



## Aspect Training

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YOUR COURSE, YOUR WAY - MORE EFFECTIVE IT TRAINING

# Programming for the Absolute Beginner with .NET

**Duration: 5 days**

## Overview:

Learning to program is one of the most rewarding experiences you can have in the world of computers! Instead of just using programs written by others, you can start to write your own programs.

Many people realize that the easiest way to learn is by seeing and doing. Aspect Training's Programming for the Absolute Beginner with .NET takes this easy to follow approach, with lots of opportunity to practice, plenty of examples to verify your work, easy to follow explanations, and plenty of sample code to examine.

In no time at all, you can start writing simple programs of your own design, using one of the most vibrant and popular languages of today, C#, or VB.

## Prerequisites:

There are no pre-requisites for this course

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## Topics:

### 1 - Your First Program

Course Overview

What is .NET

The Programming Environment

Basic .NET coding

Running a Program in Visual Studio

### 2 - Variables

What is a variable

Naming conventions

Data Types

Numeric Data Types

Variables and Math

Obtaining User Input

### 3 - Decisions

What if?

Providing and Alternative

Checking Multiple Possibilities

Time to switch

#### **4 - More Math**

One Plus One

Order of Precedence

Boolean Logic and Binary Math

Hexadecimal

#### **5 - Loops**

Safe Loops

Unsafe Loops

Controlling Loop Flow

Loops within Loops

#### **6 - Running Programs**

Comments

Building Solutions

Running the Application

Debugging

#### **7 - Arrays**

What is an Array

The use of Arrays

Multidimensional Arrays

#### **8 - String**

An overview of Strings

Escape Sequences

Concatenation

String Data Types

String Manipulation

#### **9 - More with Variables**

Data Conversion

Overflow and Underflow

Variable Lifetime (Scoping)

Structures and Enumerations

## **10 - Introduction to Methods**

Parameters

Return Value

## **11 - Anatomy of a .NET Program**

Namespaces

Classes

Instantiating an Object of a Class

Static vs Non-Static

Adding Additional Files to a Project

## **12 - Collections**

ArrayList

Boxing and Unboxing

Generic List

Hash Tables

## **13 - More on Methods**

Overloading

Passing by Value vs by Reference

The Out Keyword

Parameter Arrays

## **14 - Classes**

Constructor

Constructor and Structures

Properties

Class Methods

## **15 - Handling Exceptions**

Try your code

Catch an Exception

Catching Specific Exceptions

Finally

Throwing Exceptions