



.NET Training

177 hours

Course Overview/Description

In the .Net online program, students will learn to develop web applications using several different tools and technologies. This program is composed of multiple modules to serve as a baseline in developing and maintaining Web sites. Students will learn the client-side languages such as HTML and JavaScript.

This interactive program consists of the following modules described below:

Web Publishing and Design with HTML 4.01 and XHTML

The Web Publishing and Design with HTML 4.01 and XHTML series teaches you how to make Web sites using HTML 4.01, XHTML, and cascading style sheets. It also provides tips and guidelines to help you design and create effective Web sites, as well as organize their content.

JavaScript

This series provides an overview of the ways JavaScript can be used for adding interactivity to Web content. In addition, frames, cookies, objects, text strings, and a brief history are explained.

Dynamic HTML

This series is intended for Web page developers who want to implement Dynamic HTML in their Web site design. It examines the basic concepts of DHTML and the use of Cascading Style Sheets, implementing JavaScript with DHTML, and the DHTML object model. Other topics covered include objects, events and event handling, style sheets and content formatting, and binding data from other sources to Web pages.

XML

This series provides an introduction to the Extensible Markup Language (XML) and its general format. It introduces the fundamentals of XML, including how to read a basic XML document, the XML document structure, and viewing XML source documents. It shows how to build an XML data document, including creating elements and element modes, naming XML objects, and creating declarations and well-formed documents. Building DTDs is explained in detail, along with creating and managing internal, external, and parameter entities. Additional topics covered in this series include a detailed discussion of the Document Object Model, Cascading Style Sheets (CSS), and XSL Style Language.

GUI Design

This series introduces users to the primary concepts and tasks involved in graphical user interface (GUI) design. It identifies the characteristics of an effective GUI, describes usability factors, and examines the design principles of consistency, user feedback, information filtering, and the conceptual model. It also discusses in detail the effective use of color and typography, icons and pointers, window layouts, and screen controls. The series concludes with a discussion of effective interface design, including the principles of organization, efficiency, and communication.

Microsoft .NET 2.0 Windows Development MCTS 70-526

This series provides extensive practice for the Microsoft .NET 2.0 Windows Development MCTS 70-526 exam. Questions are presented in the same style and cover the same topics as the actual exam. Students will test their knowledge, then receive comprehensive information about the question topic and the possible answers that were presented. Please check back later for even more information on this topic.

Visual Studio .NET and ASP.NET

This series introduces students to the ASP.NET platform, and gets students started using ASP.NET features such as server controls, validation controls and composite controls in their Visual Studio .NET projects.

Visual Studio .NET Overview

This series gives students a thorough overview of the .NET initiative and prepares them to begin developing applications using Visual Studio .NET.

Visual Studio .NET Advanced Topics

This series shows developers how to create more powerful applications using Microsoft Visual Studio.NET. The series focuses heavily on creating and deploying Web-based applications. Users explore ASP.NET Web server controls in greater detail, and also learn how to implement data binding to pull data into a Web page from external data sources. Users will also learn how Visual Studio.NET facilitates XML development, and how to use Visual Studio to build and configure an XML-based Web application or a Web service client. Additionally, users will learn about what happens after the code is written - debugging, deployment, and security for Web based applications, as well as the process for upgrading existing ASP-based Web sites to ASP.NET.

Visual Basic 2005

This series introduces learners to the Microsoft .NET programming environment and teaches how to develop productive, useful applications with the new Visual Basic 2005 programming language, leveraging your existing knowledge of Visual Basic and applying that knowledge to the .NET environment.

Visual C#

The Visual C# 2005 series covers how to develop command line and graphical applications using the Visual C# 2005 programming language and the Visual Studio integrated development environment (IDE).

Microsoft .NET 2.0 App Development MCTS 70-536

This series presents questions that will help Visual Basic and C# developers prepare for the Microsoft .NET 2.0 App Development MCTS 70-536 exam. Questions are presented in the same style and cover the same topics as the actual exam. Students will test their knowledge, then receive comprehensive information about the question topic and the possible answers that were presented.

Microsoft .NET 2.0 Web Development MCTS 70-528

This series will prepare you for the MCTS 70-528 exam, which is the second required exam for the MCTS Microsoft Certified Technology Specialist: .NET Framework 2.0 Web Applications certification. This exam tests your ability to create Web applications in the .NET environment using either Visual Basic 2005 or Visual C# 2005. These study guide courses have been added to the practice exams that MindLeaders already released for this test.

Microsoft .NET 2.0 Distributed Apps MCTS 70-529

The Microsoft .NET Framework 2.0 - Distributed Application Development test is the second required exam to become a Microsoft Certified Technology Specialist (MCTS) in .NET Framework 2.0 Distributed Applications. Practice exams in this series provide extensive practice for the Microsoft .NET 2.0 Distributed Apps MCTS 70-529 exam. Questions are presented in the same style and cover the same topics as the actual exam. Students will test their knowledge, then receive comprehensive information about the question topic and the possible answers that were presented.

Course Objectives

- Examine the basic concepts of HTML, DHTML, Cascading Style Sheets, and JavaScript, and utilize them to develop web pages
- Become familiar with graphical user interface (GUI) design
- Explore the .NET initiative, and the .NET platform
- Develop applications using Visual Studio .NET
- Plan a Visual Studio .NET application by defining the application need(s)
- Learn to develop programs in the VB.Net and C# languages
- Understand the basics of web forms and ASP.Net applications
- Learn to create applications in .NET 2.0 through the use of Visual Basic code examples
- Prepare for Microsoft exams 70-526, 70-528, 70-529 and 70-536

Course Outline

- Web Publishing and Design with HTML 4.01 and XHTML
 - A. Getting Organized
 - B. Basics of HTML and XHTML
 - C. HTML, XHTML, and Cascading Style Sheets (CSS)
 - D. Advanced Cascading Style Sheets (CSS), Forms, and DHTML
 - E. Adding Interactivity and Multimedia with HTML and XHTML
- JavaScript
 - A. Start Using JavaScript
 - B. Using JavaScript for Interactivity
 - C. Using Advanced JavaScript
- Dynamic HTML
 - A. DHTML and Style Sheets
 - B. Using Javascript
 - C. Objects and Events
 - D. Styles and Content
 - E. Data From Other Sources
- XML
 - A. Viewing and Understanding XML
 - B. Creating a Basic Document
 - C. Building DTDs and Checking Documents
 - D. Entities
 - E. The Document Object Model
 - F. CSS and XSL Style Sheets
- GUI Design
 - A. Planning an Interface
 - B. Developing an Interface
 - C. Designing Screen Elements
- Microsoft .NET 2.0 Windows Development MCTS 70-526
 - A. Creating User Interfaces
 - B. Integrating Data
 - C. Implementing Printing and Reporting functionality
 - D. Enhancing Usability
 - E. Implementing Asynchronous Programming Techniques
 - F. Developing Form Controls
 - G. Configuring and Deploying Applications
 - H. Visual Basic Practice Exam 1
 - I. Visual Basic Practice Exam 2

- J. Visual Basic Practice Exam 3
- K. Visual Basic Practice Exam 4
- L. C# Practice Exam 1
- M. C# Practice Exam 2
- N. C# Practice Exam 3
- O. C# Practice Exam 4
- Visual Studio .NET and ASP.NET
 - A. Getting Started
 - B. Using Server Controls
 - C. Working with Validation and Composite Controls
- Visual Studio .NET Overview
 - A. Exploring the .NET Initiative
 - B. Languages and Application Development
 - C. Getting Started with .NET
- Visual Studio .NET Advanced Topics
 - A. Using Rich Web Controls and Debugging Applications
 - B. Data Binding and Working with Control Templates
 - C. Creating Mobile Applications and Using ADO.NET
 - D. Working with XML, Configuration, and HTTP Handlers
 - E. Caching, Security, and Migration
 - F. Working with Web Services
 - G. Deploying Applications
- Visual Basic 2005
 - A. .NET Platform Architecture
 - B. Managed Type Fundamentals
 - C. Objects, Values, and Memory
 - D. Reflection and Attributes
 - E. Delegates and Events
 - F. Asynchronous Execution
 - G. Assemblies
 - H. Windows Forms
 - I. Code Access Security
- Visual C#
 - A. .NET What You Need to Know
 - B. First C# Programs
 - C. Data Types in C#
 - D. Operators and Expressions
 - E. Control Structures and Arrays
 - F. Object-Oriented Programming

- G. Classes
- H. More About Types
- I. Methods, Properties and Operators
- J. Characters and Strings
- K. Arrays and Indexers
- L. Inheritance
- M. Virtual Methods and Polymorphism
- N. Formatting and Conversion
- O. Exceptions
- P. Interfaces
- Q. Interfaces and Collections
- R. Delegates and Events
- S. Introduction to Windows Forms
- Microsoft .NET App Development MCST 70-536
 - A. Using System Types and Collections
 - B. Implementing Service Processes, Threading, and Application Domains
 - C. Imbedding Configuration, Diagnostic, Management, and Installation Fetures
 - D. Implementing Serialization and I/O Functionality
 - E. Securing Applications with .NET Framework 2.0 Security Fetures
 - F. Implementing Interoperability, Reflection, and Mailing Functionality
 - G. Implementing Globalization, Drawing, and Text Manipulation Functionality
 - H. Visual Basic Practice Exam 1
 - I. Visual Basic Practice Exam 2
 - J. Visual Basic Practice Exam 3
 - K. C# Practice Exam 1
 - L. C# Practice Exam 2
 - M. C# Practice Exam 3
- Microsoft .NET 2.0 Web Development MCTS 70-528
 - A. Creating and Programming Web Applications
 - B. Configuring a Web Application
 - C. Using Globalization, Localization and Accessibility
 - D. Using ADO.NET and XML with ASP.NET
 - E. Creating Custom Web Controls
 - F. Deploying ASP.NET Applications
 - G. Troubleshooting and Optimizing Web Applications
 - H. Customizing and Personalizing Web Applications
 - I. Implementing Authentication and Authorization
 - J. Creating ASP.NET Mobile Web Applications
 - K. Visual Basic Practice Exam 1



- L. Visual Basic Practice Exam 2
- M. Visual Basic Practice Exam 3
- N. C# Practice Exam 1
- O. C# Practice Exam 2
- P. C# Practice Exam 3
- Microsoft .NET 2.0 Distributed Apps MCTS 70-529
 - A. Creating and Accessing XML Web Services
 - B. Configuring and Customizing Web Service Applications
 - C. Creating, Configuring, and Deploying Remoting Applications
 - D. Implementing Asynchronous Calls and Remoting Events
 - E. Implementing Web Services Enhancements (WSE) 3.0
 - F. Creating Serviced Components and Using Message Queuing
 - G. Visual Basic Practice Exam 1
 - H. Visual Basic Practice Exam 2
 - I. Visual Basic Practice Exam 3
 - J. C# Practice Exam 1
 - K. C# Practice Exam 2 C# Practice Exam 3

Prerequisites/Audience

Prerequisites

There are no specific prerequisites for this program. Students are assumed to be fairly knowledgeable on computers/Internet, and will need Internet connection with emailing capabilities. You will need plenty of practice and real-world experience before you sit for any of the .NET certification exams.

Target Audience

This program is for students who wish to become proficient in using HTML/DHTML, among other programs, to build web pages.

PC Requirements/Materials Included

Students will require the **Visual Studio .NET** software for this course.

This program includes a full online reference library, which contains the following relevant books:

- *Beginning ASP.NET 2.0 AJAX {Wrox Beginning Guides}* by McClure, Wallace
- *Beginning Ajax With ASP.NET {Wrox Beginning Guides}* by McClure, Wallace



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- *Beginning ASP.NET 2.0 {Wrox Beginning Guides}* by Hart, Chris
- *Beginning ASP.NET 2.0 in VB 2005 : From Novice to Professional {Expert's Voice in .NET}* by MacDonald, Matthew
- *Professional DotNetNuke ASP.Net Portals {Wrox Professional Guides}* by Walker, Shaun
- *Beginning ASP.NET 2.0 Databases: Beta Preview* by Kauffman, John; Thangarathinam, Thiru
- *Mastering Web Development With Microsoft Visual Studio 2005* by Mueller, John
- *ASP.NET 1.1 Insider Solutions* by Homer, Alex
- *ASP.net: Evolution* by Kent, Dan
- *ASP.NET Unleashed {2Nd Ed.}* by Walther, Stephen
- *Hacking the Code : ASP.NET Web Application Security* by Burnett, Mark; Foster, James C
- *Developing and Implementing Web Applications With Visual C# .NET and Visual Studio .NET {Exam Cram 2}* by Kalani, Amit; Kalani, Priti
- *Developing and Implementing Windows-based Applications With Visual C# .NET and Visual Studio .Net {Exam Cram 2}* by Hausman, Kalani Kirk; Kalani, Amit; Kalani, Priti