

## Course Outline

### Access Essentials of Table Design

---

**Days:** 1

**Prerequisites:** Access Introduction and Intermediate Course description

**Overview:** In Software Solutions Team's Access Essentials of Table Design, students learn how to setup a database so it is easy to analyze, manipulate, and maintain. Students will learn the database design process; identify data as fields; identify data problems and apply data normalization techniques to solve them; use referential integrity and other data integrity techniques to support the accuracy of data in the database so as to avoid making costly mistakes when designing your Access database.

#### *Course content*

##### **Lesson 1: Introduction to Relational Databases**

- The Basics of Relational Databases
- Planning the Database

##### **Lesson 2: Designing Tables**

- Deciding on Tables and Fields
- Selecting Primary Key Fields
- Identifying Table Relationships
- More on Keys and Relationships

##### **Lesson 3: Data Normalization**

- Solving Data Problems
- Higher Normal Forms

##### **Lesson 4: Data Integrity**

- Referential Integrity
- Field-level Integrity
- Table-level Integrity
- Reviewing and Finalizing the Database Design

##### **Lesson 5: Query Basics**

- Performing Queries
- Multiple Table Queries

##### **Lesson 6: More on Queries**

- Other Types of Queries
- SQL
- Optimizing Query Performance
- Appendix: Additional resources