

Course Catalog  
2012-2013

# ASP.NET



## ASP.NET

The goal of this **ASP.NET training** course is to teach students how to create a simple Active Server Page ASP.NET application that delivers dynamic content to the Web. The ASP.NET course covers Web Forms and handling events, Web Controls and input validation, using the new web application architecture and Web Services, and debugging in the new integrated development environment.

### Benefits expected from this course:

- Understanding .NET Framework
- Understanding Architecture of Scalable Applications
- Working with ASP.NET controls
- Building Data Layer
- Working with Presentation Layer
- Creating layout using Master Pages
- Working with Business Layer
- Using AJAX with .NET applications
- Improving Performance and Security
- Deploying a Web Application

### Who should attend this Training?

- Web Developers
- Application Developers
- Anyone interested to develop web based applications using ASP.NET

### Course Pre-requisites

- Knowledge of HTML and JavaScript.
- Experience with at least one other programming language

### Course Duration

36 Hours, 12 Classes, 3 Hours per class

# Course Details

## Lesson 01: The .NET Framework

- The CLR
- The Framework Class Library
- Intermediate Language
- .NET Languages
- The Global Assemblies Cache
- Disassemblers

## Lesson 02: Visual Studio 2010

- Creating Projects
- Project Anatomy
- Using the IDE
- Code Snippets

## Lesson 03: Language Syntax

- VB.NET vs C#
- Comments
- Data Types
- Variables
- Operators
- Conditional Statements
- Looping Structures
- Functions
- Exception Handling

## Lesson 04: Classes & Objects

- Classes and Objects
- Partial Classes
- Methods, Properties and Events
- Constructors
- Property Procedures
- Enumerations
- Reference vs. Value Types
- Structures
- Namespaces

## Lesson 05: Debugging Applications

- Breakpoints
- Tracepoints
- Stepping through code
- Data Tips & Visualisers
- Watch windows
- Command Windows

## Lesson 06: ASP.NET Introduction

- HTML & Server controls
- Postbacks
- Page Lifecycle

## Lesson 07: User Interface Development

- Master Pages
- Themes
- User Controls
- Navigation
- Validation

## Lesson 08: Configuration

- Configuration Files
- Developer Settings
- Administration Tools

## Lesson 09: Membership & Personalization

- Membership Providers
- Login Controls
- Roles
- State Management
- Personalization
- Web Parts

## Lesson 10: Error Handling

- Page Level Exceptions
- Site Level Exceptions
- Custom Error Pages
- Tracing

## Lesson 11: Data Binding

- Data Sources
- Data Controls
- Parameterised Queries
- Updating bound controls

## Lesson 12: AJAX

- AJAX Architecture
- Client vs Server
- The Async Post Back model
- Using Update Panel controls
- Update Progress

## Lesson 13: LINQ

- Creating a DataContext
- Querying the Database
- Updating the Database
- Using the LinqDataSource

## Lesson 14: Deployment

- XCopy deployment
- Copying web sites
- Publishing web sites
- Setup Projects