



[www.compvisions.com](http://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

## 10975: Introduction to Programming Visual Studio

### Course Outline:

#### Module 1: Introduction to Core Programming Concepts

- Computer Data Storage and Processing
- Application Types
- Application Life-Cycle
- Code Compilation

#### Module 2: Core Programming Language Concepts

- Syntax
- Data Types
- Variables and Constants

#### Module 3: Program Flow

- Introduction to Structured Programming Concepts
- Introduction to Branching
- Using Functions
- Using Decision Structures
- Introducing Repetition

#### Module 4: Algorithms and Data Structures

- Understand How to Write Pseudo Code
- Algorithm Examples
- Introduction to Data Structures

#### Module 5: Error Handling and Debugging

- Introduction to Program Errors
- Introduction to Structured Error Handling
- Introduction to Debugging in Visual Studio

#### Module 6: Introduction to Object-Oriented Programming

- Introduction to Complex Structures
- Introduction to Structs
- Introduction to Classes
- Introducing Encapsulation

#### Module 7: More Object-Oriented Programming

- Introduction to Inheritance
- Introduction to Polymorphism
- Introduction to the .NET Framework and the Base Class Library

#### Module 8: Introduction to Application Security

- Authentication and Authorization
- Code Permissions on Computers
- Introducing Code Signing

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, 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.

### **Module 9: Core I/O Programming**

- Using Console I/O
- Using File I/O

### **Module 10: Application Performance and Memory Management**

- Value Types vs Reference Types
- Converting Types
- The Garbage Collector