

Soft-Train®



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Technology Works*

Data Base Structure Analysis and Design (1 Day) ST45002

COURSE GOAL: The purpose of this course is to teach the basic concepts of database design to the student.

PREREQUISITES: Basic understanding of Windows. Familiarity with data manipulation via Microsoft Excel or Access highly recommended.

LEARNING OBJECTIVES:

Students will be able to:

- Understand what consists of a database
- Effectively analyze the requirements for a database
- Design and deploy a database using best practices

KEY TOPICS:

I. Overview of Database Design

- A. Understanding Database Fundamentals
- B. Exploration of Database Models
- C. Database Design Planning
- D. Database Design Life Cycle

II. Analyzing and Modeling Business Requirements

- A. Gathering Business and System Requirements
- B. Establishing a Business Model
- C. Understanding Entities and Relationships
- D. Normalization
- E. Entity Relationship Modeling
- F. Modeling Business Processes

III. Designing the Database

- A. Designing Tables
- B. Integrating Business Rules and Data Integrity
- C. Designing Views
- D. Applying Database Design Concepts

IV. Life After Design

- A. Implementing Database Security
- B. Change Control
- C. Analyzing Legacy Databases for Redesign