



# TDWI Data Quality Fundamentals

## Training Calendar

Date	Training Time	Location
07 January 2019	1 Day	Bilginç IT Academy
10 June 2019	1 Day	Bilginç IT Academy

## Training Details

Training Time	:	1 Day
Capacity	:	10
Prerequisites	:	There are no prerequisites for this course.

## About Training

### About Training

Managing data quality is among the most vexing of information management issues. Most organizations have persistent and long-standing data quality problems—troubles that grow and propagate with the challenges of data redundancy, purchased applications and databases, legacy databases, multiple data providers and consumers, missing documentation, and uncertainty in defining data quality.

Stepping up to data quality improvement isn't easy. It demands an understanding of quality management principles and practices, and the ability to apply those practices to a complex and continuously changing data resource. Whether your goal is a broad enterprise-wide data quality program or a highly targeted data quality project, you must begin by understanding the practices and processes of data quality assessment and improvement. This course is designed specifically to provide that foundational knowledge.

## What You'll Learn

- Definitions and dimensions of quality
- How to create an actionable definition of data quality
- Typical causes of data quality problems
- Roles, responsibilities, and accountabilities in data quality management
- Roles, uses, and limits of data quality tools and technology
- Processes and techniques for data quality assessment and data quality improvement

## Who Should Attend

Data quality and data governance professionals; BI/DW managers, architects, designers, and developers; data stewards, data architects, and data administrators; information systems analysts, designers, and developers; anyone with a role in data quality or information systems testing

## Outline

### Module One: Data Quality Concepts

#### Defining Data Quality

- Common definitions of quality
- Applying quality definitions to data
- Data correctness and data integrity
- Actionable data quality

#### Dimensions of Data Quality

- Accuracy
- Completeness
- Consistency & dependency
- Precision & granularity
- Timeliness
- Structural integrity

#### Common Causes of DQ Problems

- Definition
- Design & modeling
- Data entry & data collection
- Conversion and consolidation
- Integration

### Module Two: Data Quality Practices and Processes

#### Quality Management Practices

- Quality Assurance (QA) vs. Quality Control (QC)
- Quality economics
- Inspection and detection
- Correction and prevention

#### Quality Management and Data

- Business applications and operational data

- Integrated data and business information
- Data quality and defect propagation

### **Data Quality Organizations**

- Governance
- Ownership
- Stewardship
- Custodianship
- Architecture
- Usage (access, update, and application)

### **Data Quality Processes**

- Data profiling
- Data quality assessment
- Data cleansing
- Process improvement

### **Data Quality Tools and Technology**

- Profiling
- Verification & standardization
- Matching & grouping
- De-duplication
- Data transformation

## **Module Three: Data Quality Assessment**

### **Planning & Preparation**

- Project planning
- Assessment team
- Assessment resources

### **Conducting the Assessment**

- DQ Rule identification
- DQ Rule execution
- Analysis and tuning

### **Assessment Results**

- Error catalog
- Data quality measures and metrics
- DQ scorecard

### **Applied Results**

- Communication & expectations
- Root cause analysis
- Quality improvement
- Process improvement
- Data cleansing
- Data governance

## **Module Four: Data Quality Improvement**

### **Procedural Data Quality**

- Standardization
- Verification
- Classification
- Parsing
- Geo-coding Matching
- Grouping
- De-Duplication

#### **Rule-Based Data Quality**

- Five kinds of data correctness rules
- Six kinds of data integrity rules
- Four kinds of timeliness rules
- Applied DQ rules

#### **IT Processes and Data Quality**

- System architecture & standards
- Application and database development processes
- Conversion & migration processes
- Data warehousing & BI processes

#### **Business Processes and Data Quality**

- Defining Data
- Creating and updating data
- Access, analysis, and reporting

#### **Module Five: Summary and Conclusion**

- Summary of Key Points
- References & Resources