Systems & Network Training

Database fundamentals

A 3 day Hands on training course

Save on expenses. This course is also available on your premises.

Description

This three-day training course helps you prepare for Microsoft Technology Associate Exam, and build an understanding of these topics: Core Database Concepts, Creating Database Objects, Manipulating Data, Data Storage, and Administering a Database.

Key outcomes

By the end of the course delegates will be able to:

- ✔ Describe core database concepts.
- ✔ Create database objects.
- ✔ Manipulate data.
- ✔ Describe data storage.
- ✔ Administer a database.
- ✔ Create a relational database consisting of 3 related tables.

Training approach

This structured course uses Instructor Led Training to provide the best possible learning experience. Small class sizes ensure students benefit from our engaging and interactive style of teaching with delegates encouraged to ask questions throughout the course. Quizzes follow each major section allowing checking of learning. Hands on sessions are used throughout to allow delegates to consolidate their new skills.

Details

Who will benefit?
Those working with databases.

Prerequisites
None.

Duration: 3 days

Overall rating: ★★★★★

Generic training	Small class sizes	Hands On training	Our courseware	Customise your course
Generic training compliments product specific courses covering the complete picture of all relevant devices including the protocols "on the wire".	We limit our maximum class size to 8 delegates; often we have less than this. This ensures optimal interactivity between delegates and instructor.	The majority of our courses use hands on sessions to reinforce the theory.	We write our own courses; courseware does not just consist of slides and our slides are diagrams not bullet point text.	Please contact us if you would like a course to be customised to meet your specific requirements. Have the course your way.
"*Friendly environment with expert teaching that teaches the why before the how.*" G.C. Fasthosts	*"Excellent course. The small class size was a great benefit..."* M.B. IBM	*"Not many courses have practice added to it. Normally just the theoretical stuff is covered."* J.W. Vodafone	*"Comprehensive materials that made the course easy to follow and will be used as a reference point."* V.B. Rockwell Collins	*"I was very impressed by the combination of practical and theory. Very informative. Friendly approachable environment, lots of hands on."* S.R. Qinetiq

Database fundamentals

Course content

Understanding core database concepts

Flat-type databases, hierarchical databases, relational databases, database fundamentals, relational database concepts, using the SQL Server Management Studio Interface. Data Manipulation Language (DML), Data Definition Language (DDL), using DDL statements.

Creating database objects

Defining data types, using built-in data types, using exact numeric data types, using approximate numeric data types. Creating and using tables. Creating views. Creating stored procedures, SQL injections.

Manipulating data

Using Queries to select data, combining conditions, using the BETWEEN clause, using the NOT clause, using the UNION clause, using the EXCEPT and INTERSECT clauses, using the JOIN clause. Using Queries to insert data, Inserting data. Updating data and databases, Using the UPDATE statement. Deleting data, Using the DELETE statement, truncating a table with TRUNCATE TABLE, deleting a table with DROP TABLE, using referential integrity.

Understanding data storage

Normalising a database, normalization, first normal form, second normal form, third normal form, fourth normal form, fifth normal form. Primary, foreign and composite keys, clustered and non-clustered indexes, creating a non-clustered table.

Administering a Database

Securing Databases, server-level security, database-level security, Windows security, SQL authentication, database server roles, granting access to a database, fixed database roles, object permissions, managing roles, ownership chains, reviewing a sample security model. Backing up and restoring databases, recovery models, backup devices.