

21INT06	C# and .Net Programming	L	T	P	C
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<u>Course Objectives</u>					
The main objective of this course is to understand and learn the concepts of C# and .Net Programming and can help in the implementation of the various live project					
UNIT I	C# LANGUAGE BASICS	9 Hours			
.Net Architecture - Core C# - Variables - Data Types - Flow control - Objects and Types- Classes and Structs - Inheritance- Generics – Arrays and Tuples - Operators and Casts - Indexers					
UNIT II	C# ADVANCED FEATURES	9 Hours			
Delegates - Lambdas - Lambda Expressions - Events - Event Publisher - Event Listener - Strings and Regular Expressions - Generics - Collections - Memory Management and Pointers - Errors and Exceptions - Reflection					
UNIT III	LIBRARIES AND DATA MANIPULATION	9 Hours			
Diagnostics -Tasks, Threads and Synchronization - .Net Security - Localization - Manipulating XML- SAX and DOM - Manipulating files and the Registry- Transactions - ADO.NET- Peer-to-Peer Networking - PNRP - Building P2P Applications - Windows Presentation Foundation (WPF).					
UNIT IV	WINDOW BASED APPLICATIONS, WCF AND WWF	9 Hours			
Window based applications - Core ASP.NET- ASP.NET Web forms -Windows Communication Foundation (WCF)- Introduction to Web Services - .Net Remoting - Windows Service - Windows Workflow Foundation (WWF) - Activities – Workflows					
UNIT V	.NET FRAMEWORK AND COMPACT FRAMEWORK	9 Hours			
Assemblies - Shared assemblies - Custom Hosting with CLR Objects - Appdomains - Core XAML - Bubbling and Tunneling Events- Reading and Writing XAML - .Net Compact Framework - Compact Edition Data Stores – Errors, Testing and Debugging – Optimizing performance – Packaging and Deployment – Networking and Mobile Devices					
<u>Course Outcomes:</u>					
<ul style="list-style-type: none"> • Understand the basic structure of C# and .Net Programming • Understand the basic Libraries and its functions • Understand the basic concepts underlying the ASP.net and C#.net • Understand the basic concepts of .NET framework and compact frame work. 					

Text books:

1. C# 4.0 the Complete Reference by Herbert Schildt
2. Latest version of Andrew Troelsen's C# text from Apress(Pro C# 5.0 and the .NET Framework 4.5)

Reference Books:

1. Robert Powell, Richard Weeks, C# and the .NET Framework, Techmedia