



Course Description:

This is an introductory course to understanding how to work with a database. Correct database structure is very complex and differs greatly from spreadsheets. Students must understand how to correctly structure a database in order to fully utilize any database software and to design a functional database. The course provides the foundation necessary for a student to understand the material taught in the Access classes and to successfully utilize Access to its full potential.

Duration: Instructor-led, group-paced, classroom-delivery learning model with structured hands on activities
3.5 hours (1/2 day)

Course Objectives: To gain an understanding of how databases work and how to correctly structure a database.

Upon successful completion of this course, students will be able to:

- Be familiar with database terminology
- Know the proper steps involved in planning and creating a database from start to finish
- Understand the basics of how to normalize a database and relate tables
- Understand one-to-one relationships and one-to-many relationships
- Recognize relationship rules and referential integrity

Prerequisite: Windows Experience

Note: This course is a prerequisite for all database classes taught at BCTI.

Course Outline	
<p>What is a Database?</p> <p>Purpose and Use of Databases</p> <p>Database Terminology</p> <p>Importance of Correct Database Design an Structure</p> <p>Similarities and Differences between Spreadsheets (Flat File Databases) and Relational Databases</p> <p>Database Input and Output</p> <p>Develop Tables</p> <ul style="list-style-type: none"> • Plan • Organize 	<p>Create Relationships between Tables</p> <ul style="list-style-type: none"> • One to one • One to many <p>Normalization</p> <ul style="list-style-type: none"> • First normal form • Second normal form • Third normal form <p>Referential Integrity</p> <p>Relationship Rules</p>