

The aim of the course is to understand the fundamental concepts of .NET framework and its merits over other languages, it will enable the students to develop desktop applications and web applications.

Upon completion of this course students will be able to:

1. Define .net technology and its salient features
2. Explain the attributes of vb.net and write programs.
3. Perform database connectivity with vb.net and ado.net
4. Compare the properties of C# with vb.net and c++.
5. Create simple application systems using .net.

UNIT I:.NET TECHNOLOGY

Introduction - .Net revolution - Building blocks of .Net, overview of .Net applications .Net framework and its architecture Intermediate Language(IL), Common Language Runtime (CLR), JIT Compilation, Common Type System (CTS), Common Language System (CLS), Assemblies –Components of Assembly – DLL hell and Assembly Versioning

UNIT II: VB.NET

Introduction to VB.Net – and features of VB.NET- Arrays - procedures –scope – built-in functions – classes and objects – features of oops –constructors and destructors – creating property procedures – creating events – namespaces – import keyword - Inheritance , Polymorphism and Interfaces – overriding methods and properties – MyBase Keyword – MyClass Keyword – Abstract Base Classes – Shared members.

UNIT III: ADO.NET

Working with forms – Inheritance in windows forms – loading and showing forms –visual inheritance – adding controls – layout enhancement properties of controls – working with simple controls – adding menus – context menus - delegates -overview of ADO.Net –

ADO.NET Architecture – ADO.NET Components – Using ADO.NET – Data form wizard Components and Interoperability.

UNIT IV: C#.NET

Overview to C# - C # Compilation and Execution Process – C# Fundamentals (Data types, Operators, Programming constructs) –Inheritance –Sealed Classes – Interface - Polymorphism – Method Hiding – C# Property –Exception Handling

UNIT V: ASP.NET

ASP.Net- IIS - ASP.Net Page Life Cycle – ASP Vs ASP.Net - HTML Controls Vs Server side Controls –Validation Controls – Data binding in ASP.Net – Caching – Configuration in ASP.Net (web.config) –Session management – View State in ASP.Net.

Text book:

1. Kogent Learning Solutions Inc., “.NET 4.5 Programming 6-in-1, Black Book”, 1 st edition, Dreamtech Press , 2013.