

Curicula cursului Introducere în programare (C#)

	Topic
Lab 1	<p>Introduction</p> <ul style="list-style-type: none"> • Course Overview • An introduction to C# and .NET • Software development tools • Local environment setup
Lab 2	<p>Your first C# program</p> <ul style="list-style-type: none"> • Understanding Visual Studio <ul style="list-style-type: none"> • Working with Code Files • Working with Projects and Solutions • Debugging • The anatomy of your first c# program • Classes, Data types and Objects
Lab 3	<p>Classes, objects and control flow</p> <ul style="list-style-type: none"> • Understanding data types, variables • Operations, expressions and statements • Control flow <ul style="list-style-type: none"> • Conditional statements (branching, switching)
Lab 4	<p>Control flow</p> <ul style="list-style-type: none"> • Control flow – Iterating <ul style="list-style-type: none"> • Understanding arrays • For statement and While statements • Working with strings and Dates and Times
Lab 5	<p>Basic constructions</p> <ul style="list-style-type: none"> • Grouping your code in Classes • Using Methods, accessibility modifiers and namespaces • Using Properties
Lab 6	<p>Advanced Programing with C#:</p> <ul style="list-style-type: none"> • Working with class libraries and assembly references • Working with Events
Lab 7	<p>Object oriented programing</p> <ul style="list-style-type: none"> • Introduction to OOP, pillars of OOP • Using and understanding <ul style="list-style-type: none"> • Encapsulation • Inheritance
Lab 8	<p>Object oriented programing</p> <ul style="list-style-type: none"> • Using and understanding <ul style="list-style-type: none"> • Abstractization • Polimorfism
Lab 9	<p>Object oriented programing</p> <ul style="list-style-type: none"> • Using and understanding <ul style="list-style-type: none"> • Interfaces • Abstract classes • Composition

Lab 10	<p>Advanced constructions</p> <ul style="list-style-type: none"> • Handling Exceptions <ul style="list-style-type: none"> • Throwing • Handling • Using generic types • Working with Collections and Dictionaries • Understanding LINQ
Lab 11	<p>Input/Output</p> <ul style="list-style-type: none"> • Working with Files • Sharing code with GIT and Github
Lab 12	<p>Introduction to Web applications</p> <ul style="list-style-type: none"> • Introduction to Web applications • What is HTTP , HTML, CSS, JavaScript • Web Browsers and tools
Lab 13	<p>Getting started with ASP.NET MVC</p> <ul style="list-style-type: none"> • Introduction to Asp.Net MVC • First web applications (Hello World Wide Web) • Understanding Models, Views and Controllers
Lab 14	<p>Getting started with ASP.NET MVC</p> <ul style="list-style-type: none"> • Understanding Models, Views and Controllers • Create a Home page • Create basic navigation
Lab 15	<p>Introduction to databases</p> <ul style="list-style-type: none"> • Overview of Databases • Basic SQL language • Using a simple database engine
Lab 16	<p>Building a real web application</p> <ul style="list-style-type: none"> • Create and add new web pages • Implement basic create, update delete operations from a web page
Lab 17	<p>Building a real web application</p> <ul style="list-style-type: none"> • Understand Razor syntax • Style your web application
Lab 18	<p>Building a real web application</p> <ul style="list-style-type: none"> • Uploading and downloading files • Types of serialization
Lab 19	<p>Personal project</p> <ul style="list-style-type: none"> • Working on final project
Lab 20	<p>Recap</p> <ul style="list-style-type: none"> • Recap • Final quiz • Working on final projects