#### **ASP.NET**

Introduction to Web Programming

- Types of Applications
- Using ASP.NET
- Using Visual Studio .NET
- Creating an ASP.NET Web Application Project
- Responding to Events
- Where Does Processing Occur
- Namespace Fundamentals
- Namespaces in a Web Application
- Maintaining State Information
- Using ASP.NET Controls
- Validating Data on Client and Server Side
- Navigating Between Web Forms
- Accessing Data with ADO.NET
- Using Data Sets on Web Forms
- Processing Transactions in ADO.NET
- Using Exception Handling
- Using Error Pages
- Logging Exceptions
- Using Client-Side Scripts
- Authenticating and Authorizing Users
- Using Windows Authentication
- Using Forms Authentication
- Using Passport Authentication
- Providing Secure Communication
- Building a Web Application
- Deploying a Web Application
- Creating an Installation Program for Deployment
- Deploying Web Applications on a Web Farm or Web G
- Debugging ASP.NET Web Applications
- Creating Web User Controls
- Caching Web Forms
- Caching Parts of Web Forms or Fragment Caching
- Caching Application Data
- Working Extensively with GridView Control
- Cross Page Postback
- Master Pages

# **C# Programming Language:**

- Controls
- Programming Language Basics
- Operators Types and Variables
- Selection Statements
- Loops
- Methods
- Namespaces
- Static Methods
- Classes
- Constructors
- Inheritance
- Polymorphism
- Structs
- Exception Handling
- Attributes
- Enums
- AccessModifiers
- Events and Delegates
- Nullable Types
- Generics
- Types and Type Saftey
- Properties
- Method hidding
- Interfaces
- Abstract Classes
- Collections
- Reflector
- Strong and Weak Naming Assemblies
- Sending emails

## **SQL Server:**

- What is a database
- What is a relational database
- What is a database management system
- Normalization
- Different Types of Joins in SQL Server
- Stored Procedures
- User Defined Functions
- Indexes
- Views

### **WCF**

- What is WCF
- Creating WCF
- Consuming WCF
- Hosting WCF

#### LINQ

- Ling to Object
- Ling to SQL
- Ling to XML
- Ling to Dataset

## **ADO .NET:**

- What is ADO.NET
- SqlConnection in asp.net
- ConnectionStrings in web.config configuration file
- SqlCommand in ado.net
- Sql injection
- Calling a stored procedure with output parameters
- SqlDataReader in ADO.NET
- SqlDataAdapter in ADO.NET
- DataSet in asp.net
- Caching dataset in asp.net

### **MVC**

- MVC Architecture
- Advantages of MVC
- Creating Application in MVC