



# ExecuTrain

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## ¿Por qué ExecuTrain?

ExecuTrain es un proveedor de entrenamiento corporativo a nivel internacional y líder mundial en la capacitación empresarial. Contamos con 22 años y más de 62 mil personas capacitadas en zona occidente.

### ¿Por qué ExecuTrain?

Te guiamos en la definición de tus requerimientos de capacitación, en las diferentes etapas:

- Detección de necesidades, evaluación de conocimientos, plan de capacitación y seguimiento posterior para elegir el plan de capacitación como tú lo necesitas.
- El más amplio catálogo de cursos, desde un nivel básico hasta los niveles de conocimientos más especializados.
- En ExecuTrain el material y la metodología están diseñados por expertos en aprendizaje humano. Lo que te garantiza un mejor conocimiento en menor tiempo.
- Tú puedes confiar y estar seguro del aprendizaje porque nuestro staff de instructores es de primer nivel, algunos de los cuales son consultores en reconocidas empresas.
- No pierdas tu tiempo, los cursos están diseñados para un aprendizaje práctico.
- Nuestra garantía: Nuestro compromiso es que tú aprendas, si no quedas satisfecho con los resultados del programa, podrás volver a tomar los cursos hasta tu entera satisfacción o la devolución de tu dinero.

### Modalidad de servicio

- Cursos de Calendario
- Cursos Privados: On site y en nuestras instalaciones.
- Cursos Personalizados: Adaptamos el contenido del curso y su duración dependiendo de la necesidad del cliente.
- E-Training: cursos a distancia de forma interactiva, mejorando la capacidad de aprendizaje de nuestros participantes guiados por un instructor en vivo.

Duración: 5 días ( 35 horas)

Temario: <http://ow.ly/BPgwx>

## 20483 / Programming in C#

This training course teaches developers the programming skills that are required for developers to create Windows applications using the C# language. During their five days in the classroom students review the basics of C# program structure, language syntax, and implementation details, and then consolidate their knowledge throughout the week as they build an application that incorporates several features of the .NET Framework 4.5.

- Building new data types.
- Handling events.
- Programming the user interface.
- Accessing a database.
- Using remote data.
- Performing operations asynchronously.
- Integrating with unmanaged code.
- Creating custom attributes.
- Encrypting and decrypting data.

### > Audience Profile

This course is intended for experienced developers who already have programming experience in C, C++, JavaScript, Objective-C, Microsoft Visual Basic, or Java and understand the concepts of object-oriented programming. This course is not designed for students who are new to programming; it is targeted at professional developers with at least one month of experience programming in an object-oriented environment.

### > At Course Completion

- Describe the core syntax and features of C#.
- Create and call methods, catch and handle exceptions, and describe the monitoring requirements of large-scale applications.
- Implement the basic structure and essential elements of a typical desktop application.
- Create classes, define and implement interfaces, and create and use generic collections.
- Use inheritance to create a class hierarchy, extend a .NET Framework class, and create generic classes and methods.
- Read and write data by using file input/output and streams, and serialize and deserialize data in different formats.
- Create and use an entity data model for accessing a database and use LINQ to query and update data.
- Use the types in the System.Net namespace and WCF
- Data Services to access and query remote data.
- Build a graphical user interface by using XAML.
- Improve the throughput and response time of applications by using tasks and asynchronous operations.
- Integrate unmanaged libraries and dynamic components into a C# application.

- Examine the metadata of types by using reflection,
- create and use custom attributes, generate code at runtime, and manage assembly versions.
- Encrypt and decrypt data by using symmetric and asymmetric encryption.

## > Prerequisites

- Developers attending this course should already have gained some limited experience using C# to complete basic programming tasks. More specifically, students should have hands-on experience using C# that demonstrates their understanding of the following:
- How to name, declare, initialize and assign values to variables within an application.
- How to use:
  - arithmetic operators to perform arithmetic calculations involving one or more variables;
  - relational operators to test the relationship between two variables or expressions;
  - logical operators to combine expressions that contain relational operators.
- How to create the code syntax for simple programming statements using C# language keywords and recognize syntax errors using the Visual Studio IDE.
- How to create a simple branching structure using an IF statement.
- How to create a simple looping structure using a For statement to iterate through a data array.
- How to use the Visual Studio IDE to locate simple logic errors.
- How to create a Function that accepts arguments (parameters) and returns a value of a specified type.
- How to design and build a simple user interface using standard controls from the Visual Studio toolbox.
- How to connect to a SQL Server database and the basics of how to retrieve and store data.
- How to sort data in a loop.
- How to recognize the classes and methods used in a program.

> **Modules**

- Module 1 Review of C# Syntax
- Module 2: Creating Methods, Handling Exceptions and Monitoring Applications
- Module 3: Developing the Code for a Graphical Application
- Module 4: Creating Classes and Implementing Type-safe Collections
- Module 5: Creating a Class Hierarchy by Using Inheritance
- Module 6: Reading and Writing Local Data
- Module 7: Accessing a Database
- Module 8: Accessing Remote Data
- Module 9: Designing the User Interface for a Graphical Application
- Module 10: Improving Application Performance and Responsiveness
- Module 11: Integrating with Unmanaged Code
- Module 12: Creating Reusable Types and Assemblies
- Module 13: Encrypting and Decrypting Data