

MCTS Syllabus

Course Details:

- Duration: 8 Days (3 Hours Daily).
- Certificates: MCTS, ASP.NET Applications.
- Exams: 70-561, 70-562.

The MCTS Certification

- MCP: Microsoft Certified Professional.
- MCTS: Microsoft Certified Technology Specialist.
- MCPD: Microsoft Certified Professional Developer.

**MCTS Syllabus
Section 1 C# Part 3.0**

Module 1: Introduction :

- Installing Visual Studio.NET 2008.
- Visual Studio.NET 2008 Overview:
 - C# 2008 Overview.
 - LINQ Overview.
 - WF Overview.
 - WCF Overview.
 - WPF Technology Overview.
 - MS Expression Overview.

Module 2: Local Type Inference and Extension Methods :

- Local Type Inference.
- Extension Methods :
 - Defining Extension Methods.
 - Implementing Extension Methods.
 - Implementing a “Talking” String Extension Method.

Module 3 : Automatic Properties and Object Initializer :

- Automatic Properties.
- Object Initializer Syntax.

Module 4: Lambda Expressions:

- Lambda Expressions:
 - Writing Basic Lambda Expressions.
 - Reading Lambda Expressions.
 - Searching Strings.
 - Using Select<T> with Lambda Expressions.
 - Using Where<T> with Lambda Expressions.
 - Using OrderBy<T> with Lambda Expressions.

Module 5: Anonymous Types:

- Anonymous Types:
 - Understanding Anonymous Types.
 - Understanding Anonymous Types.
 - Using Array Initializer Syntax.
 - Creating Composite Anonymous Types.
 - Using Anonymous Type Indexes in For Statements.
 - Anonymous Types and Using Statements.
 - Testing Anonymous Type Equality.
 - Using Anonymous Generic Methods.

Module 6: Query Expression and Partial Methods :

- Query Expression.
- Partial Methods:
 - Defining Partial Methods.
- Implementing Partial Methods.

Module 7: Language Integrated Query :LINQ

- LINQ Overview.
- LINQ Providers:
- LINQ Structure.
- LINQ Query Operators:
 - Constructing a LINQ Query.
 - Filtering Information.
 - Partitioning with Skip and Take.
 - Using Generation Operations:
 - DefaultIfEmpty.
 - Empty.
 - Range.
 - Repeat.
- Equality Testing.
- Obtaining Specific Elements from a Sequence.
- Appending Sequences with Concat.

Module 8: LINQ for Objects:

- Sorting and Grouping Queries.
- Grouping Information.
- Using Aggregate Operations.
- Averaging Collection Values.
- Finding Minimum and Maximum Elements.
- Performing Set Operations.
- Mastering Select and SelectMany.
- Joining Query Results.

Module 9: Workflow: WF:

- WF Overview.
- Working with WF.

Module 10: Windows Presentation Foundation: WPF:

- WPF Applications.
- WPF Contents.
- Working with WPF.

Module 11: Microsoft Expression Studio:

- Microsoft Expression Studio Overview.
- Microsoft Expression Studio Contents.

Section 2 ADO.Net 3.5

Module 1: LINQ to ADO.NET: Part 1:

- Querying Relational Data with LINQ:
 - Defining Table Objects.
- Creating Better Entities and Mapping Inheritance and Aggregation:
 - Defining Better Entities with Nullable Types.
 - Mapping Inheritance Hierarchies for LINQ to SQL.
 - Creating Inheritance Mappings with the LINQ to SQL Designer.
 - Customizing Classes Created with the LINQ to SQL Designer.
 - Creating Databases with LINQ to SQL.

Module 2: LINQ to ADO.NET: Part 2:

- Joining Database Tables with LINQ Queries:
 - Defining Joins with LINQ to DataSet.
 - Coding Equijoins.
- Updating Anonymous Relational Data:
 - Adding and Removing Data:
 - Inserting Data with LINQ to SQL.
 - Deleting Data with LINQ to SQL.
 - Updating Data with LINQ to SQL.
 - Using Stored Procedures.
- Using Transactions.

Section 3 ASP.NET 3.5

Module 1: Windows Communication Foundation: WCF:

- WCF Overview.
- Working with WCF.

Module 2: ASP.NET 3.5:

- ASP.NET 3.5 Overview.
- Working with ASP.NET 3.5.

Module 3: Microsoft Expression Web:

- Microsoft Expression Web Overview.