



SQL Server 2012 Training — Daywise breakup

Modules	Day
<i>Module 1: Creating database, tables and enforcing Data integrity</i>	
Database Creation with wizard and & with T-SQL	1
Creating and Altering Tables	1
Choosing Table Indexes	1
Enforcing Data Integrity	1
Constraints: Primary Key, Unique, Foreign Key, Check, Default	1
<i>Module 2: Foundations of T-SQL & basic SQL queries</i>	
Evolution of T-SQL	1
Using T-SQL in a Relational Way	1
Logical Query Processing Phases	1
Using the FROM and SELECT Clauses	1
Delimiting Identifiers	1
Working with Data Types and Built-in Functions	1
Choosing the Appropriate Data Type	1
Date and Time Functions	1
Character Functions	1
CASE Expression	1
Filtering Data with Predicates, Three-Valued Logic, and Search Arguments	1
Using the ORDER BY Clause to Sort Data	1
Filtering Data with TOP and OFFSET-FETCH	1
Text search overview: CONTAINS and FREETEXT	1
<i>Module 3: Combining sets, Grouping and Windowing</i>	
Using Joins: Cross Joins, Inner Joins, Outer Joins, Multi-Join	2
Using Subqueries	2
Table Expressions	2
The APPLY Operator	2
Using Set Operators: UNION and UNION ALL, INTERSECT, EXCEPT	2
Working on Single and Multiple Grouping Sets	2
Pivoting and Unpivoting Data	2
Window Aggregate Functions	2
Window Ranking Functions	2
Window Offset Functions	2
<i>Module 4: Inserting, updating, deleting, merging</i>	
INSERT VALUES, INSERT SELECT, INSERT EXEC, SELECT INTO	3
UPDATE: Update Based on Join, Update based on Variable, Table Expressions, UPDATE All-at-Once	3
DELETE: Delete based on Join, Delete Using Table Expressions	3
TRUNCATE: Delete vs Truncate	3
MERGE Statement	3
OUTPUT Clause: Insert with Output, Delete with Output, Update with Output, Merge with Output, Composable DML	3
<i>Module 5: Views, Inline functions, Synonyms, T-SQL routines and Dynamic SQL</i>	
Implementing Views	3
Inline functions	3
Synonyms	3
Comparing Views, Inline Functions, and Synonyms	3
Stored Procedures	4
User-Defined Functions (UDF): Scalar, Table-valued	4
UDF: Limitations, Performance Considerations. Comparison with Stored Procedures	4

Trigger: AFTER, INSTEAD OF	4
Dynamic SQL Overview: SQL Injection, Using sp_executesql	4
<i>Module 6: Cursors, sets, and temporary tables</i>	
Cursor-Based Iterative Solutions	4
Set-Based Solutions	4
Using Temporary Tables vs. Table Variables	4
Performance Improvement Recommendations for Cursors and Temporary Objects	4
<i>Module 7: Normalization, Transactions & Error handling</i>	
Database Normalization Overview	5
Transactions and Concurrency	5
Types of Transactions	5
Basic Locking	5
Transaction Isolation Levels	5
Implementing Error Handling	5
Detecting and Raising Errors	5
Handling Errors After Detection	5
<i>Module 8: Query performance, Indexes and statistic, Optimization</i>	
Query Optimizer	6
SQL Server Extended Events	6
SQL Trace	6
SQL Server Profiler	6
Implementing Indexes: Nonclustered Indexes, Indexed Views	6
Search Arguments	6
Plan Iterators: Access Methods, Join Algorithms, Others	6
Parameterized Queries	6
Batch Processing	6