development Planning
    - Timeboxing
    - Example of an Incremental Development Plan
- Organizational Architecture
    - Deployment and Operations Planning
    - Training Plan
    - Support Plan – Data & Information Consumers
    - Program, Project & Operations Roles

Module Three

Data Warehouse Implementation

- Implementation Planning
    - Incremental Development Project
    - Architectural Adjustments
    - Balancing Time, Resources, and Results
- Warehousing Data Modeling
    - Overview
    - Designing the Data Structures
    - What to Model?
    - Logical Models of Relational Data
    - Logical Models of Dimensional Data
    - Structural Design Considerations
    - Physical Design Considerations
- The Warehousing Process Model
    - Moving Data through the Warehousing Environment
    - Source/Target Maps
    - Data Capture Concepts
    - Data Transformation Concepts
    - Database Loading Concepts
    - Data Cleansing Concepts
    - Data Transformation Rules
    - Metadata Responsibility
    - Design of Information Services
- Deployed Technology
    - Ready-to-Use Tools
    - Range and Roles of Technology
- Implementation Components
    - Environments, Procedures, and Processes
    - Putting the Pieces Together
- Delivery Results
    - Environments, Procedures, and Processes
    - Data and Information Services

Module Four

Data Warehouse Operation

- Business Services
    - Valuable and Sustainable Services
    - Service Environment & Culture
- Data Warehouse Administration

    - Data Refresh
    - Managed Platforms
    - Managed Environment
    - Customer Service
- Managed Quality
    - Dimensions of Quality
- Managed Infrastructure
    - Processes, Technology, and People

Module Five

Summary & Conclusions

- Common Mistakes
    - From TDWI's *10 Mistakes to Avoid* Series
- References & Resources
    - Publications

Appendix A – Bibliography and References