University of Central Lancashire
UCLan Cyprus

Αρχή Ανάπτυξης Ανθρώπινου Δυναμικού Κύπρου

Programming
IN C#

HRDA PROGRAMME 20483C

ONLINE COURSE

This training course teaches developers the programming skills that are required to create Windows applications using the Visual C# language. During their 6- days in the classroom students review the basics of Visual 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 4.7.

Dates

17th of March, Wednesday
19th of March, Friday
24th of March, Wednesday
26th of March, Friday
31st of March, Wednesday
2nd of April, Friday

Time 09:00 – 16:15

Initial Fee €1100 incl. VAT
HRDA Subsided €680
Fee to be paid after HRDA subsidization €420

*Discounts are offered to individuals who are not entitled to any subsidy

Program Objectives

By the end of the program, participants will be able to:
- Describe the core syntax and features of Visual C#.
- Describe the monitoring requirements of large-scale applications.
- Create methods and handle exceptions
- 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 and to extend a .NET Framework class.
- 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 data.
- Access and query remote data by using the types in the System.Net namespace and WCF Data Services.
- 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 Visual 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. Use set operators

Target Audience

- Developers who already some experience in C, C++, JavaScript, Objective-C, Microsoft Visual Basic, or Java and understand the concepts of object-oriented programming.
- Web Developers, Software Developers, Software Engineers, IT officers, Programmers, QA officer, Test engineers

For registrations & information please contact *24694000 or email at ansavva@uclan.ac.uk*

Course Timetable

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