



www.compvisions.com
16 Corporate Woods Blvd.
Albany, NY 12211

Computer Visions Course Outline

Get What You Want

We offer highly customizable group training courses: desktop applications, web development, networking & operating systems, technical certification, professional development & skills, help desk.

Get It When & Where You Want It

All Computer Visions courses are available for presentation on-site or off-site for your convenience. We can roll out any combination of courses at one or more locations anywhere in the United States, according to your requirements and time table. Just let us know and we'll work with you!

Corporate Training Solutions

Corporations look to us to train their employees. Why? Because our proven training methods have increased employee proficiency and productivity. We assign one person to each of our corporate clients to ensure quality service, and we also offer extranet Web registration, management, reporting and billing for all clients. Simplicity, quality and outstanding service are our hallmarks.

Consulting Solutions

Consulting is about trust,

4994: Introduction to Programming Microsoft .NET Applications with Microsoft Visual Studio 2005

Description:

This five-day instructor-led course enables introductory-level developers who are not familiar with the Microsoft .NET Framework or Microsoft Visual Studio 2005 to gain familiarity with the Visual Studio 2005 development environment. Students will also learn basic skills using either Microsoft Visual Basic or Microsoft Visual C# as a programming language.

Course Outline:

Module 1: Getting Started

This module introduces the .NET Framework and the software development life cycle. It also describes the key features of Visual Studio 2005.

Lessons

- Introduction to Microsoft .NET and the .NET Framework
- Introduction to the Software Development Life Cycle
- Exploring Visual Studio 2005

Lab 1: Getting Started

- Working in the Development Environment

Module 2: Creating a Simple Windows Forms Application

This module explains how to create a Windows Forms application, how to add controls to a form, and how to compile and run the application.

Lessons

- Creating a Windows Forms Project
- Adding Controls to a Windows Forms Project
- Compiling and Running a Windows Forms Project

service and accountability. Our consulting division is one of the fastest-growing around. Why? Clients trust us to provide excellent service and expertise. Visit our consulting section for more information.

Classroom and Computer Rentals

Need space and equipment to conduct specialized presentations or classes? We can help. With our world class classrooms and state of the art projection and presentation equipment, we take care of the details so you can have a successful presentation.

Lab 2: Creating a Simple Windows Forms Application

- Creating a Windows Forms Application
- Adding Controls to the Main Form
- Compiling and Testing the Application

Module 3: Programming Fundamentals

This module explains important programming concepts and terminology. It also covers the main elements of a program and explains how to create and work with items such as functions, properties, and methods. Finally, this module provides guidelines on areas such as naming conventions and code documentation.

Lessons

- Understanding Programming Concepts
- Defining Program Structure and Flow
- Styling and Writing Code

Lab 3: Programming Fundamentals

- Displaying the Current Date on a Form
- Adding a New Form to the Application
- Adding Controls to the New Form

Module 4: Data Types and Variables

This module introduces data types, variables, and constants and explains how to use them. It also explains how to use collections and data type conversion.

Lessons

- Introduction to Data Types
- Defining and Using Variables
- Defining and Using Collections
- Converting Data Types

Lab 4: Data Types and Variables

- Implementing Variables and Constants
- Implementing Arrays and Enumerations

Module 5: Controlling Program Execution

This module describes how to control program execution by writing expressions, conditional statements, and iteration statements.

Lessons

- Writing Expressions

- Creating Conditional Statements
- Creating Iteration Statements

Lab 5: Controlling Program Execution

- Checking User Input
- Enabling and Disabling Controls

Module 6: Fundamentals of Object-Oriented Programming

This module introduces students to the concepts of object-oriented programming, defines important terminology, and shows the syntax for defining classes and creating instances.

Lessons

- Introduction to Object-Oriented Programming
- Defining a Class
- Creating a Class Instance

Lab 6: Fundamentals of Object-Oriented Programming

- Creating a SalesPerson Class
- Creating and Using a SalesPerson Object

Module 7: Creating Object-Oriented Applications

This module describes how to design classes by using the Class Designer tool in Visual Studio, and also describes how to use inheritance and interfaces.

Lessons

- Designing Classes with the Class Designer Tool
- Implementing Inheritance
- Defining and Implementing Interfaces

Lab 7: Creating Object-Oriented Applications

- Creating a Base Class
- Creating Derived Classes

Module 8: Building a User Interface

This module explains how to develop an application by using features such as modal and modeless forms, menus, toolbars, status bars, tool tips, and the HelpProvider control.

Lessons

- Managing Forms and Dialog Boxes
- Creating Menus and Toolbars

- Providing User Assistance

Lab 8: Building a User Interface

- Adding a Menu and a Toolbar to an Application
- Adding a Status Bar and Tooltips to an Application

Module 9: Validating User Input

This module explains how to restrict user input on a form, and how to use field-level and form-level validation.

Lessons

- Restricting User Input
- Implementing Field-Level Validation
- Implementing Form-Level Validation

Lab 9: Validating User Input

- Adding an ErrorProvider Component to a Form
- Providing Visual Cues to the User by Enabling an OK Button

Module 10: Debugging and Exception Handling

This module introduces students to the types of errors that can occur in an application, and describes how to use a combination of debugging and exception handling to detect and diagnose these errors.

Lessons

- Types of Errors
- Debugging Applications
- Handling Exceptions in Applications

Lab 10: Debugging and Exception Handling

- Detecting Logic Errors
- Handling Run-Time Errors

Module 11: Accessing Data

This module introduces students to data access in .NET Framework applications, and shows how to access data both by using the Visual Studio integrated development environment (IDE) and by writing code.

Lessons

- Overview of Data Access
- Accessing Data by Using the Visual Studio 2005 Integrated Development Environment
- Programmatic Access to Data

Lab 11: Accessing Data

- Displaying Data by Using a DataGridView Control
- Access Data Programmatically by Using ADO.NET

Module 12: Creating Web Applications and XML Web Services

This module introduces students to ASP.NET, and describes how to create simple Web applications and XML Web services.

Lessons

- Creating Web Applications
- Creating and Using XML Web Services

Lab 12: Creating Web Applications and XML Web Services

- Creating a Web Application
- Creating and Using an XML Web Service

Module 13: Exploring .NET Framework 3.0 Technologies

This module introduces the new .NET Framework 3.0 technologies and explains how to create a Windows Presentation Foundation application and a Windows Communication Foundation service.

Lessons

- Introduction to the .NET Framework 3.0 Technologies
- Introduction to Windows Presentation Foundation
- Introduction to Windows Communication Foundation

Lab 13: Exploring .NET Framework 3.0 Technologies

- Building a Windows Presentation Foundation Application
- Building a Windows Communication Foundation Service
- Accessing a Windows Communication Foundation Service from a Windows Presentation Foundation Client

Module 14: Testing and Deploying Microsoft .NET Framework Applications

This module provides an overview of software testing and explains how to use the Object Test Bench (OTB). It also explains how to deploy Microsoft .NET Framework applications by using both Windows Installer and ClickOnce.

Lessons

- Overview of Testing
- Creating Object Test Bench Objects

- Deploying Microsoft .NET Framework Applications