

## **Object Oriented Programming in C#**

**Modality:** Self-Paced Learning

**Duration:** 15 Hours

**SATV Value:**

**CLC:**

**NATU:**

**SUBSCRIPTION:** Learn, Master

### **About this course:**

The concept of object-oriented programming is supported by numerous popular programming languages. For the creation of more effective and robust applications, you can use the techniques to modeling real-world objects in your codes.

C# was planned to form the bottom-up to be type-safe, object-oriented programming language. This course provides you the basic knowledge and understanding of C#. You will also learn how to apply core object-oriented programming (OOP) principles to the applications and code you are creating. Additionally, this course provides you an understanding of polymorphism, inheritance, and encapsulation. This course also provides you the knowledge of memory management in the MS .NET framework.

### **Course Objective:**

- Fundamental knowledge OOP in C#
- Techniques to apply the 3 core object-oriented programming (OOP) concepts by utilizing C#
- Techniques to use and create objects and classes in a C# application
- Understanding of Core OOP concepts
- Understanding of resource management and memory in .Net Framework and C#
- Understanding of Encapsulation
- Understanding of static classes and static methods
- Explain polymorphism and interfaces
- Explain sealed and abstract classes

### **Course duration:**

This training course is based on 15 hours

### **Audience:**

- Programmer

### **Prerequisites:**

- C# Introduction

## **Course Outline:**

### **Module 1 | Introducing OOP**

- Introducing Object Oriented Programming in C#
- Classes in C#
- Encapsulation
- Static Methods and Static Classes
- Additional Resources
- Module 1 Assignment

### **Module 2 | More OOP**

- Anonymous Classes
- Inheritance
- Abstract and Sealed Classes
- Interfaces and Polymorphism
- Additional Resources
- Module 2 Assignment

### **Module 3 | Resource and Memory Management**

- Introducing Memory Management
- Additional Resources
- Module 3 Assignment?