

# Certified Fullstack developer .Net

## MODULE 1

Introduction to .NET Framework

1. Overview of .NET Framework
2. Understanding Common Language Runtime (CLR)
3. Introduction to .NET languages: C#
4. Exploring .NET Framework Class Library (FCL)
5. Setting up development environment: Visual Studio, .NET SDK
6. Basic C# syntax and programming constructs
7. Hands-on exercises and coding examples

## MODULE 2

Frontend Development with ASP.NET Core MVC

1. Introduction to ASP.NET Core MVC
2. Model-View-Controller (MVC) architectural pattern
3. Creating controllers, views, and models
4. Routing and URL patterns
5. Handling user input and form submissions
6. Working with Razor syntax for dynamic content
7. Using Bootstrap for responsive design
8. Hands-on projects to build web applications

## MODULE 3

Backend Development with ASP.NET Web API

1. Understanding RESTful API principles
2. Introduction to ASP.NET Web API
3. Creating API controllers and routes
4. Implementing CRUD operations
5. Request and response formatting (JSON, XML)
6. Authentication and authorization with JWT
7. Error handling and logging
8. Hands-on exercises to develop APIs

## MODULE 4

Database Development with Entity Framework Core

1. Introduction to Entity Framework Core (EF Core)
2. Setting up database connections and contexts
3. Creating and configuring database models
4. Performing CRUD operations using EF Core
5. Implementing data validation and relationships
6. Querying data with LINQ
7. Migrations and database schema management
8. Hands-on projects integrating EF Core with ASP.NET applications

## MODULE 5

Final Project

1. Task Management System
2. E-commerce Platform:
3. Blogging Platform
4. Inventory Management System
5. Fitness Tracker



## The goal of the education

The goal of the education is that the student, after completing the education, has acquired the knowledge required for qualified and independent work in the field.

## Eligibility requirements

No special eligibility requirements.

## Assessment criteria

After completing the education, with a passed result on all assignments and tests, the student receives a certificate. The main teacher for the education is the one who examines the student.

## Degree title

Certified Fullstack developer .Net

## Extent of education

The studies are conducted at any study pace and include about 10-15 weeks of full-time studies.