



Introduction to Web Development with Microsoft Visual Studio 2013

Course No. ISI-1345B 5 Days Instructor-led, Hands-on

Introduction

During this five day, instructor-led course students will learn how to build full-featured ASP.NET websites using Visual Studio 2012. The course shows you how to build dynamically generated web pages in C# and VB. You will learn about customizing the IDE, working with files and web forms, designing web pages, displaying and updating data, creating tables and more.

The course also briefly reviews jQuery, LINQ, the Entity Framework and database principles necessary to support efficient website creation.

At Course Completion

After completing this course, students will understand:

- Highlights the latest features of ASP.NET 4.5 and Visual Studio 2012
- Details how to work with ASP.NET 4.5 controls
- Explains what the ASP.NET state engine is and why it is important
- Shares advice for creating consistent-looking websites
- Includes information on how to add features with pre-built server controls
- Reveals practical tips for using user controls
- Clarifies ways to use Web Services and page methods in Ajax websites
- Includes coverage of jQuery, LINQ, and the entity framework
- Explores measures to take for optimal security

Prerequisites

Before attending this course, students should have the following experience:

- Knowledge of HTML or DHTML, including:
 - Tables
 - Images
 - Forms
- Programming experience using Visual Basic .NET or Visual C# .NET, including:
 - Declaring variables

Contact ISInc for more information at 916.920.1700 or by visiting our website at <http://www.isinc.com>



- Using loops
- Using conditional statements

Course Materials

The student kit includes a comprehensive workbook and other necessary materials for this class.

Course Outline

Module 1: Getting Started with ASP.NET 4.5

This module explains the key features of Microsoft .NET Framework and Microsoft ASP.NET. It helps you view the complete Web application that you build in the labs throughout this course

- Introduction to ASP.NET 4.5
- A tour of the IDE
- Customizing the IDE

Module 2: Building an ASP.NET Web Site

- Creating web sites with Visual Studio 2012
- Working with files in your web site
- Working with Web Forms

Module 3: Designing Your Web Pages

- Why do you need CSS?
- An introduction to CSS
- Working with CSS in Visual Studio

Module 4: Working with ASP.NET Server Controls

- A closer look at ASP.NET server controls
- Types of controls
- The ASP.NET state engine.

Module 5: Programming Your ASP.NET Web Pages

- Introduction to Programming

Contact ISInc for more information at 916.920.1700 or by visiting our website at <http://www.isinc.com>



- Data types and variables
- Statements
- Organizing code
- Object orientation basics

Module 6: Creating Consistent Looking Web Sites

- Consistent page layout with master pages
- Using a centralized base page
- Themes
- Skins

Module 7: Navigation

- Different ways to move around your site
- Using navigation controls
- Programmatic redirection

Module 8: User Controls

- Introduction to user controls
- Adding logic to your user controls

Module 9: Validating User Input

- Gathering data from the user
- Processing data at the server

Module 10: ASP.NET AJAX

- Introducing AJAX
- Using ASP.NET AJAX in your projects
- Using Web Services and Page Methods in Ajax Websites

Module 11: JQuery

- An introduction to jQuery
- jQuery syntax
- Modifying the DOM with jQuery
- Effects with jQuery
- jQuery and Validation

Contact ISInc for more information at 916.920.1700 or by visiting our website at <http://www.isinc.com>



Module 12: Introduction to Databases

- What is a database
- Different kinds of relational databases
- Using SQL to work with database data
- Retrieving and manipulating data with SQL
- Creating your own tables

Module 13: Displaying and Updating Data

- Data controls
- Data source and data-bound controls working together
- Customizing the appearance of the data controls
- Updating and inserting data

Module 14: LINQ and the ADO.NET Entity Framework

- Introducing LINQ
- Introducing the ADO.NET entity framework
- Mapping your data model to an object model
- Introducing query syntax
- Using server controls with LINQ queries

Module 15: Working with Data – Advanced Topics

- Formatting your controls using styles
- Handling events
- Hand-coding data access code
- Caching

Module 16: Security in Your ASP.NET 4.5 Web Site

- Introducing security
- Introducing the login controls
- The role manager

Module 17: Personalizing Websites

- Understanding profile
- Other ways to dealing with profile

Contact ISInc for more information at 916.920.1700 or by visiting our website at <http://www.isinc.com>



Module 18: Exception Handling, Debugging and Tracing

- Exception handling
- The basics of debugging
- Tools support for debugging
- Debugging client-side script
- Debugging the Page Inspector
- Tracing your ASP.NET web pages

Module 19: Deploying Your Website

- Preparing your website for deployment
- Introducing bundling and minification
- Copying your website
- Running your site under IIS
- Moving data to a remote server
- The deployment checklist