# Introduction to Relational Database Design Using SQL Server

**Course and Learning Objectives**

- Database Design: Getting Started

**Relational Database Structure and Terminology**

- Database and the Database Components
- Relationships
- Structured Query Language

**Objectives of Relational Database Design**

- Design Objectives Controlled by the Database Designer
- Design Objectives Not Completely Controlled by the Database Designer

**Relational Database Design Strategy**

- Approaches to Relational Database Design

**Database Three-Schema Architecture**

- User Views (Queries)
- Logical Schema
- Physical Schema

**Design Stages in the Database Life Cycle**

- The Six Stages in the Database Life Cycle

**Exercise 1: E-R Diagram**

- Physical Design Stage
- Database Implementation
- Monitoring, Modification, and Maintenance
- Understanding Normalization
- Using One Table To Hold All Values
- The First Three Levels of Normal Forms in the Normalization Process

**Exercise 2: Terminology and Normalization Project**