

<h2 style="text-align: center; color: blue;">Database Application Testing Fundamentals</h2>		<h3 style="text-align: center; color: blue;">Topical Outline</h3>
<ul style="list-style-type: none"> • Describe the basic structures of databases • Understand the differences in testing the database design and testing the data • Determine the approach for testing database applications 		<p>Course Overview</p> <ul style="list-style-type: none"> ➤ Testing the database design vs. testing the data <p>Understanding Database Structures</p> <ul style="list-style-type: none"> ➤ What is a relational database? ➤ Understanding data and data types ➤ Relationships between tables (one-one, one-many, many-many) ➤ Reading database schema diagrams <p>Data Integrity</p> <ul style="list-style-type: none"> ➤ Looking for data integrity bugs at the field, table, and relationship levels ➤ Integrity of the data itself as defined by business rules ➤ ACID test for transactions <p>Analyzing the Database Design</p> <ul style="list-style-type: none"> ➤ Analytical databases (Data warehouse) vs Operational databases ➤ Understanding Normalization and De-normalization ➤ Stored Procedures <p>Test Strategies</p> <ul style="list-style-type: none"> ➤ Data Mining for bugs and test cases ➤ Where is validation done? ➤ Testing a database migration/conversion <p>Introduction to SQL</p> <ul style="list-style-type: none"> ➤ SQL components ➤ Simple SQL – Create, Retrieve, Update and Delete (CRUD)
<p>Description</p> <p>The database and the data in the database are critical elements of almost every client-server and web application in production today. This course provides a foundation of knowledge of database structures specifically for testers to help them become more efficient and effective at testing database applications. Testing at the component level is at the heart of every Test Strategy that is looking to make testing faster and better. Understanding the database design will allow testers to identify bugs and potential bugs that may otherwise go into production and intensify in potential damage.</p>	<p>Audience, Prerequisites</p> <p>This course is intended for beginning level testers and analysts. Participants are expected to have knowledge of Microsoft Windows.</p> <p>Course length: 1 day</p> <p>Course format: lecture plus individual and group exercises and discussions.</p>	